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“It will flourish, if naturalists, chemists, antiquaries, philologers, and men of science in different parts of *Asia*, will commit their observations to writing, and send them to the Asiatic Society of Calcutta. It will languish, if such communications shall be long intermitted; and it will die away, if they shall entirely cease.” SIR WM. JONES.

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JOURNAL

OF THE

ASIATIC SOCIETY OF BENGAL.



Part I.—HISTORY, LITERATURE, &c.

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No. I.—1899.

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On the Kāçmīrī Verb.—By G. A. GRIERSON, C.I.E., PH.D., I.C.S.

[Read January, 1899.]

The Kāçmīrī Verb is treated in the *Akhyāta-* and *Kṛdanta-prakriyās* of Īçvara-kaula's *Kaçmīraçabdāmṛta*.

Verbal roots may end either in a consonant or in a vowel. When a root ends in a consonant, the vowel अ *a* is added to assist the pronunciation. Thus the root कर् *kar* is written कर *kar^a*. It is still, however, considered to be a root ending in a consonant and is referred to as such. The final अ *a* is dropped before adding the conjugational suffixes. For this reason, throughout this series of papers, I shall so far depart from the rule of strict transliteration, that I shall not write the final अ *a* of roots ending in consonants, although that final अ *a* will be written in the Nāgarī character.

When a root ends in a vowel, that vowel is always इ *i*. There are only eight of these roots, of which five belong to the first, and three to the third conjugation, as follows,—

First Conjugation.—खि *khi*, eat ; चि *ci*, drink ; दि *di*, give ; नि *ni*, take ; and हि *hi*, take.

Third Conjugation.—जि *zi*, be born ; पि *pi*, fall ; and यि *yi*, come

As in the above examples, all verbs will be quoted under their root-forms.

Excepting the verbs नि *ni*, take, दि *di*, give, and यि *yi*, come, all verbs whose roots end in vowels change the final इ *i* to य *ya(ě)* throughout (viii. ii. 11). Thus, the present participle of all these verbs is made by adding वान् *wān* to the root. But the present participle of खि *khi*, eat, is खिवान् *khiwān*, not खवान् *khyawān*, not खिवान् *khiwān*. On the other hand, the present participle of नि *ni*, take, is निवान् *niwān*, not न्यवान् *nyawān*. This rule is a most important one, and will be met over and over again in the following pages.

Conjugation.

There are three conjugations of verbs. They only differ in the formation of the Causal Voice, and of the past participles and of the tenses derived from them. Their consideration is postponed till these tenses come to be dealt with.

Voice.

There are three voices: the Active, the Passive, and the Causal.

THE ACTIVE VOICE.

This is formed by adding the conjugational suffixes to the root direct according to the rules to be hereafter detailed.

THE PASSIVE VOICE.

This is formed by conjugating the oblique form of the verbal noun in उन् *un*, that is to say, the shortened form of the Instrumental Singular which is used before post-positions, and which ends in अन *an^a*, with the verb यि *yi*, come, which may either precede or follow. Thus, from the verb कर *kar*, make, the verbal noun is करुन् *karun*. The oblique form of this is करन *karan^a*, and the Passive is करन यि *karan^a yi*, be made, literally, come into making. Compare the Hindī देखने में आता है *dēkh'nē mē ātā hai*, it comes into seeing, it is seen (viii. i. 49).

Examples of the use of the Passive are (viii. i. 50).

रनन यिवान् कुद् बत *ranan^a yiwān chuh bat^a*, the rice is coming into cooking, *i.e.*, is being cooked.

पानय् कुह् यिवान् करन *pāna-y chuh yiwān karan^a*, he, himself, is being made.

Even neuter verbs can take the passive form, without, in this case, changing their meaning (viii. i. 51). Thus,—

जोतान् कुह् *zōtān chuh*; or

जोतन यिवान् कुह् *zōtan^a yiwān chuh*, he is shining. The latter example is literally, he is coming into shining.

दजान् कुह् *dazān chuh*, or

दजन यिवान् कुह् *dazan^a yiwān chuh*, he is burning.

The root बोज् *bōz*, hear, when used in the passive means 'see' (viii. i. 52). Thus,—

बोजान् कुह् *bōzān chuh*, he hears, but.

बोजन यिवान् कुह् *bōzan^a yiwān chuh*, he is being seen.

बोजन आव् *bōzan^a āv* (*āv*, is the irregular past tense of *yi*), he was seen.

बोजन यियि *bōzan^a yiyi*, he will be seen.

If we want to express the passive of the verb 'to hear,' we must use a periphrasis. Thus,—

बोजनस् अन्दर् यिवान् कुह् *bōzanas andar yiwān chuh*, he is coming into hearing, he is being heard.

The root गर *gar*, work metal, may mean 'to become hard' in the Passive (viii. i. 53). Thus,—

गरन यिवान् कुह् *garan^a yiwān chuh*, it is being worked, or it is becoming hard.

The root नि *ni*, take, may mean 'to have the attention distracted' in the Passive (viii. i. 55). Thus,—

निन यिवान् कुह् *nin^a yiwān chuh*, he is being distracted, or he is being taken.

The root हि *hi*, take, may mean 'to be engaged in' in the Passive (viii. i. 56). Thus, ह्यन यिवान् कुह् *hyan^a yiwān chuh*, he is engaged (in a business), or he is being taken.

The root डेष *dēṣ*, see, is irregular. Its Passive is formed thus, द्रेठ् यिवान् कुह् *drēṭh yiwān chuh*, he is being seen (viii. i. 54).

In adding this termination अन *an^a*, we must remember that in the case of the verbs नि *ni*, take, दि *di*, give, यि *yi*, come, the first अ *a* is elided (viii. ii. 11). Thus, निन यिवान् कुह् *nin^a yiwān chuh*, he is being taken.

दिन यिवान् कुह् *din^a yiwān chuh*, he is being given.

यिन यिवान् कुह् *yin^a yiwān chuh*, it is being come by him, *i.e.*, he is coming. In the case of other verbs ending in इ *i*, that vowel becomes य् *y*. Thus,—

खि *khi*, eat, ख्यन यिवान् कुह् *khyan^a yiwān chuh*, he is being eaten.

हि *hi*, take, ह्यन यिवान् कुह् *hyan^a yiwān chuh*, he is being taken

चि *ci*, drink, च्यन यिवान् कुह् *cyan^a yiwān chuh*, it is being drunk.

THE CAUSAL VOICE.

A root is made causal by adding अनाव् *anāw* (viii. iv. 2, 3). Thus, कर *kar*, make; करनाव् *karanāw*, cause to make. So, in the present tense, करान् कुह् *karān chuh*, he makes; करनावान् कुह् *karanāwān chuh*, he causes to make.

Exceptions—

The root वुफ् *wuph*, fly, is regular. Thus, वुफनावान् कुह् *wuphanāwān chuh*, he causes to fly. But when the causal verb means 'to incite,' the *n* is changed to *l* (viii. iv. 4). Thus, वुफलावान् कुह् *wuphalāwān chuh*, he incites.

Intransitive roots containing three *akṣaras* omit the अन् *an* of अनाव् *anāw* in forming causals (viii. iv. 7). Thus,—

From—

व्वबर *wōbar*, be finished.

व्वबरावान् कुह् *wōbarāwān chuh*, he finishes.

काञ्जर *kāṭsar*, be tawny.

काञ्जरावान् कुह् *kāṭsarāwān chuh*, he makes tawny.

कुमल *kumal*, be tender.

कुमलावान् कुह् *kumalāwān chuh*, he makes tender.

चौखर *cōkhar*, be contracted.

चौखरावान् कुह् *cōkharāwān chuh*, he makes contracted.

झीङ्गन <i>tshāṭtshan</i> , be light.	झीङ्गनावान् कुह् <i>tshāṭtshanāwān chuh</i> , he makes light.
मन्दक <i>mandach</i> , be ashamed.	मन्दकवान् कुह् <i>mandachāwān chuh</i> , he makes ashamed.
वज्रल <i>wōzal</i> , be red.	वज्रलवान् कुह् <i>wōzalāwān chuh</i> , he makes red.
समख <i>samakh</i> , become visible.	समखवान् कुह् <i>samakhāwān chuh</i> , he makes visible.
व्यपज <i>wōpaz</i> , be born.	व्यपजवान् कुह् <i>wōpazāwān chuh</i> , he produces.

This exception does not apply to transitive verbs, which are regular.

Thus,—

कमव <i>kamav</i> , earn.	कमवनावान् कुह् <i>kamavanāwān chuh</i> , he causes to earn.
कतर <i>katar</i> , slice.	कतरनावान् कुह् <i>kataranāwān chuh</i> , he causes to cut in slices.
कपट <i>kapat</i> , cut (clothes).	कपटनावान् कुह् <i>kapatanāwān chuh</i> , he causes to cut.

The root वुष्ण *wuṣṇ*, be hot, also drops the अन् *an*. Thus, वुष्णवान् कुह् *wuṣṇāwān chuh*, he makes hot (viii. iv. 8).

The verbs वुज्ज *wuz*, be awake; वड *bōḍ*, dive; लार *lār*, touch; पिल *pil*, arrive; काम्प *kāmp*, tremble, and रज्ज *ranz*, be pleased, add optionally अच् *av*, instead of अनाच् *anāv* (viii. iv. 5, 14). Thus, वुज्जवान् कुस् *wuzawān chu-s*, or वुज्जनावान् कुस् *wuzanāwān chu-s*, he wakens him. So काम्पवान् कुस् *kāmpawān chu-s*, or काम्पनावान् कुस् *kāmpānāwān chu-s*, he causes him to tremble. The root प्रस *pras*, be born, has three forms (viii. iv. 5, 15); viz. प्रसवान् कुह् *prasawān chuh*; प्रसनावान् कुह् *prasanāwān chuh*, and पीनवान् कुह् *pīnawān chuh*, he causes to bear children.

The verb यि *yi*, come, makes its causal अननाव *ananāv*. [This is really the causal of अन *an*, bring]. Thus, अननावान् कुह् *ananāwān chuh*, he causes to bring.

The root फट *phat*, be split, makes its causal फाटवान् कुह् *phāṭawān chuh*, or फाटनावान् कुह् *phāṭanawān chuh* (viii. iv. 17).

With regard to roots ending in इ *i*, the following are the forms (viii. iv. 9–13).

SIMPLE VERB.

CAUSAL.

पि *pi*, fall.पावान् कुह् *pāwān chuh*, he causes to fall.दि *di*, give.दावान् कुह् *dāwān chuh*, or दिवनावान् कुह् *diwanāwān chuh*, he causes to give.नि *ni*, take.न्यावान् कुह् *nyāwān chuh*, or निवनावान् कुह् *niwanāwān chuh*, he causes to take.चि *ci*, drink.चावान् कुह् *cyāwān chuh*, or चावनावान् कुह् *cyāwanāwān chuh*, he gives to drink.खि *khi*, eat.ख्यावान् कुह् *khyāwān chuh*, or ख्यावनावान् कुह् *khyāwanāwān chuh*, he gives to eat.हि *hi*, take.ह्यावान् कुह् *hyāwān chuh*, or ह्यवनावान् कुह् *hyawanāwān chuh* (sic), he causes to take.

Regarding यि *yi*, come, see *supra*, p. 5.

Regarding जि *zi*, be born, see *post*, p. 9.

Other verbs of the **third conjugation** form their causals by adding *rāw* (viii. iv. 20). Before this,—

if the root vowel is अ *a* it becomes अ̄ *ā*.

आ *ā* „ आ̄ *ā̄*.

ए *ē* „ ई̄ *ī̄*.

ओ *ō* „ ऊ̄ *ū̄* (viii. iv. 27).

Moreover,—

if the final consonant of the root is त् *t* it becomes त्स *ts*.

द् *d* „ ज् *z*.

न् *n* or न्न *nn* „ ञ् *ñ* (viii. iv. 25).

[The only root of the third conjugation which ends in थ् *th* is पाथ् *pāth*, become, and, according to my Paṇḍit, its causal is regular, पाथनावान् कुह् *pāthanāwān chuh*. पाक्रावान् कुह् *pāts^hrāwān chuh*, is possible, but unusual].

कल *kal*, be dumb.

कल्रावान् कुह् *ka^lrāwān chuh*, he makes dumb.

गव *gōb*, be too heavy.

गव्रावान् कुह् *gōbarāwān chuh*, he makes too heavy.

व्यथ *vyath*, be fat.

व्यथ्रावान् कुह् *vyath^arāwān chuh*, he makes fat.

कान *kān*, be one-eyed.

कान्रावान् कुह् *kān^arāwān chuh*, he makes one-eyed.

ठीक *thik*, stand firmly.

ठीक्रावान् कुह् *thik^arāwān chuh*, he makes to stand firmly.

तेज *tēz*, be sharp.

तेज्रावान् कुह् *tiz^arāwān chuh*, he makes sharp.

ब्रेथ *brēth*, be a fool.

ब्रेथ्रावान् कुह् *brēth^arāwān chuh*, he makes foolish.

पोथ *pōth*, be fat.

पूथ्रावान् कुह् *pūth^arāwān chuh*, he makes fat.

लोक *lōk*, be small.

लूक्रावान् कुह् *lūk^arāwān chuh*, he makes small.

छत *chat*, be white.

छत्रावान् कुह् *chats^arāwān chuh*, he makes white.

तत *tat*, be hot.

तत्रावान् कुह् *tats^arāwān chuh*, he makes hot.

थद *thad*, be high.

थज्रावान् कुह् *thaz^arāwān chuh*, he elevates.

श्वद *ṣōd*, be pure.

श्वज्रावान् कुह् *ṣōz^arāwān chuh*, he purifies.

बन *ban*, be.

बज्रावान् कुह् *bañ^arāwān chuh*, he causes to be.

तन *tan*, be thin.

तज्रावान् कुह् *tañ^arāwān chuh*, he makes thin.

The verb चक *tsök*, if it means 'be sour,' makes its causal चक्रवान् कुह् *tsök^arāwān chuh*; but if it means 'be angry,' its causal is चुक्रवान् कुह् *tsuk^arāwān chuh*. The verb खल *khal*, be loose, makes its causal खलवान् कुह् *khal^arāwān chuh*, or खज्रवान् कुह् *khaj^arāwān chuh*.

The following verbs form their causals optionally by adding either *anāw*, or *arāw*, (viii. iv. 19, 21, 22, 23).

First Conjugation: चक *chak*, scatter; चप *chap*, pass time; ज्ञेन *tsēn*, know by a sign; मान *mān*, confess.

Second Conjugation: चल *tsal*, flee; च्यन्न *tshyann*, be split; थक *thak*, be weary; फस *phas*, be entangled; फुट *phut*, be broken; फल्ल *phöll*, expand (of a flower); मष *maṣ*, forget; राव *rāv*, be lost; कख *hökh*, be dry; क्च *höts*, decay; अप *çrap*, be digested.

Third Conjugation: यठ *tyath*, be bitter.

Thus, ज्ञेनवान् कुह् *tsiñ^arāwān chuh*, or ज्ञेनगवान् कुह् *tsēnanāwān chuh*; चलवान् कुह् *tsal^arāwān chuh*, or चलनावान् कुह् *tsalanāwān chuh*; यठवान् कुह् *tyath^arāwān chuh*, or यठनावान् कुह् *tyathanāwān chuh*.

The root चक *chak* does not alter its meaning in the causal in *arāw*. Thus, चकान् कुह् *chakān chuh*, चक्रवान् कुह् *chak^arāwān chuh*, both mean 'he scatters.' To give a causal meaning it has चकनावान् कुह् *chakanāwān chuh*, or चक्रनावान् कुह् *chak^aranāwān chuh*.

The root चप *chap* has for its causal चप्रवान् कुह् *chap^arāwān chuh*, चपनावान् कुह् *chapanāwān chuh*, or चूप्रवान् कुह् *chöp^arāwān chuh*.

The following verbs of the third conjugation form their causals in *anāw*, and not in *arāw* (viii. iv. 17). क्च *k^ats*, be wet; ग्वह *gōh*, shine; ग्रक *grak*, boil over; जौत *zōt*, shine; ट्क *t^ak*, run; तेल *tēl*, smart; तोष *tōṣ*, be satisfied (according to my Paṇḍit, this verb belongs to the 2nd conjugation); दोर *dōr*, run; नाँप *nāṅp*, shine; नील *nīl*, become blue; पिस *pis*, boil over; पेड *pēḍ*, exude; पोर *pōr*, be competent; प्रार *prār*, wait (according to my Paṇḍit, this verb belongs to the 2nd conjugation); फब *phab*, be excellent; फर *phar*, be stolen; फल *phal*, become old (of clothes); फुग् *phuḡ* or फुह *phuh*, be inwardly angry; फेर *phēr*, go round; फोर *phōr*, quiver (according to my Paṇḍit, this verb belongs

to the 2nd conjugation); बाद *bād*, be powerful; बास *bās*, become clear (according to my Paṇḍit, this verb belongs to the 2nd conjugation); बुड *bud*, be old: ब्रज *braz*, shine; याप *yāp*, pervade; रंब *ramb*, be beautiful; रस *ras*, be full of juice; रोच *rōts*, be preferred; रोट *rōt*, be stopped; रूढ *rād*, persistently follow; रूण *rāṇ*, be worn out; ल्यड *lyad*, be conquered; लोर *lōr*, become deficient. Thus, कञ्जनावान् कुह् *k^atsanāwān chuh*, not कञ्जरावान् कुह् *k^ats^arāwān chuh*.

All causal verbs in *^arāw*, may optionally drop the syllable *āw* in the termination, and add *^ar* instead of *^arāw* (viii. iv. 24). Thus,—

Instead of—

We may have—

कल्रावान् कुह् *ka^al^arāwān chuh*

कल्रान् कुह् *ka^al^arān chuh*

ग्वव्रावान् कुह् *g^ob^arāwān chuh*

ग्वव्रान् कुह् *g^ob^arān chuh*

चक्रावान् कुह् *ts^ok^arāwān chuh*

चक्रान् कुह् *ts^ok^arān chuh*

and so on.

The following verbs form their causals by merely lengthening their root vowels (viii. iv. 28).

तर *tar*, be crossed. Causal तारान् कुह् *tārān chuh*, he crosses.

मर *mar*, die. मारान् कुह् *mārān chuh*, he kills.

डल *ḍal*, pass over. डालान् कुह् *ḍālān chuh*, he causes to pass over.

लग *lag*, be with. लागान् कुह् *lāgān chuh*, he unites.

When मर *mar* (18, 28), means 'unite,' and when लग *lag* (28) means 'suffer pain,' or 'fit,' they are regular. Thus, मरनावान् कुह् *maranāwān chuh*, he causes to unite; लगनावान् कुह् *laganāwān chuh*, he causes to suffer pain.

The following are quite irregular,—

जि *zi*, be born. Causal जिव्रान् कुह् *zōv^arān chuh*, he brings forth (26).

खस *khas*, ascend. खारान् कुह् *khārān chuh*, he causes to ascend (29).

वस *vas*, descend. वारान् कुह् *wārān chuh*, he brings down (29).

श्रंग <i>çöng</i> , go to sleep.	सावान् कुह् <i>sāwān chuh</i> , he puts to sleep (30).
दज्ज <i>daz</i> , burn.	जालान् कुह् <i>zālān chuh</i> , he burns (act.) (31).
डेष <i>dēṣ</i> , see.	हावान् कुह् <i>hāwān chuh</i> , he shows (32).
गक्क <i>gatsh</i> .	पकनावान् कुह् <i>pakanāwān chuh</i> , he drives.
	गक्कनावान् कुह् <i>gatshānāwān chuh</i> , he despatches (33).
	Thus, गोवन् पकनावान् कुह् <i>gōvān pakanāwān chuh</i> , he drives the cows ;
	गंगाय गक्कनावान् कुस् <i>gaṅgāy^a gatshānāwān chu-s</i> , he sends him to the Ganges.
व्वथ <i>wōth</i> , rise.	तुलान् कुह् <i>tulān chuh</i> , he raises, he lifts up; but व्वथनावान् कुह् <i>wōthanāwān chuh</i> , he causes so and so to rise (34).

Verbal Suffixes.

Before proceeding to the consideration of the conjugation of the verb, it is necessary to describe in detail one remarkable feature of the Kāçmīrī language, which it shares with other languages of the North-Western group of the Indo-Aryan Vernaculars, namely, the facility with which the meaning of the verbal stem can be modified by the addition of suffixes. Indeed, it may be said that, given the form of a tense-stem, there is usually no conjugation, in the proper sense of the word, at all. In most cases, suffixes, which may be added, or detached, at pleasure, and most of which have an independent recognised existence, are added, and give the various modifications of meaning which we designate number and person, or of negation, affirmation, and so on, by forming true compound words, and without becoming merged in the base in the form of terminations. Thus, take the word कर् *kar^u*. This means 'made,' and may mean, 'made by me,' 'made by us,' 'made by him' and so on. That is to say, it means, 'I made,' 'we made,' 'he made,' &c. If we wish to lay stress on the person who made, we may say तस्मि कर् *tamⁱ kar^u*, 'by him made,' i.e., 'he made.' Instead, however of using तस्मि *tamⁱ*, the iustriental singular of the third

personal pronoun, in Kāçmīrī we may optionally add the suffix न् *n*, which means 'by him,' just as much as तन्नि *tan̄i* does, and we get कर्णन् *karu-n*, which also means 'made by him,' or 'he made.' Suppose we want to express who was made by him, and that the person is the speaker, then we can say बृह् कर्णन् *bōh karu-n*, 'I was made by him,' i.e., 'he made me.' Instead, however, of बृह् *bōh*, we may add the suffix अस् *as*, which means 'I.' We thus get कर्णन्स् *kar^u-n-as*, 'I was made by him,' i.e., 'he made me.' Again, if we wish to emphasise the fact that I was the person made, we can add the suffix ति *ti*, and we get the form कर्णन्स्ति *kar^u-n-as-ti*, which means, 'I also was made by him,' 'he made me also.' Again, if we want to make the verb interrogative, we can add, after all these, the interrogative particle, आ *ā*, thus, कर्णन्स्त्या *kar^u-n-as-ty-ā*, 'was I also made by him?' 'did he make me also?'

The above examples will show the freedom with which these suffixes are used in Kāshmirī. They can be combined almost *ad infinitum*. These suffixes may be divided into two classes, adverbial and pronominal, and in this order, I now proceed to discuss them.

ADVERBIAL SUFFIXES.

These suffixes are added to all verbs. Before all these the final ह् *h* of a verbal form is elided (iv. 131). The ordinary rules of *sandhi* also occur. Thus *i* and *u* before *ā* become *y* and *w* respectively, *ya* (*ē*) + *ā* becomes *yā*, and *a* + *ā* becomes *ā*.

1. न् *n^a*. This negatives the verb (viii. i. 13). Thus,—

करान् कुह् *karān chuh*, he makes. करान् कुन *karān chun^a*, he does not make.

करान् क्किह् *karān chih*, they make. करान् क्किन *karān chin^a*, they do not make.

करान् क्कह् *karān chēh*, she makes. करान् क्कन *karān chēn^a*, she does not make.

करान् क्कह् *karān chēkh*, thou (fem.) makest. करान् क्कह्न *karān chēkhn^a*, thou dost not make.

करि *kari*, he will make. करिन *karin^a*, he will not make.

गयोव् *gayōv*, he went. गयोव्न *gayōvn^a*, he did not go.

पकु *pak^u*, he went. पकन *pak^un^a*, he did not go.

2. च्वा ā. This gives an interrogative force to the verb (viii. i. 14).

Thus,—

करान् चुह् <i>karān chuh</i> , he makes.	करान् च्वा (for चुह्+आ, चु+आ) <i>karān chwā</i> , does he make?
करान् च्छह् <i>karān chēh</i> (lit. <i>chyah</i>), she makes.	करान् च्छा <i>karān chyā</i> , does she make?
करि <i>kari</i> , he will make.	कर्या <i>karyā</i> , will he make?
परव् <i>parav</i> , we shall read.	परवा <i>paravā</i> , shall we read?
कर्यान् <i>karyōn</i> , he made.	कर्याना <i>karyōnā</i> , made he?
करन् <i>karun</i> , he made.	करना <i>kar^unā</i> , made he?
गयोव् <i>gayōv</i> , he went.	गयोवा <i>gayōvā</i> , did he go?
पकु <i>pak^u</i> , he went.	पकुआ <i>pak^uā</i> , did he go?

In the first and third persons Feminine, च्चय् *ay* is substituted for च्वा *ā*, when the person addressed is a woman. If a man is addressed, च्च^o is used in the first person Singular, and च्वा *ā* in the first person Plural, and in the third person.

Thus, करान् च्छस *karān chēs^a*, am I (fem.) making? here a man is addressed. If a woman is addressed, the speaker would say च्छसय् *chēsay*.

करान् च्छा च्छसि *karān chyā (chēh + ā) asⁱ*, are we (fem.) making? If a woman is addressed, the speaker must say च्छय् *chēy*. See No. 4.

3. च्च^o. This may be substituted for च्वा *ā*, in the following cases.

(a) In the first person Singular Masculine (viii. i. 15)

Thus,—

करान् चुस् <i>karān chus</i> , I make.	करान् चुस <i>karān chus^o</i> (instead of करान् चुसा <i>karān chusā</i>), am I making?
--	---

(b) Always in the first person Singular Feminine, when a man is addressed (viii. i. 17). Thus,—

करान् च्छस् <i>karān chēs</i> , I (fem.) make.	करान् च्छस <i>karān chēs^o</i> , am I (fem.) making? Here the speaker is addressing a man. If she was addressing a woman she would say करान् च्छसय् <i>karān chēsay</i> .
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(c) Honorifically in the second person Singular and Plural (viii. i. 15).

करान् कुक् *karān chukh*, thou makest. करान् कुक् *karān chukh^a*, does Your Honour make ?

करान् चिव् *karān chiw^a*, you make. करान् चिव् *karān chiw^a*, do your Honours make ? Note here that the vowel remains short.

4. च्य् *ay* or, after a vowel, य् *y*. Used as follows, instead of च् *ā* or च्य^a.

(a) In the first person Singular and Plural Feminine, and in the third person Singular and Plural Feminine (viii. i. 17, 18), when a woman is addressed. Thus,—

करान् च्यस् *karān chēs*, I (fem.) make. करान् च्यस्य् *karān chēsai* am I (fem.) making ? Here the speaker is addressing a woman. If she were addressing a man, she would say करान् चस *karān chēs^a*.

करान् च्यह् चिसि *kārān chēh asⁱ*, we (fem.) make. करान् च्यह् चिसि *karān chēy asⁱ*, are we (fem.) making ?

करान् च्यह् स्वह् *karān chēh sōh*, she makes. करान् च्यह् स्वह् *karān chēy sōh*, is she (fem.) making ?

करान् च्यह् तिम *karān chēh tim^a*, they (fem.) make. करान् च्यह् तिम *karān chēy tim^a*, are they (fem.) making ?

In the three last, the speaker is also addressing a woman. If she were addressing a man, she would say च्या *chyā*, instead of च्य् *chēy*.

(b) In the second person Feminine optionally instead of च्य *a*, when a woman is addressed honorifically (viii. i. 16). Thus,—

करान् च्यक् *karān chēkh*, thou (fem.) makest. करान् च्यक् च्यक् *karān chēkhay*, or करान् च्यक् *karān chēkh^a*, is Your Honour (fem.) making ? Here the speaker is necessarily addressing a woman.

करान् च्यव *karān chēw^a*, you (fem.) make. करान् च्यव च्यव *karān chēway*, or करान् च्यव *karān chēw^a*, are Your Honours (fem.) making ? The speaker is again addressing women.

5. ति *ti* (iv. 179). This suffix is used to signify 'also,' 'indeed.' Thus,—

करान् कुह् *karān chuh*, he makes. करान् कृति *karān chuti*, he makes also.

करि *kari*, he will make. करिति *kariti*, he will indeed make.

6. ना *nā*, नय् *nay* (viii. i. 14, 16). This is a compound of न *nā* (No. 1) and आ *ā* (No. 2) or अ *a* (No. 3), or of न *nā*, and अय् (No. 4). It gives the force of an interrogative negative, and is used like the separate parts. Thus,—

करान् कुह् *karān chuh*, he makes. करान् कुना *karān chunā*, does he not make ?

So करान् चना *karān chēnā*, does she not make ?

कर्योन् *karyōn*, he made. कर्योन्ना *karyōnnā*, did he not make ?

करि *kari*, he will make. करिना *karinā*, will he not make ?

करान् चख् *karān chēkh*, thou (fem.) makest. करान् चख्ना *karān chēkhnā*, dost thou (fem.) not make ? करान् चख्नय् *karān chēkhnay*, does Your Honour (fem.) not make ?

करान् चव *karān chēw^a*, you (fem.) make. करान् चवना *karān chēw^anā*, do you (fem.) not do ? or करान् चवनय् *karān chēw^anay*, do Your Honours (fem.) not make ?

7. त्या *tyā* or त्यय् *tyay*. This is a combination of ति *ti*, (No. 5) and आ *ā* (No. 2), or अय् *ay* (No. 4). It implies a question with emphasis (viii. i. 14). Thus,—

करान् कृत्या *karān chutyā*, does he make (it) ?

कर्योन्त्या *karyōntyā*, did he make (it) ?

करित्या *karityā*, will he make (it) ?

करान् चवत्यय् *karān chēw^atyay*, do Your Honours (fem.) make (it) ?

8. सन *san^a*, सना *sanā*, आसन *āsan^a*, used in a question with doubt. If there is an interrogative word also in the sentence, it is added to it. Otherwise it is added to the verb. [सना *sanā* is not used with a verb].

The *आ* *ā* of *सना* *sanā* and *आसन* *āsanā*, is suffix No. 2 already described (viii. i. 25, 28). Thus,—

खवान् छ्वासन *khyawān chwāsanā* (*chuh + āsanā*), is he really eating?

क्यासन खवान् क्वा *kyāsanā (kyāh + sanā) khyawān chwā*, what, is he really eating?

क्यासना खवान् कुह् *kyāsanā khyawān chuh*, what, is he eating?

बट कैत्यासन आसान् बिह् *baṭā kaityāsanā (kaiti + āsanā) āsān chih* how many brahmans are there really?

कर्सना बाग्नि यिवान् कुह् *karsanā bāgṇi yiwān chuh*, at what hour is he coming? (*kar* = when? *बाग्नि* *bāgṇi* = Skr. *bhāga*, a portion of the day or night).

कर्सना यियि *karsanā yiyi*, when will he come?

कृतिसना आसहान् *kūṭisanā āsahān*, how many may there be?

कतिसना ओसु *katisanā ōsu*, where was he?

9. सा *sā*. This is the vocative particle (*vide ante*, Vol. lxvii, p. 92). It is used exactly like *सन* *sanā*. Thus,—

कैत्यासा लूक् आसि *kaityāsā (kaiti + ā-sā) lūkh āsi*, how many people were there?

PRONOMINAL SUFFIXES.

1. Before these as before all other suffixes, the final *ह* *h* of a verb is elided (iv. 131). So also, an initial *अ* *a* of a suffix is elided when the verb, either after the elision of *ह* *h* or not, ends in a vowel (viii. i. 39). Thus, *कुह् + अम्* *chuh + am* becomes first *कु + अम्* *chu + am*, and then *कु + म्* *chu + m* = *कुम्* *chum*, there is to me.

2. If the final *ख* *kh* of a suffix is followed by another pronominal (not an adverbial) suffix commencing with a vowel, the *ख* *kh* becomes *ह* *h* (viii. i. 38). Thus,—

करान् कुहस् *karān chu-h-as* (for *chu-kh + as*), thou makest for him.

करान् कुहख् *karān chu-h-akh*, thou makest for them.

3. The termination *अव्* *av* becomes *ओ* *ō* before suffixes (viii. ii. 18). Thus,—

करोय् *karō-th* (*karav + ath*), we shall make thee.

4. The termination इव् *iv* becomes यू *yū* before suffixes. Thus,—
कर्युम् *karyū-m* (for *kariv + am*), make ye for me; or make ye me.

When suffixes are added to the root direct, in the second singular imperative, a उ *u* is inserted (viii. i. 16). Thus,—

कर *kar*, make thou. करुम् *karu-m*, make thou for me,
or make me.

When suffixes are added to the 3rd person singular of the Future, indicative, the अ *a* of the suffix is not elided. Thus, करि *kari*, he will make, कर्यस् *kary-as*, not करिस् *kari-s*, he will make for him. This does not hold with the suffixes of the second person. Thus, करिय् *kari-y*, he will make for thee, करिव *kari-w^a*, he will make for you.

[When interrogative and other adverbial suffixes are added to the verb, they follow the pronominal suffix. *E.g.*, कुमा *chu-m-ā*, is there to me? So कुमासन *chu-m-āsan^a*, &c.].

Some verbs are never used without pronominal suffixes of the dative case (viii. i. 45). These are,—

त्सर *tsar*, be inwardly wrathful.

क्वश *phōç*, be inwardly wrathful.

फुह *phuh*, be inwardly wrathful.

मर्त्त *marts*, be inwardly wrathful.

वुत्त *wuts*, be burnt.

फित्त *phits*, forget.

त्यंब *tyamb*, look eagerly (viii. iii. 45).

Moreover these verbs are always conjugated in the feminine, whether the subject is masculine or feminine. They are then used as impersonal verbs. Thus,—

त्सरान् अस् *tsarān chě-s*, lit. there is inward anger to him. *I.e.*,
he is inwardly angry.

Similarly, क्वशान् अस् *phōçān chě-s*, फुहान् अस् *phuhān chě-s*, मर्त्तान् अस् *martsān chě-s*. Again त्सरान् अस् *tsarān chě-m*, there is inward anger to me, I am inwardly angry, and so on. Again, वुत्तान् अस् *wutsān chě-s*, there is burning to him, *i.e.*, he is burning (inwardly); फित्तान् अस् *phitsān chě-s*, there is forgetfulness to him, he forgets: त्यंबान् अस् *tyambān chě-s*, he looks eagerly.

Sometimes full pronouns are used instead of suffixes (viii. i. 46). Thus,—

तमिस् त्ररान् अह् *tamis tsarān chēh*, there is inward anger to him.

The verb गच्छ *gatsh*, be proper, be desirable, is also used with the dative (viii. i. 47). Thus,—

तमिस् गच्छान् कुह् जि परह् *tamis gatshān chuh zi parahā*, to him it is desirable that I should read. He thinks it proper that I should read. This is only in the third person. For the other persons always, and for the third person optionally, suffixes are used when they exist (viii. i. 48). Thus,—

गच्छान् कुम् *gatshān chu-m*, it is proper for me.

गच्छान् कुह् *gatshān chuh* (no suffix), it is proper for us.

गच्छान् कुय् *gatshān chu-y*, it is proper for thee.

गच्छान् कुव् *gatshān chu-w^a*, it is proper for you.

गच्छान् कुस् *gatshān chu-s*, it is proper for him.

गच्छान् कुक् *gatshān chu-kh*, it is proper for them.

This applies only to the present tense.

FIRST PERSON.

The suffix of the *Nominative Singular* is अस् *as*, which is not used with the Future tense (viii. i. 43). Thus,—

करान् कुस् *karān chu-s*, I make.

पकुस् *paku-s*, I went.

कर्येनस् *karyō-n-as*, I (*as*) was made (*karyō*) by him (*an*). *I.e.*, he made me.

But कर *kar^a*, not करस् *kara-s*, I shall make. करस् *kara-s* means 'I shall make for him' (*vide post*, third person).

For *other cases of the singular*, the suffix is अम् *am* (viii. i. 24). Thus,—

करान् कुम् *karān chu-m*, he makes me, or for me.

करान् चिम् *karān chi-m*, they make me, or for me.

करम् *karu-m*, made by me, I made.

There are no *Plural Suffixes* of the first person: the full pronouns are used instead (viii. i. 44). Thus,—

करान् कुह् अस्य *karān chuh asē*, he makes us, and so on.

SECOND PERSON.

For the *Nominative Singular* the suffix is अख् *akh*, which is used as follows (viii. i. 36). Thus,—

करान् कुख् *karān chhu-kh*, thou makest.

करख् *kara-kh*, thou wilt make.

करदाख् *karahā-kh*, (if) thou hadst made.

पकुख् *ṣaku-kh*, thou wentest.

करमख् *kar^m-m-akh*, thou wast made by me, *i.e.*, I made thee.

कर्योनख् *karyō-n-akh*, thou wast made by him, *i.e.*, he made thee.

For the *Accusative Singular*, अथ् *ath* is used in the first person singular and plural (viii. i. 37). Thus,—

करथ् *kara-th*, I shall make thee.

करोथ् *karō-th* (*karav + ath*), we shall make thee.

करान् कुसथ् *karān chu-s-ath*, I make thee.

करान् च्छिथ् *karān chi-th*, we make thee.

We cannot use this suffix with the third person. Thus, we cannot say करिथ् *kari-th*, he will make thee. We must use instead the suffix अय् *ay*, which properly belongs to the Dative. Thus,—

सुह् करिथ् *suh kari-y*, he will make thee, or for thee.

तिम् करनथ् *tim karan-ay*, they will make thee, or for thee.

सुह् करान् कुथ् *suh karān chu-y*, he makes thee, or for thee.

तिम् करान् च्छिथ् *tim karān chi-y*, they make thee, or for thee.

The same suffix (अथ् *ath*) is also used for the *Agent Singular* with the past tenses of transitive verbs. Thus,—

करथ् *karu-th*, made by thee, *i.e.*, thou madest.

कर्यथ् *karyō-th*, made by thee, *i.e.*, thou madest.

For the *Dative Singular* and also (when the verb is in the third person) for the *Accusative Singular*, the suffix अय् *ay* is used (viii. i. 40). Thus,—

करान् कुथ् *karān chu-y*, he makes for thee, or thee.

करान् कुसथ् *karān chu-s-ay*, I make for thee.

करान् च्छिथ् *karān chi-y*, we make for thee.

करान् द्विक् *karān chi-y*, they make for thee, or thee.

करिक् *kari-y*, he will make for thee, or thee.

This form is liable to certain changes in the Aorist and Pluperfect tenses of verbs. These will be found duly explained in the proper place. With the Past Conditional this suffix may have the force of the Accusative.

For all cases of the *Plural*, the suffix is व *w^a*. Thus,—

Nominative—

करान् द्विव *karān chi-w^a*, you make.

Accusative or Dative—

करान् कुव *karān chu-w^a*, he makes you, or for you.

करान् द्विव *karān chi-w^a*, they make you, or for you.

करान् कुस्व *karān chu-s-w^a*, I make you, or for you.

Agent—

कस्व *kar^w-w^a*, made by you, you made.

THIRD PERSON.

There is no pronominal suffix of the *Nominative Singular or Plural*.

The pronominal suffix of the *Dative Singular* is अस् *as* (viii. i. 33).

Thus,— (masculine).

करान् कुसस् *karān chu-s-as*, I make for him.

करान् कुहस् *karān chu-h-as* (*chu-kh + as*), thou makest for him.

करान् कुस् *karān chu-s*, he makes for him.

करान् द्विस् *karān chi-s*, we make for him.

करान् द्विस्व *karān chi-wa-s*, you make for him.

करान् द्विस् *karān chi-s*, they make for him.

करस् *kara-s*, I shall make for him.

So also for the feminine, करान् अस् *karān che-s-as*.

[This suffix is also used for the *Accusative*, when the verb is in the third person. Thus, करान् कुस *karān chu-s*, he makes him, करान् द्विस् *karān chi-s*, they make him].

For other oblique cases of the singular, अन् *an* is used (viii. i. 34).

Thus,—

Accusative—

करान् कुहन *karān chu-h-an* (*chu-kh + an*), you make him.

खवान् कुहन *khyawān chu-h-an*, you eat him.

अस *as* is however, used for अन् *an* with the third person. Thus, करान् चुस् *karān chu-s*, not करान् चुन् *karān chu-n*, he makes him.

Agent—

करन् *karu-n* (कर् *kar^u* + अन् *an*), made by him, he made.

For all cases of the plural, the suffix is अख् *akh* (viii. i. 35). Thus,—

करान् चुसख् *karān chu-s-akh*, I make for them, or I make them.

करान् चुक् *karān chu-kh*, he makes for them, or makes them.

करख् *karu-kh*, made by them, they made.

Moods and Tenses.

The Kāçmīrī verb has four Moods, *viz.*, the Indicative, the Imperative, the Benedictive, and the Conditional.

The Indicative Mood is usually credited with eight tenses, *viz.*,—

1. The Present.
2. The Imperfect.
3. The Future.
4. The Past.
5. The Aorist.
6. The Pluperfect.
7. The Perfect.
8. The Periphrastic Pluperfect.

Of these, Nos. 2, 7, and 8, are not discussed by Īçvara-kaula in his grammar. I shall, however, give short notices of them for the sake of completeness. Nos. 1, 2, 7, and 8, are all periphrastic tenses, made up of Participles conjugated with auxiliary verbs. In No. 1, the Present participle is conjugated with the Present tense of the auxiliary verb, and in No. 2, it is conjugated with the Past tense of the same. In No. 7, the Past participle is conjugated with the Present tense of the same verb, and in No. 8, with its Past tense.

The Imperative Mood has three tenses, *viz.*,—

1. The Present.
2. The Future.
3. The Past.

The Present Imperative has two forms, a Simple, and a Modified.

The Benedictive Mood has one tense, which may be called the Future.

The Conditional Mood has two tenses, *viz.*,—

1. A Present-Future. This is the same in form as the Future Indicative.
2. A Past.

Other tenses may be manufactured on the analogy of Hindī, but they are not in frequent use. Thus, सुह करान् आसि *suh karān āsi*, equivalent to the Hindī वह करता होगा *wah kar'tā hōga*, he will (probably) be making. It is unnecessary to make a list of these. They can be made up as required.

Some verbs are irregular in the use of their tenses. These are the following.

The root ज्ञान *zān*, know, when it means to know how to do a thing, uses the Future in the sense of the Present (viii. i. 58). Thus,—

करन् ज्ञानि *karun zāni*, he knows how to make a thing.

परन् ज्ञानन् *parun zānan*, they know how to read.

So also, स्यठाह् ज्ञानि *syathāh zāni*, he knows a great deal.

विद्या ज्ञानि *vidyā zāni*, he is a learned man (lit. he knows knowledge).

In the same way, in writing the ceremonial part of a letter, a past tense is sometimes used instead of the imperative. Thus, तमिस् ल्युख्य् सोनु नमस्कार् *tamis lyūkhu-th sōn^v namaskār*, to him was there written-by-thee our compliment, *i.e.*, write our compliments to him.

The root पाथ *pāth*, be, become, has no regular Present; and uses the Future for that tense (viii. i. 59). Thus,—

पाथ *pāth^a*, I am.

पाथव् *pāthav*, we are.

पाथस् *pāthakh*, thou art.

पाथिव् *pāthiv*, you are.

पाथि *pāthi*, he is.

पाथन् *pāthan*, they are.

For the Past tense, the following forms are used.

1 पाथहा *pāthahā*, I was.

पाथहाव् *pathahāv*, we were.

2 पाथहास् *pāthahākh*, thou wast.

पाथिहीव् *pāthihiv*, you were.

3 पाथिहे *pāthihē*, he was.

पाथहान् *pāthahān*, they were.

These forms are properly those of the Past Conditional. This verb has no verbal nouns.

Gender, Number and Person.

GENDER.

The verb has two Genders, Masculine and Feminine. The Future Indicative, and the Imperative, Benedictive, and Conditional Moods, do not however, make any change for Gender. Their Masculine and Feminine forms are identical.

Some verbs are conjugated only in the Feminine. They are all impersonal. They are,—

चर *tsar*, be inwardly wrathful (viii. i. 45).

झर *phöç*, be inwardly wrathful.

फुह *phuh*, be inwardly wrathful.

मर्च *martš*, be inwardly wrathful.

वुच *wutš*, be burnt.

फिच *phits*, forget.

त्यंब *tyamb*, look eagerly, (viii. iii. 45).

चुव *tsuv*, quarrel (viii. iii. 9).
मोरव *mōrav*, bear pain. } These two are feminine and
impersonal in the past
tenses only.

The peculiarities of these verbs will be found described in the proper places. The first six form one group, which is known as the चरादि *tsarādi*, or ‘*tsar* and the others,’ which will be frequently met with in the course of this article.

NUMBER. There are two numbers,—singular and plural (viii. i. 4). There is no dual. तिम् चिह् परान् *tim chih parān*, means ‘they two,’ or ‘they (many) are reading.’

PERSON. There are three persons,—first, second, and third (viii. i. 3).

The first person is more worthy than the second, and the second than the third (viii. i. 5).

Thus, सुह् त च्छ् परिव् *suh t^a ts^ah pariv*, do thou and he read (imperative).

च्छ् त बुह् परव् *ts^ah t^a böh parav*, let thee and me read.

सुह् त बुह् परव् *suh t^a böh parav*, let him and me read.

सुह् त च्छ् त बुह् परव् *suh t^a ts^ah ta böh parav*, let him and thee and me read.

Auxiliary Verbs, and Verbs Substantive.

There are many verbs meaning ‘to be’ in Kāçmīrī. The following are the two commonest forms, and they are used not only as verbs substantive, but also as auxiliary verbs.

PRESENT. I am (viii. i. 11, 12).

Person.	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	चुस् <i>chu-s.</i>	च्यस् <i>chě-s.</i>	चिह् <i>chih.</i>	च्यह् <i>chěh.</i>
2	चुख् <i>chu-kh.</i>	च्यख् <i>chě-kh.</i>	चिव् <i>chi-w^a.</i>	च्यव <i>chě-w^a.</i>
3	चुह् <i>chuh.</i>	च्यह् <i>chěh.</i>	चिह् <i>chih.</i>	च्यह् <i>chěh.</i>

Negative form चुस्न *chu-s-n^a*, &c., see p. 11.

Interrogative form चुसा *chu-s-ā*, चुस *chu-s^a*, &c., see p. 12.

Negative-interrogative form चुस्ना *chu-s-nā*, see p. 14.

Emphatic form चुस्ति *chu-s-ti*, see p. 14.

Emphatic-interrogative form चुस्त्या *chu-s-ty-ā*, see p. 14.

PAST. It was.

Person.	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	ओसुस् <i>ōsu-s.</i>	ओस्यस् <i>ās^ū-s.</i>	ओसि <i>āsⁱ.</i>	ओस <i>ās^a.</i>
2	ओसुख् <i>ōsu-kh.</i>	ओस्यख् <i>ās^ū-kh.</i>	ओसिव् <i>āsⁱ-w^a.</i>	ओसव <i>ās^a-w^a.</i>
3	ओसु <i>ōs^u.</i>	ओस्य <i>ās^ū.</i>	ओसि <i>āsⁱ.</i>	ओस <i>ās^a.</i>

Negative form ओसुस्न *ōsu-s-n^a*, &c., see p. 11.

Interrogative form ओसुसा *ōsu-s-ā*, &c., see p. 12.

Negative-interrogative form ओसुस्ना *ōsu-s-nā*, &c., see p. 14.

Emphatic form ओसुस्ति *ōsu-s-ti*, &c., see p. 14.

Emphatic-interrogative form ओसुस्त्या *ōsu-s-ty-ā*, &c., see p. 14.

These verbs take the usual pronominal suffixes. The following are examples.

सुह् कुम् *suh chu-m*, he is to me, *est mihi*, I have him.

स ष्यत् *s^a chě-y*, she is to thee, thou hast her.

तिम् चिस् *tim chi-s*, they are to him, he has them.

सुह् ओसुम् *suh ōsu-m*, he was to me, I had him.

स आस्त्स् *s^a ās^ū-s*, she was to him, he had her.

Any other tenses required of the auxiliary verb are formed (like the past) regularly from the root आस *ās*, be. Thus, Future आसि *āsi*, he will be. It is unnecessary to give these forms.

THE
CONJUGATION
OF THE
ACTIVE VERB.

Verbal Nouns.

THE INFINITIVE. This is formed by adding **उन्** *un*, **उनु** *un^u*, or **अनु** *an^u* to the root. It is an abstract noun. Its formation is fully described in the chapter on Primary Suffixes. See Nos. 16, 17, 18 (*ante* Vol. lxxvii, pp. 202 and ff.) Examples are **करन्** *karun*, **करनु** *karun^u*, and **करानु** *karān^u*, to make, making (ix. ii. 2, 3).

करन् *karun*, belongs to the first declension, and the other two to the second. All are masculine. They are declined as follows.

Singular.	Nom.	करन् <i>karun</i> .	करनु <i>karun^u</i> or करानु <i>karān^u</i> .
	Acc.	करनस् <i>karanas</i> .	Not used.
	Ag.	करनन् <i>karanan</i> .	कर्नि <i>kar^anⁱ</i> .
	Obl.	करन <i>karana</i> .	करनि <i>karani</i> .
Plural.	Nom.	करन् <i>karan</i> .	कर्नि <i>kar^anⁱ</i> .
	Acc.	करनन् <i>karanan</i> .	Not used.
	Ag.	करनौ <i>karanau</i> .	Not used.
	Obl.	करनौ <i>karanau</i> .	Not used.

The various cases are used as gerunds. Thus, Dat. **करनस् कित्** *karanas kyut^u*, for making. The oblique form in **अनि** *ani*, is specially used to indicate intention (ix. i. 18). Thus, **परनि गङ्गान् छुह्** *parani gatshān chuh*, he is going to read; **रनि गौव्** *ranani gauv*, he went to cook; **अनि गङ्गि** *khēni gatshi*, he will go to eat.

Roots ending in vowels form the Infinitive only in **अनु** *an^u* (ix. i. 21, 24). Thus, from **खि** *khi*, eat, **अनु** *khyān^u*; from **चि** *ci*, drink, **अनु** *cyān^u*. This applies only to the nominative singular. Thus, Acc. Sing., **अनस्** *khyānas*. As usual, **नि** *ni*, take; **दि** *di*, give; and **यि** *yi*,

come, are exceptions. Their Infinitives are निनु (न्युन्) *nyun^u*, Acc. Sing., निनस् *ninas*, or निनिस् *ninis*, and so on for the other two.

The following verbs have feminine infinitives. They never use the ordinary masculine forms (ix. ii. 24, 25).

त्सर <i>tsar</i> , be inwardly wrathful.	Infinitive	त्सरिञ् <i>tsariñ</i> , to be so.
त्सुव <i>tsuv</i> , quarrel.	„	त्सुविञ् <i>tsuviñ</i> , to quarrel.
मोरव <i>mōrav</i> , bear pain.	„	मोरवञ् <i>morav^uñ</i> , to bear pain.
मर्च <i>martṣ</i> , be impatient.	„	मर्चञ् <i>martṣ^uñ</i> , to be impatient.

The verbs ख्स *kh^as*, pluck the hair; फित्त *phits*, forget; क्कश *phōç*, be inwardly angry; फुह *phuh*, be inwardly angry; वजव *wazav*, moisten; and वुत्त *wutṣ*, be burned, may either have a masculine infinitive in उन् *un*, etc., or a feminine one in ञ् *ñ* (ix. ii. 25, 26). Thus, खसुन् *k^asun* or खसुञ् *k^as^uñ*, to pluck the hair (*sensu obscæno*). A great many other verbs also optionally form abstract nouns of the feminine gender. These are all described under the head of primary suffixes.

NOUNS OF AGENCY. There are three forms of these. The first is made by adding अवुन् *awun^u*, to the root. Thus, करवुन् *karawun^u*, a doer (ix. i. 25–27). If the root ends in इ *i*, अव *aw* is inserted, and the इ *i* is changed to य *y*. Thus, खि *khi*, eat, ख्यववुन् *khyawawun^u*, a doer. Exceptions, as usual, are नि *ni*, take; दि *di*, give; and यि *yi*, come. These form their nouns of agency as follows, निववुन् *niwawun^u*, a taker, and so on for the other two. The feminine of करवुन् *karawun^u* is करवञ् *karavañ*, and the noun is thus declined. See article on Primary Suffixes, No. 4, (Vol. lxxvii, p. 195).

MASCULINE.

FEMININE.

Singular. Nom.	करवुन् <i>karawun^u</i> .	करवञ् <i>karavañ</i> .
Acc.	करवनिस् <i>karawanis</i> .	करवञ् <i>karawañě</i> .
Ag.	करव्नि <i>karaw^anⁱ</i> .	करवञ् <i>karawañi</i> .
Plural. Nom.	करव्नि <i>karaw^anⁱ</i> .	करवञ् <i>karawañě</i> .
Acc.	करवन्यन् <i>karawanyan</i> .	करवञ् <i>karawañan</i> .
Ag.	करवन्यौ <i>karawanyau</i> .	करवञ् <i>karawañau</i> .

The second form of the Noun of Agency is made by adding **अन्वोलु** *anwōl^u*, to the root (ix. i. 28-31). Thus, **करन्वोलु** *karanwōl^u*, a doer. An example of a verb ending in a vowel is **ख्यनवोलु** *khyānawōl^u*, in which **अ** *a* is inserted before **वोलु** *wōl^u*. As an example of **नि** *ni*, **दि** *di*, and **यि** *yi*, we may give **निनवोलु** *ninawōl^u*. Sometimes **वोलु** *wōl^u* can be added to a feminine abstract noun, thus, **ज्ञान्वोलु** *zāñwōl^u*, a knower. Regarding these see the article on Primary Suffixes, Nos. 5 and 6, (Vol. lxxvii, p. 196).

The feminine of **करन्वोलु** *karanwōl^u* is **करन्वाज्यञ्** *karanwājyñ*, and the noun is thus declined.

MASCULINE.

FEMININE.

Singular. Nom.	करन्वोलु <i>karanwōl^u</i> .	करन्वाज्यञ् <i>karanwājyñ</i> .
Acc.	करन्वालिस् <i>karanwālis</i> .	करन्वाज्यञ् <i>karanwājyñ</i> .
Ag.	करन्वालि <i>karanwālī</i> .	करन्वाज्यञ् <i>karanwājyñī</i> .
Plural. Nom.	करन्वालि <i>karanwālī</i> .	करन्वाज्यञ् <i>karanwājyñ</i> .
Acc.	करन्वाल्यन् <i>karanwālyan</i> .	करन्वाज्यञ् <i>karanwājyñan</i> .
Ag.	करन्वाल्यौ <i>karanwālyau</i> .	करन्वाज्यञ् <i>karanwājyñau</i> .

The third form of the Noun of Agency is made by adding **अन्प्राख्** *anprākh* to the root (ix. i. 28-31). Thus, **करन्प्राख्** *karānprākh*, a doer. The feminine is **करन्प्राकञ्** *karānprākāñ* (vi. 28). It is declined regularly. Thus, Acc. Sing., masc. **करन्प्राकस्** *karānprākas*, fem., **करन्प्राकञ्** *karānprākāñ*. Verbs ending in vowels have the same irregularities as in the second form. Thus, **ख्यनप्राख्** *khyānagrākh*, an eater, **निनप्राख्** *ninagrākh*, a taker.

Verbal Adjectives, or Participles.

These are Present, Future, or Past. The Past Participles are either Verbal or Adjectival. Verbal Past Participles are the original Past Participles of the verb, but are not now used as participles. Nowadays they are only used as bases for the formation of Past tenses. Adjectival Past Participles are modern formations from the Verbal Past Participles, and are nowadays the only forms used as participles proper. Verbal Past Participles have three forms, *viz.*, the Past, the Aorist, and the Pluperfect.

The PRESENT PARTICIPLE. This Participle is an active one. It has been fully described under the head of Primary Suffixes, (No. 1; Vol. lxvii, p. 193). The following *resumé* is given for the sake of convenience. It is formed by adding

आन् *ān* to the root (viii. i. 19; ix. i. 2). Thus, कर *kar*, make, Pres. Part. करान् *karān*. It does not change for gender or number.

The roots नि *ni*, take, दि *di*, give, and यि *yi*, come, take वान् *wān*, thus निवान् *niwān*, दिवान् *diwān*, यिवान् *yiwān*. Other roots ending in इ *i* change the इ *i* to य *ya*, and add वान् *wān*. Thus, खि *khi*, eat, Pres. Part. खिवान् *khyawān*, चि *ci*, drink, चिवान् *cyawān* (viii. i. 19, 20; ix. i. 3).

When a Present Participle is repeated, it means that the thing is done frequently (ix. i. 4). Thus दिवान् दिवान् गौव् *diwān diwān gauv*, he kept giving as he went.

The FUTURE PARTICIPLE. This is a passive Participle, equivalent to the Latin Future Participle in *-endus*, or the Sanskrit Participle in अनियः *anīyah*. It is the same in form as the Infinitive in उन् *un*, उन् *un^u* or अन् *an^u*. Thus, इह् पाठ् चुह् परन् *yih pāṭh chuh parun*, this lesson is to be read, *ayaṁ pāṭhaḥ paṭhanīyah*. इह् पूथि च्ह परन् *yih pūthi chēh parañ*, this book is to be read, *iyaṁ pustikā paṭhanīyā*. In the case of Intransitive Verbs, the participle takes an impersonal passive signification. Thus, चलुन् *tsalun*, it is to be fled, *calanīyam*, तस् चुह् चलुन् *tas chuh tsalun*, it is to be fled by him, he must flee. Note that the Agent is always put in the Accusative (which is an old Dative), and not in the Agent case, as we might expect. For further particulars regarding the use of this Future Participle, see the article on Primary Suffixes, Nos. 16–18, (Vol. lxvii, pp. 204 and ff.)

The FUTURE IMPERSONAL PARTICIPLE. Another impersonal Future Participle Passive is formed by adding अनि *anī* to the root (ix. i. 50). It is formed with both Transitive and Intransitive verbs. Thus तस् करनी *tas karanī*, it is to be done by him, he must do; तस् पकनी *tas pakanī*, he must go. See Primary Suffix No. 14 (Vol. lxvii, p. 201).

The VERBAL PAST PARTICIPLE. These will be fully dealt with when describing the past tenses. Suffice it at present to say that the Past Verbal Past Participle only occurs in the first and second conjugations, and is formed by adding उ *u-mātrā* to the root. Thus, first conjugation, कर् *kar^u*, done; second conjugation, चलु *tsal^u*, gone. In the case of verbs of the first conjugation, it is a Passive Participle, and

in the case of verbs of the second conjugation, which are all intransitive, it is a Neuter Participle. See also article on Primary Suffixes, (No. 10; Vol. lxvii, p. 197). This Past Participle refers to something which has lately happened.

AORIST VERBAL PAST PARTICIPLE. This will also be fully dealt with when describing the Aorist Tense. It is formed by adding योव् *yōv* or यौव् *yāuv*, to the root. Thus, कर्षोव् *karyōv* or कर्षौव् *karyāuv*, done. The Participle occurs for all conjugations, with this difference, that in the first and second conjugations it is an Aorist or Indefinite Past, and contains no idea of proximity or remoteness of time. In the case of verbs of the third conjugation, which have no Verbal Past Participle, it is used instead of that Participle, and refers to something which has lately happened. See, also, Primary Suffix, No. 11, (Vol. lxvii, p. 198).

PLUPERFECT VERBAL PAST PARTICIPLE. This will also be fully dealt with when describing the Pluperfect tense. It is formed by adding याव् *yāv* to the root. Thus, कर्षाव् *karyāv*, done. In the case of verbs of the first and second conjugations it implies that the action has taken place a long time ago. In the case of verbs of the third conjugation it takes the place of the Aorist Participle, the proper form of which has been used up for the Past. These verbs have a special form for the true Pluperfect Participle, which need not be described here.

The ADJECTIVAL PAST PARTICIPLE. These are formed by adding the termination मत् *mat^u* or मुत् *mut^u*, to a verbal Past Participle. In the case of verbs of the first and second conjugations, this is added to the Past Participle in उ *u-mātrā*, and in the case of verbs of the third conjugation to the Aorist Participle in योव् *yōv* or यौव् *yāuv*, the final व् *v* of which is elided. Both members of the compound thus formed are liable to changes of inflexion and gender (ix. i. 40). See also article on Primary Suffixes, (No. 12; Vol. lxvii, p. 198). Examples are,—

FIRST CONJUGATION.

कर्म्मत् *kar^umat^u*, or कर्म्मुत् *kar^umut^u*, made; which is thus declined.

SINGULAR.

	Masc.	Fem.
Nom.	कर्म्मत् <i>kar^umat^u</i> or कर्म्मुत् <i>kar^umut^u</i> .	कर्म्मत् <i>kar^umat^{sū}</i> .
Acc.	कर्म्मत् <i>karⁱmatⁱ</i> .	कर्म्मत् <i>kar^emat^{sē}</i> .
Ag.	कर्म्मत् <i>karⁱmatⁱ</i> .	कर्म्मत् <i>karⁱmat^{si}</i> .

PLURAL.

	Masc.	Fem.
Nom.	करि॑मति॒ <i>karimatî</i> .	कर्य॑मच्च <i>karëmaṭs̄a</i> .
Acc.	करि॑मत्यन् <i>karimatyan</i> .	कर्य॑मच्चन् <i>karëmaṭsan</i> .
Ag.	करि॑मत्यौ <i>karimatyanu</i> .	कर्य॑मच्चौ <i>karëmaṭsau</i> .

SECOND CONJUGATION.

बुवु॑मत् *bövumaṭ*^u, or बुवु॑मत् *bövumuṭ*^u, become.

Singular. Masc.	बुवु॑मत् <i>bövumaṭ</i> ^u .
Fem.	बुवु॑मच्च <i>bövumats̄</i> ^u .
Plural. Masc.	बुवि॑मति॒ <i>bövimatî</i> .
Fem.	बुव्य॑मच्च <i>bövëmats̄</i> ^a .

THIRD CONJUGATION.

व्यथो॑मत् *vyathyomaṭ*^u, व्यथो॑मत् *vyathyaumaṭ*^u, व्यथो॑सुत् *vyathyōmuṭ*^u, or व्यथो॑सुत् *vyathyaumuṭ*^u, become fat, from व्यथ *vyath*, be fat. It is thus declined,—

SINGULAR.

	Masc.	Fem.
Nom.	व्यथो॑मत् <i>vyathyomaṭ</i> ^u , &c.	व्यथे॑मच्च <i>vyathyëmats̄</i> ^u .
Acc.	व्यथे॑मत्तिस् <i>vyathyëmatis</i> .	व्यथे॑मच्च <i>vyathyëmats̄</i> ^e .
Ag.	व्यथे॑मत्ति <i>vyathyëmati</i> .	व्यथे॑मच्चि <i>vyathyëmatsi</i> .

PLURAL.

Nom.	व्यथे॑मत्ति <i>vyathyëmati</i> .	व्यथे॑मच्च <i>vyathyëmats̄</i> ^a .
Acc.	व्यथे॑मत्यन् <i>vyathyëmalyan</i> .	व्यथे॑मच्चन् <i>vyathyëmats̄an</i> .
Ag.	व्यथे॑मत्यौ <i>vyathyëmalyau</i> .	व्यथे॑मच्चौ <i>vyathyëmats̄au</i> .

Verbal Adverbs, or Conjunctive Participles.

There are two of these, a Present and a Past.

The PRESENT CONJUNCTIVE PARTICIPLE. This is formed from the Present Participle by adding इ *i-mātrā*, and modifying the preceding long अ *ā*. Thus, from कर *kar*, make, Present Participle, करान् *karān*,

Present Conjunctive Participle, करानि *karānī*, on making, at the time of making. It is used in sentences like the following सुह करानि गौव् *suh karānī gauv*, he went away as he was doing it. This form is not mentioned by Īçvara-kaula, and, according to my paṇḍit, is only used by rustics. It is more elegant to use the simple Present Participle. Thus, सुह करान् गौव् *suh karān gauv*.

The PAST CONJUNCTIVE PARTICIPLE. This form corresponds to the Sanskrit Conjunctive Participle in त्वा *tvā*, or य *ya* (त्य *tya*), and means 'having done so and so.' It is fully described in the Article on Primary Suffixes, (No. 2; Vol. lxvii, p. 193), and the more important information there given is here repeated for the sake of convenience. It is formed by adding इथ् *ith* or इथ् क्यथ् *ith kyāth*, to the root. Thus, करिथ् *karith*, having made, परिथ् *parith*, having read. So also करिथ् क्यथ् *karith kyāth*, having made, and परिथ् क्यथ् *parith kyāth*, having read (ix. i. 5, 6).

Before this suffix a radical आ *ā* is modified, a radical ए *ē* becomes ई *ī*, and a radical ओ *ō* becomes ऊ *ū* (ix. i. 13-15). Thus,—

From —

कार *kār*, boil.

कारिथ् *kārith*, having boiled.

मार *mār*, beat.

मारिथ् *mārith*, having beaten.

तार *tār*, pass over.

तारिथ् *tārith* having passed over.

त्सेट् *tsēt*, pound to powder.

त्सेटिथ् *tsētith*, having pounded to powder.

लेख *lēkh*, write.

लौखिथ् *līkhith*, having written.

[So also —

ब्यह *byah*, sit.

बिहिथ् *bihith*, having sat].

खोत्र *khōts*, fear.

खूत्रिथ् *khutsith*, having feared.

बोज *bōz*, hear.

बूजिथ् *būzith*, having heard.

तोल *tōl*, weigh.

तूलिथ् *tūlith*, having weighed.

Roots ending in vowels, form their Conjunctive Participle as follows (ix. i. 7, 8).

खि *khi*, eat.

ख्यथ् *khyāth*, having eaten.

चि *ci*, drink.

च्यथ् *cyāth*, having drunk.

हि *hi*, take.ह्यथ् *hyäth*, having taken.जि *zi*, be born.ज्यथ् *zyäth*, having been born.पि *pi*, fall.प्यथ् *pyäth*, having fallen.

But—

दि *di*, give.दिथ् *dith*, having given.नि *ni*, take.निय् *nith*, having taken.यि *yi*, come.यिथ् *yith*, having come.So also, ख्यथ् क्यथ् *khyäth kyäth*, &c.

The following are irregular,—

वुड् *wud*, fly, when it means to obtain salvation (*mōkṣa*) makes वुजिथ् *wujith*. Thus, वुजिथ् गौव् *wujith gauv*, having obtained salvation, he went, *i.e.*, he went to heaven, but वुडिथ् गौव् *wuḍith gauv*, having flown, he went, *i.e.*, he flew away (ix. i. 9).

The causal verb म॒ष्राव् *maṣṛāw*, cause to forget, makes मा॒षविथ् *māṣawith*, when the object forgotten is death. Thus, म॒रुन् मा॒षविथ् *marun māṣawith*, having caused to forget death. If anything else is forgotten, it is म॒ष्राविथ् *maṣṛāwīth*, regularly (ix. i. 10).

When the Conjunctive Participle is repeated, to imply continuous action, the थ् *th* is dropped, and the final *i* becomes *i-mātrā* (ix. i. 11, 12). Thus,—

क॒रि क॒रि *karī karī*, having made, having made, *i.e.*, having kept making.

बू॒जि बू॒जि *būzī, būzī*, having kept hearing.

का॒रि का॒रि *kārī kārī*, having kept boiling.

ता॒रि ता॒रि *tārī tārī*, having continued passing people over.

Verbs ending in vowels optionally retain the थ् *th*. Thus, ख्य् ख्य् *khě khě*, or ख्यथ् ख्यथ् *khyäth khyäth*, having kept eating. दि दि *di di*, or दिथ् दिथ् *dith dith*, having kept giving.

NEGATIVE CONJUNCTIVE PARTICIPLE. This is formed by adding अनथ् *anay* to the root (ix. i. 51). Thus, करनथ् *karanay*, not having done. See Primary Suffix, No. 14, (Vol. lxxvii, p. 201).

A. Indicative Mood.

1. PRESENT TENSE.

The same form is used both for the Definite, the Habitual, and the Indefinite Present (viii. i. 7-10). Thus, परान् कुह् *parān chuh*, he is reading, or he is in the habit of reading, or he reads. So we have,—

ईश्वर् जगतस् रक्षान् कुह् *Īṣvar zagatas rachān chuh*, God protects the world.

पान पानस् रक्षान् कुह् *pān^a pānas rachān chuh*, by himself (*i.e.*, by his own power) he protects himself. *Ātmanā atmānaṁ pālayati*.

व्याकरण् परान् कुह् ल्लुकुट् *vyākaraṇ parān chuh lōkuṭ^u*, the boy is reading (*i.e.*, has arrived at that stage of his studies) grammar.

गङ्गाय गङ्गान् कुह् प्रथ् कुम्बस् *gaṅgāy^a gaṅgān chuh prāth kumbas*. He visits (is in the habit of visiting) the Ganges at every *kumbha* festival.

क्याह् कुह् मुर्त्त करान् *kyāh chuh murts karān*, does he make images? (is that his profession?)

क्याह् कुह् जान् लेखान् *kyāh chuh jān lēkhān*, is the holy man writing (and going on writing)?

क्याह् कुह् र्तु ग्यवान् *kyāh chuh r^t gyawān*, is the good man singing?

This tense is found by adding the Present Tense of the auxiliary verb to the Present Participle of the principal verb, which does not change for gender or number. It is therefore thus conjugated.

I make, or am making.

Person.	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	करान् कुस् <i>karān chus.</i>	करान् छस् <i>karān chēs.</i>	करान् चिह् <i>karān chih.</i>	करान् छह् <i>karān chēh.</i>
2	करान् कुख् <i>karān chukh.</i>	करान् छख् <i>karān chēkh.</i>	करान् चिख् <i>karān chiw^a.</i>	करान् छव <i>karān chēw^a.</i>
3	करान् कुह् <i>karān chuh.</i>	करान् छह् <i>karān chēh.</i>	करान् चिह् <i>karān chih.</i>	करान् छह् <i>karān chēh.</i>

Negative form, करान् कुस्न *karān chusn^a*, I do not make, &c., see p. 11.

Interrogative form, करान् कुसा *karān chusā*, करान् कुस *karān chus^a*, &c., do I make? see p. 12.

Negative Interrogative form, करान् कुस्ना *karān chusnā*, &c., do I not make? see p. 14.

Emphatic form, करान् कुस्ति *karān chusti*, &c., I do indeed make, see p. 14.

Emphatic Interrogative form, करान् कुस्त्या *karān chustyā*, &c., do I indeed make? see p. 14.

In this, and in other periphrastic tenses, it is elegant to put the auxiliary before the verb (viii. i. 22, 23, 24) when standing in a sentence. Thus,—

बत कुह् सुह् ख्यवान् *bat^a chuh suh khyawān*, he is eating rice, is more elegant than बत सुह् ख्यवान् कुह् *bat^a suh khyawān chuh*, though both are correct.

तव पत कुह् आसनस् षट् बिहिय् पूजा करान् *taw^a pat^a chuh āsanas pyāṭh bihith pūzā karān*, after that; he is doing worship having sat down on a seat, is more elegant than तव पत आसनस् षट् बिहिय् पूजा करान् कुह् *taw^a pat^a āsanas pyāṭh bihith pūzā karān chuh*, though both are correct.

So the following is the most elegant order,—ईश्वर् कुह् आसान् काशिय अंदर् *iṣwar chuh āsān kāṣiy^a andar*, God exists in Benares. When, however, the verb stands by itself as in the paradigm, the auxiliary always follows.

The following are examples of the use of pronominal suffixes, (pp. 15 and ff)—

बुह् कुसथ् करान् *bōh chus-ath karān*, I make thee (viii. i. 37).

असि चिय् करान् *asⁱ chi-th karān*, we make thee.

बुह् कुसन् करान् *bōh chus-an karān*, I make him.

बुह् कुसस् करान् *bōh chus-as karān*, I make for him.

बुह् कुसव करान् *bōh chus-aw^a karān*, I make you.

बुह् कुसख् करान् *bōh chus-akh karān*, I make them.

Similarly for the other persons, which are all regular, except सुह् कुस् करान् *suh chu-s karān*, he makes him, or for him (not कुन् *chu-n*) (see p. 19).

2. IMPERFECT TENSE.

This tense is not described by *Īçvara-kaula*. It is formed exactly like the Present, except that the Past tense of the Auxiliary Verb is used instead of the Present. Thus,—

I was making.

Person.	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	करान् औसुस् <i>karān ōsus.</i>	करान् आसुस् <i>karān ās^us.</i>	करान् आसि <i>karān āsⁱ.</i>	करान् आस <i>karān ās^a.</i>
2	करान् औसुख् <i>karān ōsukh.</i>	करान् आसुख् <i>karān ās^ukh.</i>	करान् आसिव <i>karān āsⁱw^a.</i>	करान् आसव <i>karān ās^aw^a.</i>
3	करान् औसु <i>karān ōs^u.</i>	करान् आसु <i>karān ās^u.</i>	करान् आसि <i>karān āsⁱ.</i>	करान् आस <i>karān ās^a.</i>

The various adverbial suffixes are added as in the case of the Present Tense. They will be found in detail under the paradigm of the auxiliary verb, and need not be repeated here. One example will suffice. करान् औसुसन् *karān ōsusn^a*, I was not making. As in the case of the Present, in a formal sentence, it is more elegant to place the auxiliary before the present participle. Thus, बत औसु सुह् खवान् *bat^a ōs^u suh khyawān*, he was eating rice.

Pronominal suffixes are added as in the Present. Thus,—

बुह् औसुसथ् करान् *bōh ōsus-ath karān*, I was making thee.

आसि आसिथ् करान् *āsⁱ āsi-th karān*, we were making thee.

बुह् औसुसथ् करान् *bōh ōsus-ay karān*, I was making for thee.

बुह् औसुसन् करान् *bōh ōsus-an karān*, I was making him.

बुह् औसुसस् करान् *bōh ōsus-as karān*, I was making for him.

बुह् औसुसव करान् *bōh ōsus-aw^a karān*, I was making you.

बुह् औसुसख् करान् *bōh ōsusakh karān*, I was making them.

सुह् औसुस् करान् *suh ōsu-s karān*, he was making him or for him.

(not औसुन् *ōsu-n*).

And so others.

3. FUTURE TENSE.

This tense is conjugated as follows (viii. ii. 28).

SINGULAR.	PLURAL.
1 कर <i>kar^a</i> , I shall make.	करव् <i>karav</i> , we shall make.
2 करख् <i>karakh</i> , thou wilt make.	करिव् <i>kariv</i> , you will make.
3 करि <i>kari</i> , he will make.	करन् <i>karan</i> , they will make.

Roots ending in vowels insert म् *m* in the first person of both numbers. Before इ *i*, they insert य् *y*. As usual, all roots ending in इ *i*, except नि *ni*, take, दि *di*, give, and यि *yi*, come, change the final इ *i* of the root to य *ya* (29). We thus get for the future of खि *khi*, eat,—

SINGULAR.	PLURAL.
1 ख्यम <i>khyam^a</i> .	ख्यमव् <i>khyamav</i> .
2 ख्यख् <i>khyakh</i> .	ख्ययिव् <i>khëyiv</i> .
3 ख्ययि <i>khëyi</i> .	ख्यन् <i>khyan</i> .

From दि *di*, give, we have,—

SINGULAR.	PLURAL.
1 दिम <i>dim^a</i> .	दिमव् <i>dimav</i> .
2 दिख् <i>dikh</i> .	दियिव् <i>diyiv</i> .
3 दियि <i>diyî</i> .	दिन् <i>din</i> .

This tense has a special interrogative form, which is thus conjugated (30, 31).

SINGULAR.	PLURAL.
1 करा <i>karā</i> , shall I do or make.	करव <i>karaw^a</i> .
2 करख <i>karakh^a</i> .	करिव <i>kariw^a</i> .
3 कर्था <i>karyā</i> .	करन् <i>karan^a</i> .

Pronominal suffixes are added to this tense as usual, except that the third person singular is slightly irregular, being कर्यम् *karyam* (he will make me), &c., not करिम् *karim*, &c. (viii. ii. 29). So कर्यस् *karyas*, not करिस् *karis*, and all other suffixes added to this person of this tense. When, however, the suffixes of the second person is added there is no irregularity. Thus, करिय् *kariy*, not कर्य्य् *karyay*. Remember that final

ख् *kh* becomes ह् *h* before a suffix. We thus get the following forms which will do as samples.

Added to first person,—

करस् *kara-s*, I shall make for him.

करन् *kara-n*, I shall make him.

करोस् *karō-s*, we shall make for him.

करोन् *karō-n*, we shall make him.

Added to second person,—

करहस् *karah-as*, thou wilt make for him.

करहन् *karah-an*, thou wilt make him.

कर्युस् *karyū-s*, you will make for him.

Added to third person,—

कर्यम् *kary-am*, he will make me.

करिय् *kari-y*, he will make thee or for thee. (It should be remembered that the suffix अथ् *ath* is not used with the third person).

करिव् *kari-w^a*, he will make you or for you.

कर्यस् *kary-as*, he will make him, or for him. (अन् *an* is not used with the third person).

कर्यख् *kary-akh*, he will make them or for them.

करनस् *karan-as*, they will make him or for him.

करनख् *karan-akh*, they will make them or for them.

Interrogative forms would be such as करस *kara-s-^a*, shall I make for him ?

The feminine impersonal verbs चर *tsar*, to be inwardly wrathful, &c. (see pp. 16 and 22), are thus conjugated, this tense making no distinction between masculine and feminine.

चर्यम् *tsary-am*, there will be inward anger to me. I shall be inwardly angry.

अस्य चरि *asē tsari*, we shall be inwardly angry.

चरिय् *tsari-y*, thou wilt be inwardly angry.

चरिव् *tsari-w^a*, you will be inwardly angry.

चर्यस् *tsary-as*, he will be inwardly angry.

चर्यख् *tsary-akh*, they will be inwardly angry.

ON THE PAST TENSES GENERALLY.

Kaçmīrī has three Simple (as distinct from Periphrastic) Past Tenses,—the Past, the Aorist, and the Pluperfect.

There are three conjugations of verbs in these tenses. The first conjugation includes all active and impersonal verbs.

The second conjugation includes the following neuter (viii. iii. 77-97) verbs,—

- | | |
|--|---|
| 1. थक <i>thak</i> , be weary. | 19. फुट <i>phut</i> , be broken. |
| 2. पक <i>pak</i> , go. | 20. रोट <i>rōt</i> , be stopped (also third conjugation). |
| 3. समख <i>samakh</i> , become visible, be seen, meet a person. | 21. बुड <i>bōd</i> , dive, sink. |
| 4. ऋख <i>hōkh</i> , become dry. | 22. वात <i>wāt</i> , arrive. |
| 5. तग <i>tag</i> , be possible, be known how to be done. | 23. व्वथ <i>wōth</i> , stand up. |
| 6. लग <i>lag</i> , be with, suffer pain, fit. | 24. छन्न <i>tshyann</i> , be bored, be torn, be split. |
| 7. चंग <i>çōng</i> , lie down, go to sleep. | 25. सपन <i>sapan</i> , सपज़ <i>sapaz</i> , or सपद <i>sapad</i> , be complete. |
| 8. क्त्त्र <i>k^ots</i> , be wet. | 26. वुप <i>wup</i> , burn inside (see below). |
| 9. खोत्त्र <i>khots</i> , fear. | 27. अष <i>çrap</i> , evaporate, be digested be soaked up (see below). |
| 10. पत्त्र <i>pats</i> , trust with a loan. | 28. प्रथ <i>pray</i> , be pleased. |
| 11. रीत्त्र <i>rōts</i> , be preferred. | 29. लय <i>lay</i> , be worth. |
| 12. व्यत्त्र <i>vyats</i> , pervade, fit into. | 30. वय <i>way</i> , be fit to eat, agree with, suit. |
| 13. ऋत्त्र <i>hōts</i> , go bad, decay. | 31. खर <i>khar</i> , be disliked. |
| 14. गत्त्र <i>gatsh</i> , be proper (गक् <i>gatsh</i> , go, belongs to the third conjugation). | 32. तर <i>tar</i> , be crossed. |
| 15. व्वपज़ <i>wōpaz</i> , be born. | 33. फर <i>phar</i> , be stolen, be a cause of loss to. |
| 16. दज़ <i>daz</i> , be burnt. | 34. फेर <i>phēr</i> , go round, rot, regret, be inverted. |
| 17. रीज़ <i>rōz</i> , stop, stand. | 35. मर <i>mar</i> die, (मर <i>mar</i> , unite, |
| 18. फट <i>phat</i> , split (of wood), sprout (of a plant), sink into water. | |

- belongs optionally (viii. iii. 91) to the first conjugation).
36. सोर *sōr*, be spent, exhausted (of things).
37. गल *gal*, melt.
38. त्रल *tsal*, flee, escape.
39. डल *ḍal*, pass over.
40. डोल *ḍōl*, be unused.
41. फल *phal*, bear fruit, become old (of clothes), be divided.
42. फल्ल *phōll*, expand (of a flower).
43. मेल *mēl*, meet, be met by a person.
44. बव *bōv*, be born, grow.
45. राव *rāv*, be lost.
46. दष *dōṣ*, trickle.
47. पोष *pōṣ*, be competent, victorious.
48. मष *maṣ*, forget.
49. रोष *rōṣ*, be angry.
50. आस *ās*, be.
51. खस *khas*, mount, ascent.
52. फस *phas*, be entangled, caught.
53. बस *bas*, dwell.
54. लस *las*, live long, live in good health.
55. लोस *lōs*, be weary.
56. वस *vas*, come down, descend.
57. ब्यह *byah*, sit.

Of the above, the verb रोट *rōt*, be stopped, may optionally be conjugated in the third conjugation (viii. iii. 84). Thus,—

2nd Conjugation.	Past Participle,	रुट् <i>rūt^u</i>
	Aorist	,, रोचोव् <i>rōcyōv</i> .
	Pluperfect	,, रोचाव् <i>rōcyāv</i> .
3rd Conjugation.	Aorist	,, in sense of Past रोचोव् <i>rōtyōv</i> .
	Pluperfect	,, ,, Aorist रोचाव् <i>rōtyāv</i> .
	True Pluperfect	,, रोटियाव् <i>rōṭiyāv</i> .

The verbs वुप *wup*, burn inside, and अप *ṣrap*, be digested, optionally form their Pluperfect after the manner of the third conjugation (viii. iii. 89). Thus,—

2nd Conjugation.	Pluperfect Participle	वुष्याव् <i>wuṣyāv</i> ,
		अष्याव् <i>ṣrapyāv</i> .
3rd Conjugation.	True Pluperfect Participle	वुपियाव् <i>wupiyāv</i> ,
		अपियाव् <i>ṣrapiyāv</i> .

The above 57 verbs are those given by Īṣvara-kaula in the *Bhūta-pāda* of the *Ākhyāta-prakriyā* of his Grammar (viii. iii. 77–97), but the following are added to the second conjugation by my Paṇḍit.

- | | |
|---|---|
| 58. पलज <i>palaz</i> , be useful. | 62. फोर <i>phōr</i> , quiver. |
| 59. पलट <i>palat</i> , melt, deliquesce. | 63. नश <i>naç</i> , disappear. |
| 60. पुन <i>pun</i> , come true (of a
curse). | 64. तोष <i>tōṣ</i> , be satisfied. |
| 61. प्रार <i>prār</i> , wait. | 65. बास <i>bās</i> , become clear, evident. |
| | 66. व्वबस <i>wōbas</i> , increase. |

The third conjugation includes all other neuter verbs, except those used impersonally.

I shall now describe each of the Past tenses separately.

4 (a). THE VERBAL PAST PARTICIPLE.

This Participle, from which, as will be seen, the Past Tense is derived, is formed by adding उ *u-mātrā* to the root. Thus, कर *kar*, do; Past Participle कर् *kar^u*. Its feminine singular is formed by changing *u-mātrā* to *ū-mātrā*. Thus, कर् *kar^ū*. The masculine plural by changing the *u-mātrā* to *i-mātrā*. Thus, कर् *karⁱ*, and the feminine plural by changing the *ū-mātrā* to य *y^a* (ě), thus, कर् *kar^ě*. Before the *mātrā*-vowels, the root-vowel of the verb is liable to modifications. But (this is important) before the य *y^a* (ě) of the feminine plural, there is no modification. The modifications caused by *mātrā*-vowels are as follows,—

If the root-vowel is *a*, before *u-mātrā*, it becomes *a* (*o*). Thus, कर *kar*, make, कर् *kar^u*, pronounced *kor*, he (was) made (viii. iii. 19).

If the root-vowel is *a*, before *ū-mātrā*, it becomes *a* (*ü*). Thus, कर् *kar^ū*, pronounced *kür*, she (was) made (viii. iii. 19).

If the root-vowel is *a*, before *i-mātrā*, it becomes *a* (*aⁱ*). Thus, कर् *karⁱ*, pronounced *kaⁱrⁱ*, they (masc.) (were) made (viii. iii. 19).

If the root-vowel is *ā*, before *ū-mātrā*, it becomes *ā*. Thus, मार *mār*, kill, मार *mār^ū*, he (was) killed (viii. iii. 20).

If the root-vowel is *ā*, before *ū-mātrā*, it becomes *ā* (*ö*). Thus, मार *mār^ū*, pronounced *mör*, she (was) killed (viii. iii. 19).

If the root-vowel is *ā*, before *i-mātra* it becomes *ā* (*öⁱ*). Thus, मार *mārⁱ*, pronounced *möⁱrⁱ*, they (masc.) (were) killed (viii. iii. 19).

If the root-vowel is *i*, before *u-mātrā* it becomes *yu*. Thus, लिव *liv*, plaster, लिव *lyuv^u*, he (was) plastered.

If the root-vowel is *i*, before *ū-mātrā* it becomes *i* (pronounced *yü*). Thus, लिव *liv^ū*, pronounced *lyüv*, she (was) plastered.

If the root-vowel is *i*, before *i-mātrā*, it is unchanged. Thus, लि॒वि *livⁱ*, they (masc.) (were) plastered.

If the root-vowel is *ī*, before *u-mātrā*, it becomes *yū*. Thus, ची॒र *cīr*, squeeze out, च्यूर् *cyūr^u*, he (was) squeezed out.

If the root-vowel is *ī*, before *ū-mātrā* it is unchanged. Thus, ची॒रु *cīr^ū*, she (was) squeezed out.

If the root-vowel is *ī*, before *i-mātrā* it is unchanged. Thus, ची॒रि *cīrⁱ*, they (masc.) (were) squeezed out.

If the root-vowel *u* or *ū*, it always remains unchanged. Thus, from बु॒ज *buz*, parch, बु॒जु *buz^u*, बु॒जू *buz^ū*, बु॒जि *buzⁱ*. From लू॒ट *lūt*, rob, लू॒टु *lūt^u*, लू॒टू *lūt^ū*, लू॒टि *lūtⁱ*.

If the root-vowel is *ē*, before *u-mātrā*, it becomes *yū*. Thus, फे॒र *phēr*, be turned, फ्यूर् *phyūr^u*, he (was) turned (viii. iii. 21, 22).

If the root-vowel is *ē*, before *ū-mātrā*, it becomes *ī*. Thus, फी॒रु *phīr^ū*, she (was) turned (viii. iii. 23).

If the root-vowel is *ē*, before *i-mātrā*, it becomes *ī*. Thus, फी॒रि *phīrⁱ*, they (were) turned (viii. iii. 21, 22).

If the root-vowel is *ō*, before *u-mātrā*, it becomes *ū*. Thus, बो॒ज *bōz*, hear, बू॒जु *būz^u*, he (was) heard (viii. iii. 24).

If the root-vowel is *ō*, before *ū-mātrā*, it becomes *ū*. Thus, बू॒जू *būz^ū*, she (was) heard (viii. iii. 25).

If the root-vowel is *ō*, before *i-mātrā*, it becomes *ū*. Thus, बू॒जि *būzⁱ*, they (masc.) (were) heard (viii. iii. 24).

Before य *ě* or च *a* of the feminine plural, the root-vowel is always unchanged. Thus, कर्॒य *karě*, मार॒य *mārě*, लि॒य *livě*, ची॒र्य *cīrě*, बु॒ज *buz^a*, फे॒र्य *phērě*, बो॒ज *bōz^a*.

When any pronominal suffix except व *w^a* is added to a form ending in a *mātrā*-vowel, that *mātrā*-vowel becomes fully pronounced, but the modification of the root-vowel remains unchanged. Thus, क॑र् *kar^u* (pronounced *kor*) + न् *n*, becomes क॑रन् *karun*, pronounced *korun*, and not *karun* or *korn*. So मो॑र् *mōr^u* + न् becomes मो॑रन् *mōrun*, and so on. In such a case, *ū-mātrā* is pronounced as a short German *ü*. Thus, क॑रु *kar^ū* (pronounced *kür*) + न् *n*, becomes क॑रुन् *kar^ūn*, pronounced *kürün*. If the suffix is

व w^a , the *mātrā*-vowel remains unchanged. Thus, कर् + व $kar^u + w^a$, he (was) made by you, becomes कर्व kar^uw^a , and is pronounced $korw^a$, and not $koruw^a$. So कर् + व $kar^u + w^a$ made (fem.) by you, becomes कर्व kar^u-w^a , and is pronounced $kürw^a$. Similarly, when a *mātrā*-vowel is followed by any other vocalized syllable, it remains a *mātrā*-vowel. Thus, कर्नस् kar^u-n-as , not कर्नस् $karunas$, (was) made-by-him-I. Even in such cases, Īçvara-kaula (as in viii. iii. 3 and 4) writes कर्व $karuw^a$, लीखिव $likhiw^a$, &c., with the *mātrā*-vowel apparently fully pronounced, but in this he is, according to my Paṇḍit, incorrect, and it is a mere slip of the pen.

When, in the feminine plural, य y^a (ě) follows one of the letters च् ts , क् ts^h , ज् z , or ञ् $ñ$, the y^a becomes अ a (viii. iii. 47). Thus, दिच् $dits + y^a$ becomes दिच् $dits^a$, they (fem.) (were) given. So ह्यच् $hěts + y^a$, becomes ह्यच् $hěts^a$, they (fem.) (were) taken. So वाच् $wāts + y^a$ becomes वाच् $wāts^a$, they (fem.) arrived, दज् $daz + y^a$ becomes दज् daz^a , they (fem.) were burnt (viii. iii. 7, 12).

So also य् y is often elided after स् s (viii. iii. 13). Thus, आस् $ās + y^a$, becomes आस $ās^a$, they (fem.) were. बस् $bas + y^a$, बस bas^a , they (fem.) dwelt. Īçvara-kaula restricts this to verbs of the 2nd conjugation, but, according to my Paṇḍit, य् y is also elided after all verbs of the 1st conjugation, except in the case of च्चस् $tsas$, laugh loudly (impersonal). Thus, from कस् kas , fry, feminine plural कस kas^a , but, from च्चस् $tsas$, च्चस्य $tsasě$.

In the case of the following verbs of the 1st conjugation, the य् y may, according to my Paṇḍit, be optionally retained. ठास् $thās$ bury; दास् das , beat; मुस् mus , eat improperly; सस् s^as , break wind. Thus, ठास् $thās^a$, or ठास्य $thāsě$.

It will be seen that the feminine of this participle ends in $ū$ -*mātrā*, in y^a (ě), or in a . Before these terminations, the final consonant of the Past Participle undergoes certain changes. These changes only occur in the first and second conjugations. They are as follows:—

Final क् k , ख् kh , and ग् g , become च् c , क् ch , and ज् j respectively, before both क् $ū$ -*mātrā* and य ya (ě) (viii. iii. 7). Thus,—

From Root थक *thak*, be weary ; थकु *thak^u*, he (was) weary ; but थचू *thac^ū*, she (was) weary ; थच्य *thacě*, they (fem.) (were) weary.

„ „ लेख *lekh*, write ; ल्यूखु *lyūkh^u*, he (was) written ; but लीखू *lich^ū*, she (was) written ; लेख्य *lechě*, they (fem.) (were) written.

„ „ दग *dag*, pound ; दगु *dag^u*, he (was) pounded ; but दजू *daj^ū*, she (was) pounded ; दज्य *dajě*, they (fem.) (were) pounded.

ट् *t*, ठ् *th*, and ड् *d*, become च् *c*, च् *ch*, and ज् *j* respectively, before *y^a* (*ě*), but not before *ū-mātrā* (viii. iii. 70). Thus,—

From Root फट *phaṭ*, be split ; फटु *phaṭ^u*, he (was) split ; फटू *phaṭ^ū*, she (was) split ; but फच्य *phacě*, they (fem.) (were) split.

„ „ मठ *maṣ*, forget ; मठु *maṭh^u*, he (was) forgotten ; मठू *maṭh^ū*, she (was) forgotten ; but मच्य *machě*, they (fem.) (were) forgotten.

„ „ गंड *gaṇḍ*, bind ; गंडु *gaṇḍ^u*, he (was) bound ; गंडू *gaṇḍ^ū*, she (was) bound ; but गज्य *ganjě*, they (fem.) (were) bound.

त् *t*, थ् *th*, द् *d*, and न् *n*, become च् *ts*, च् *tsh*, ज् *z*, and ज् *ñ* respectively, before both *ū-mātrā*, and before *y^a* (*ě*), which latter then becomes *a* by the rule given on the last page (viii. iii. 72, 73). Thus,—

From Root कत *kat*, spin ; कतु *kaṭ^u*, he (was) spun ; but कचू *kaṭ^ū*, she (was) spun ; कच्च *kaṭ^a*, they (fem.) (were) spun.

„ „ व्वथ *wōth*, arise ; व्वथु *wōth^u*, he arose ; but व्वचू *wōtsh^ū*, she arose, and व्वच्च *wōtsh^a*, they (fem.) arose.

„ „ लद *lad*, build ; लदु *laḍ^u*, he (was) built ; but लजू *laḥ^ū*, she (was) built, and लज्ज *laḥ^a*, they (fem.) (were) built.

„ „ रन *ran*, cook ; रनु *raṇ^u*, he (was) cooked ; but रचू *rañ^ū*, she (was) cooked, and रच्च *rañ^a*, they (fem.) (were) cooked.

ल *l* becomes ज् *j* before both *ū-mātrā* and *y^a* (*ě*) (viii. iii. 74).

Thus,—

From Root चल *tsal*, flee ; चलु *tsal^u*, he fled ; but चजू *tsaj^ū*, she fled, and चच्च *tsajě*, they (fem.) fled.

The verbs पिह *pih*, grind; मुह *muh*, deceive; सह *sah*, bear; गृह *g^ah*, grind; and च्छ *ts^ah*, suck, under similar circumstances change their final ह *h* to ष् *ç* (viii. iii. 75). Thus,—

प्युह् *pyuh^u*, he (was) ground; but पिष् *piç^u*, she (was) ground; and पिश्य *piçë*, they (fem.) were ground.

Combining what is said here, together with what has been said above (pp. 40 and ff.) regarding vowel changes, we come to the three following general rules, all of which apply only to the first and second conjugations, and do not apply to the third.

1. *In the Past Participle masculine, both singular and plural, only the root vowel, and not the final consonant, is liable to change.*

2. *In the Past Participle feminine singular, both the root vowel and the final consonant are liable to change.*

3. *In the Past Participle feminine plural, only the final consonant, and not the root vowel, is liable to change.*

These three rules are most important, as the whole scheme of conjugating the Past Tense depends upon them.

IRREGULAR PAST PARTICIPLES.

The following verbs have irregular Past Participles. The irregularities are, of course, carried through the Past tense.

Verb.	PAST PARTICIPLE.			
	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
खस <i>khas</i> , mount (viii. iii. 66).	खथ् <i>khath^u</i> [or खतु <i>khath^u</i>].	खत् <i>khats^hh^u</i> , [or खत्त <i>khats^u</i>].	खथि <i>khathiⁱ</i> [or खति <i>khathiⁱ</i>].	खत् <i>khats^ha</i> [or खत्त <i>khats^a</i>].
वस <i>vas</i> , descend (66).	वथ् <i>wath^u</i> .	वत् <i>wats^hh^u</i> .	वथि <i>wathiⁱ</i> .	वत् <i>wats^ha</i> .

Verb.	PAST PARTICIPLE.			
	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
लस <i>las</i> , live long (27, 28, 33, 67, 96).	लसु <i>lūst^v*</i>	लसु <i>lūtsh^ū*</i>	लसि <i>lūstⁱ*</i>	लसि <i>lātsh^a*</i>
लोस <i>lōs</i> , be weary (67, 96).	लूस <i>lūs^v</i>	लूस <i>lūs^ū</i> or लूस <i>lūtsh^ū</i>	लूसि <i>lūsⁱ</i>	लोस <i>lōs^a</i> लूस <i>lōtsh^a</i>
मर <i>mar</i> , die (26, 31, 59). मर <i>mar</i> , unite, is regular.	मूदु <i>mūd^v</i>	म्वय <i>mōy^a</i>	मूदि <i>mūdiⁱ</i>	म्वय <i>mōy^a</i>
हि <i>hi</i> , take (32).	ह्युतु <i>hyat^v</i>	ह्यु <i>hētsh^ū</i>	ह्युति <i>hētⁱ</i>	ह्युतु <i>hētsh^a</i>
दि <i>di</i> , give (32).	द्युतु <i>dyut^v</i>	दितु <i>dits^ū</i>	दिति <i>ditⁱ</i>	दितु <i>dits^a</i>
खि <i>khi</i> , eat (viii. iii. 6, ix. i. 37).	ख्यौव् <i>khyauv</i>	ख्यय <i>khēy^a</i>	ख्येय् <i>khyēy</i>	ख्यय <i>khēy^a</i>
चि <i>ci</i> , drink (viii. iii. 6, ix. i. 37).	च्यौव् <i>cyauv</i>	च्यय <i>cēy^a</i>	च्येय् <i>cyēy</i>	च्यय <i>cēy^a</i>
नि <i>ni</i> , take (viii. iii. 6, 34, ix. i. 38).	न्युव् <i>nyūv</i>	निय <i>niy^a</i>	नीय् <i>nīy</i>	निय <i>niy^a</i>

* लस *las*, is sometimes used regularly by the vulgar, thus, लसु *las^v*, &c. (viii. iii. 96). In the fem. sing. Içvara-kaula sometimes writes लसु *lūtsh^ū*, and sometimes लसु *lūtsh^ū*. According to my Paṇḍit, the latter is the correct form.

Verb.	PAST PARTICIPLE.			
	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
डेष <i>dēs</i> , see (viii. iii. 62).	द्युठ् <i>dyūṭh^u</i> .	डीठ् <i>dīṭh^ū</i> .	डीठि <i>dīṭhⁱ</i> .	डेछ <i>dēchĕ</i> .
रोष <i>rōṣ</i> , be angry (24, 62).	रुठ् <i>rūṭh^u</i> .	रुठ् <i>rūṭh^ū</i> .	रुठि <i>rūṭhⁱ</i> .	रोछ <i>rōchĕ</i> .
मष <i>maṣ</i> , forget (62).	मठ् <i>maṭh^u</i> .	मठ् <i>maṭh^ū</i> .	मठि <i>maṭhⁱ</i> .	मछ <i>maçĕ</i> .
ब्यह् <i>byah</i> , sit (22, 62).	ब्युठ् <i>byūṭh^u</i> .	बीठ् <i>bīṭh^ū</i> .	बीठि <i>bīṭhⁱ</i> .	बेछ <i>bēchĕ</i> .
क्त्त्र <i>k^ats</i> , be wet (63).	कत् <i>kat^u</i> .	क्त्त्र <i>k^ats^ū</i> .	क्त्ति <i>katⁱ</i> .	क्त्त्र <i>k^ats^a</i> .
क्त्त्र <i>hōts</i> , decay (63).	क्त्तु <i>hōt^u</i> .	क्त्त्र <i>hōts^ū</i> .	क्त्ति <i>hōtⁱ</i> .	क्त्त्र <i>hōts^a</i> .
दज् <i>daz</i> , be burnt (64).	ददु <i>dad^u</i> .	दज् <i>daz^ū</i> .	ददि <i>dadⁱ</i> .	दज् <i>daz^a</i> .
रोज् <i>rōz</i> , stop (64).	रुदु <i>rūd^u</i> .	रुज् <i>rūz^ū</i> .	रुदि <i>rūdⁱ</i> .	रोज् <i>rōz^a</i> .
व्वपज् <i>wōpaz</i> , be born (64).	व्वपदु <i>wōpaḍ^u</i> .	व्वपजू <i>wōpaḍ^ū</i> .	व्वपदि <i>wōpaḍⁱ</i> .	व्वपज् <i>wōpaz^a</i> .
हहर <i>hahar</i> , to marry off (a girl) (76).	हहर् <i>hahar^u</i> (rare).	हहर <i>hahar^ū</i> or हरश् <i>haraṣ^ū</i> .	हहरि <i>haharⁱ</i> (rare).	हहर् <i>haharĕ</i> , or हरश् <i>haraṣĕ</i> .

4 (b). THE PAST TENSE.

This tense is peculiar to the first and second conjugations. It does not occur in the third conjugation. It describes something which has happened lately, *e.g.*, क॑रुन् *karun*, he has (just) made.

It is formed from the Past Participle in क्त^u. This Participle is Passive in the case of verbs of the first conjugation. Thus, क॑र्त् *kar^u*, done, अ॑सु *as^u* (impersonal verb), laughed. It is Neuter in the case of verbs of the second conjugation. Thus, ब॑वु *bö^u*, become. Verbs of the first conjugation are therefore passive in construction. Instead of saying 'I made this,' we must say 'this was made by me,' इ॒ह् म्य क॑र्त् *yih mē kar^u*, this (*yih*) by me (*mē*) made (*kar^u*). Here the original object of the sentence has become the grammatical subject, and the logical subject has been put into the case of the agent. If the object (grammatical subject) is feminine, the participle must be feminine. If it is plural, the participle must be plural. Thus,—

क॑र्त् म्य क॑र्त् *kar^u mē kar^u*, the bracelet (masc.) was made by me.

प॑ट् म्य क॑र्त् *paṭ^u mē kar^u*, the tablet (fem.) was made by me.

क॑र्त् म्य क॑र्त् *karⁱ mē karⁱ*, the bracelets were made by me.

प॑च म्य क॑र्त् *pač^e mē kar^e*, the tablets were made by me.

As regards the original subject, it is put in the agent case, and may also be added to the verb in the form of a pronominal suffix of the agent case. This *must* always be done in the second person singular and plural. These suffixes are given on pp. 15 and ff. For the sake of ready reference, they are here repeated.

	SINGULAR.	PLURAL.
1st Person.	अ॒म् <i>am.</i>	—
2nd „	अ॒थ् <i>ath.</i>	अ॒व <i>aw^a.</i>
3rd „	अ॒न् <i>an.</i>	अ॒ख् <i>akh.</i>

The initial अ *a* is elided when following a vowel.

When the pronominal suffix is added to a verb (it is *always* added in the case of the second person), the original subject (now agent), if a pronoun, may be omitted. Thus, for 'he made,' we may say,—

- (a) त॑मि क॑रु॒ त॑मि॑ क॑रु॒, by him made,
 or (b) त॑मि क॑रु॒न् त॑मि॑ क॑रु॒-न, by him made-by-him,
 or (c) क॑रु॒न् क॑रु॒-न, made-by-him.

In the second person we cannot use the first or (a) form. We can only say,—

- (b) च॑ क॑रु॒थ त॑स॑ क॑रु॒-थ, by thee made-by-thee,
 or (c) क॑रु॒थ क॑रु॒-थ, made-by-thee.

So in the plural.

- (b) त्व॑ह्य क॑रु॒व त॑ह॑ क॑रु॒-व^a, by you made-by-you,
 or (c) क॑रु॒व क॑रु॒-व^a, made-by-you.

We cannot say च॑ क॑रु॒ त॑स॑ क॑रु॒ or त्व॑ह्य क॑रु॒ त॑ह॑ क॑रु॒.

This Passive construction is called in Sanskrit Grammar the *karmani prayōga*, and is described in Īçvara-kaula's Grammar under that name (viii. iii. 3).

THE IMPERSONAL CONSTRUCTION.

Impersonal verbs are used passively with all persons. The terminations are the same as in the case of active verbs. An example is,—

- (a) त॑मि अ॑सु॒ त॑मि॑ अ॑सु॒, by him it was laughed,
 or (b) त॑मि अ॑सु॒न् त॑मि॑ अ॑सु॒-न, by him it was laughed-by-him,
 or (c) अ॑सु॒न् अ॑सु॒-न, it was laughed-by-him,

all three of which mean 'he laughed' (viii. iii. 3). So अ॑सु॒म् अ॑सु॒-म, I laughed.

The two verbs चु॒व त॑सु॒व, quarrel, and मो॒रव॑ म॒ो॒र॒व, bear pain, may be used impersonally, and are then put in the feminine (viii. iii. 9).

Thus, चु॒वन् त॑सु॒वन्, quarrelling was done-by-him, he quarrelled, the verb agreeing with the nominative ह॑रु॒ har, a quarrel, which is feminine. So मो॒र॒वन् म॒ो॒र॒वन्, pain was suffered-by-him, he suffered pain, the true nominative being some feminine word like पी॒ड् पि॑द, pain, understood.

In these cases we may use all the three forms, except, as before, in the second person. Thus,—

- (a) त॑मि चु॒व त॑मि॑ चु॒व,
 or (b) त॑मि चु॒वन् त॑मि॑ चु॒वन्,
 or (c) चु॒वन् चु॒वन्.

These two words can even be used in the fem. plur. Thus, चुब्यन्, he quarrelled (many times) ; मोरव्यन् *mōravyan*, he suffered pains.

The following verbs (repeated from pp. 16 and 22) are also impersonal but have this peculiarity that they are conjugated with suffixes of the dative instead of suffixes of the agent, and are also in the feminine.

ऋर *tsar*, be inwardly wrathful.

ऋष *phōṣ*, ditto.

फुह *phuh*, ditto.

मर्च *marṭs*, ditto.

वुञ्च *wuṭs*, be burnt.

फिञ्च *phits*, forget.

त्यंब *tyamb*, look eagerly (conjugated in the third conjugation).

Thus, च्छस् *tsar̄-s*, not च्छन् *tsar̄-n*, there was inward anger to him, he was angry.

च्छ्य *tsar̄-y*, not च्छ्य *tsar̄-th*, thou wast angry.

च्छम् *tsar̄-m*, I was angry.

So वुञ्च्य *wuṭs̄y*, thou wast burnt. These verbs are given here, because the first six are used in the Past Tense. त्यंब *tyamb*, look eagerly, belongs to the third conjugation, and does not use the Past Tense.

This impersonal construction, whether with the Dative or with the Agent, is called in Sanskrit, the *bhāvē-prayōga*.

NEUTER VERBS.

Neuter verbs of the second conjugation, having their Past Participle neuter, are conjugated, in the Past tenses actively. They thus take the pronominal suffixes of the nominative, and agree with the subject of the sentence in number and person. The addition of the pronominal suffixes is obligatory.

They are here quoted for ready reference.

SINGULAR.	PLURAL.
1. अस् <i>as</i> .	_____
2. अस् <i>akh</i> .	अव <i>aw^a</i> .
3. _____	_____

There are no nominative suffixes of the first person plural or of the third person.

Taking, therefore, the verb ब॒व *böv*, become, for 'I became' we may say,—

(b) ब॒ह् ब॒वुस् *böh bövu-s*,

or (c) ब॒वुस् *bövü-s*.

We cannot say ब॒ह् ब॒व *böh böv^u*, any more than we can say ल॒ह्य क॑र् *töhë kar^u*.

These preliminaries being understood, I shall, in the paradigms, only give the (c) forms of the past tenses. From these the (b) forms and (when they exist) the (a) forms can easily be deduced.

A. FIRST CONJUGATION.

(a) **Transitive Verb** (viii. iii. 3-9) (c. forms only) 'I made,' *Lit.* 'he, she, it, &c., was (were) made by me, you, him, us, &c.'

	SINGULAR.		PLURAL.	
	Masculine. ¹ क॑र् <i>kar^u</i> , made.	Feminine. ¹ क॑र् <i>kar^ü</i> .	Masculine. ¹ क॑रि <i>karⁱ</i> .	Feminine. ¹ क॑र्य <i>karë</i> .
Sing.				
1	क॑रम् <i>karu-m</i> .	क॑रुम् <i>kar^ü-m</i> .	क॑रिम् <i>karⁱ-m</i> .	क॑र्यम् <i>karya-m</i> . ²
2	क॑रथ् <i>karu-th</i> .	क॑रुथ् <i>kar^ü-th</i> .	क॑रिथ् <i>karⁱ-th</i> .	क॑र्यथ् <i>karya-th</i> .
3	क॑रन् <i>karu-n</i> .	क॑रुन् <i>kar^ü-n</i> .	क॑रिन् <i>karⁱ-n</i> .	क॑र्यन् <i>karya-n</i> .
Plur.				
1	क॑र् <i>kar^u</i> .	क॑र् <i>kar^ü</i> .	क॑रि <i>karⁱ</i> .	क॑र्य <i>karë</i> .
2	क॑रव् <i>kar^u-w^a</i> .	क॑रुव् <i>kar^ü-w^a</i> .	क॑रिव् <i>karⁱ-w^a</i> .	क॑र्यव् <i>karë-w^a</i> .
3	क॑रख् <i>karu-kh</i> .	क॑रुख् <i>kar^ü-kh</i> .	क॑रिख् <i>karⁱ-kh</i> .	क॑र्यख् <i>karya-kh</i> .

Verbs ending in vowels are slightly irregular in the masculine singular and plural, and in the feminine singular, which latter is the

¹ *E.g.* The object of the sentence, which has now become the grammatical subject, as explained above.

² Or *karë-m*, and so throughout.

same as the feminine plural (viii. iii. 6). None of these verbs belong to the second conjugation.

As usual there are two groups of these verbs, *viz.*, those which change their final vowel, *i*, to *ya*, such as खि *eat*, and others (*vide* p. 1) and those which do not, which are three in number, नि *ni*, take, दि *di*, give, and यि *yi*, come, of which the last belongs to the third conjugation. Taking the verb खि *khi*, eat, we get.

	SINGULAR.		PLURAL.	
	Masculine. खौव् <i>khyauv.</i>	Feminine. ख्य khÿya ^a .	Masculine. ख्येय् <i>khyēy.</i>	Feminine. ख्य khÿya ^a .
Sing.				Same as singular.
1	खौम् <i>khyō-m</i> or खौम् <i>khyau-m</i> (ix. i. 37).	ख्यम् <i>khÿya-m.</i>	ख्येम् <i>khyē-m.</i>	
2	खौथ् <i>khyō-th</i> or खौथ् <i>khyau-th.</i>	ख्यथ् <i>khÿya-th.</i>	ख्येथ् <i>khyē-th.</i>	
3	खौन् <i>khyōn</i> or खौन् <i>khyau-n.</i>	ख्यन् <i>khÿya-n.</i>	ख्येन् <i>khyē-n.</i>	
Plur.				
1	खौव् <i>khyauv.</i>	ख्य khÿya ^a .	ख्येय् <i>khyēy.</i>	
2	खौव् <i>khyō-w^a</i> or खौव् <i>khyau-w^a.</i>	ख्यव् <i>khÿya-w^a.</i>	ख्येव् <i>khyē-w^a.</i>	
3	खौख् <i>khyō-kh</i> or खौख् <i>khyau-kh.</i>	ख्यख् <i>khÿya-kh.</i>	ख्येख् <i>khyē-kh.</i>	

Similarly is conjugated, चि *ci*, drink.

The verb नि take, is further irregular (viii. iii. 6, 34; ix. i. 38).

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
Sing.				
1	न्यूम् <i>nyū-m.</i>	नियम् <i>niya-m.</i>	नीम् <i>nī-m.</i>	Same as singular.
2	न्यूथ् <i>nyū-th.</i>	नियथ् <i>niya-th.</i>	नीथ् <i>nī-th.</i>	
3	न्यून <i>nyū-n.</i>	नियन् <i>niya-n.</i>	नीन् <i>nī-n.</i>	
Plur.				
1	न्यूव् <i>nyūv.</i>	निय <i>niy^o.</i>	नीय् <i>nīy.</i>	
2	न्यूव <i>nyū-w^a.</i>	नियव <i>niy^a-w^a.</i>	नीव <i>nī-w^a.</i>	
3	न्यूख् <i>nyū-kh.</i>	नियख् <i>niya-kh.</i>	नीख् <i>nī-kh.</i>	

The verbs हि *hi*, take, and दि *di*, give, are still further irregular (viii. iii. 7, 32). Thus,—

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
Sing.				
1	ह्यतुम् <i>hyatu-m.</i>	ह्यत्सुम् <i>hëts^u-m.</i>	ह्यतिम् <i>hëti-m.</i>	ह्यत्सम् <i>hëtsa-m.</i>
2	ह्यतुथ् <i>hyatu-th.</i>	ह्यत्सुथ् <i>hëts^u-th.</i>	ह्यतिथ् <i>hëti-th.</i>	ह्यत्सथ् <i>hëtsa-th.</i>
3	ह्यतुन् <i>hyatu-n.</i>	ह्यत्सुन् <i>hëts^u-n.</i>	ह्यतिन् <i>hëti-n.</i>	ह्यत्सन् <i>hëtsa-n.</i>

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
Plur.				
1	ह्यत् <i>hyat^u.</i>	ह्यत् ह्यत् <i>hět̄s̄^u.</i>	ह्यत्ति <i>hět̄i.</i>	ह्यत्त <i>hět̄s̄^a.</i>
2	ह्यत्तव <i>hyat^u-w^a.</i>	ह्यत्तव ह्यत्तव <i>hět̄s̄^u-w^a.</i>	ह्यत्तिव <i>hět̄i^u-w^a.</i>	ह्यत्तव ह्यत्तव <i>hět̄s̄^a-w^a.</i>
3	ह्यत्तुक् <i>hyatu-kh.</i>	ह्यत्तुक् ह्यत्तुक् <i>hět̄s̄^u-kh.</i>	ह्यत्तिक् <i>hět̄i-kh.</i>	ह्यत्तुक् ह्यत्तुक् <i>hět̄s̄^a-kh.</i>

दि *di*, give, is similarly declined, but its first person is दितुम् or द्युतुम् *dyutu-m*, दिच्चम् *dits̄^u-m*, दितिम् *diti-m*, दिच्चम् *dits̄^a-m*, and so throughout.

The verb हहर *hahar*, to get a girl married, is of necessity, conjugated in the past tenses only in the feminine. Moreover it forms its feminine Past Participle, optionally, in an irregular fashion (viii. iii. 76), Thus, हहर्हन् *hahar^u-n* or हरश्चन् *harāç^u-n*, he got her married.

NOTES. (1) Once for all. By the first person singular, is meant, 'I made him, her, them (masc.), or them (fem.),' literally, 'he, she, they (masc.), or they (fem.) were made by me.' So the second person singular means 'thou madest him, her, them (masc.), or them (fem.),' and so on, through the other persons.

(2) There is no suffix for the first person plural. Hence this form is always the same as the past participle.

(b) **Impersonal Verb** (viii. iii. 3-9) (*c.* forms only), 'I laughed,' literally, 'it was laughed by me,' &c.

Singular 1 असुम् *asu-m*, I laughed.

2 असुथ् *asu-th*, thou laughedst.

3 असुन् *asu-n*, he laughed.

Plural 1 असु *as^u*, we laughed.

2 असुव *as^u-w^a*, you laughed.

3 असुक् *asu-kh*, they laughed.

When an Impersonal Verb is conjugated in the feminine (see pp. 22 and 48), we get forms such as the following, (चुव *tsuv*, quarrel) (viii. iii. 9),—

- Singular 1 चुवम् *tsuv^ū-m*, I quarrelled.
 2 चुवथ् *tsuv^ū-th*, thou didst quarrel.
 3 चुवन् *tsuv^ū-n*, he quarrelled.
 Plural 1 चुव *tsuv^ū*, we quarrelled.
 2 चुवव *tsuv^ū-w^a*, you quarrelled.
 3 चुवख् *tsuv^ū-kh*, they quarrelled.

If such an Impersonal Verb is conjugated in the plural, we get—

- Singular 1 चुयम् *tsuvya-m*, I quarrelled many times, and so on.
 2 चुयथ् *tsuvya-th*.
 3 चुयन् *tsuvya-n*.
 Plural 1 चुय *tsuvē*.
 2 चुयव *tsuvya-w^a*.
 3 चुयख् *tsuvya-kh*.

So मोरव *mōrav*, bear pain.

चर *tsar* and the others are thus conjugated (see pp. 16, 22, and 49).

- Singular 1 चरम् *tsar^ū-m*, I was inwardly angry, and so on.
 2 चरथ् *tsar^ū-y*.
 3 चरस् *tsar^ū-s*.
 Plural 1 चर *tsar^ū*.
 2 चरव *tsar^ū-w^a*.
 3 चरख् *tsar^ū-kh*.

In the case of Transitive verbs, when the grammatical subject (*i.e.*, the logical object) is a pronoun, it may be added to the verb in the shape of an additional pronominal suffix in the Nominative case. The following are the masculine forms which occur. The feminine ones can easily be made on the same principle.

From कर्म् *karu-m*, made by me, I made.

कर्मख् *kar^ū-m-akh*, thou wast made by me, I made thee.

So कर्मख् *kar^ū-m-akh*, thou (fem.) wast made by me, I made thee (fem.).

[क॑रु॒मन् *kar^u-m-an*, I made him, is not used. We always say
सु॒ह् क॑रु॒म् *suh karu-m*. क॑रु॒मस् *kar^u-m-as* means 'I made
for him.']

क॑रि॒मव *karⁱ-m-aw^a*, I made you.

[क॑रि॒मख् *karⁱ-m-akh*, I made them, is not used. We always
say ति॒म् क॑रि॒म् *tim kari-m*. क॑रि॒मख् *karⁱ-m-akh* means 'I
made them for them.']

From क॑रु॒थ् *karu-th*, made by thee, thou madest.

क॑रु॒थस् *kar^u-th-as*, thou madest me (or thou madest for him).

क॑रु॒थन् *kar^u-th-an*, thou madest him.

क॑रि॒थख् *karⁱ-th-akh*, thou madest them (or for them).

From क॑रु॒न् *karu-n*, made by him, he made.

क॑रु॒न्स् *kar^u-n-as*, he made me (or he made for him).

क॑रु॒न्ख् *kar^u-n-akh*, he made thee (or he made for them).

[क॑रु॒न्न् *kar^u-n-an*, he made him, is not used. We say सु॒ह्
क॑रु॒न् *suh karun*.]

क॑रि॒नव *karⁱ-n-aw^a*, he made you (or for you).

[क॑रि॒नख् *karⁱ-n-akh*, he made them, is not used. We say ति॒म्
क॑रि॒न् *tim kari-n*. क॑रि॒नख् *karⁱ-n-akh*, means 'he made them
for them.']

From क॑रु॒ *kar^u*, made by us, we made.

क॑रु॒ख् *karu-kh*, we made thee.

[क॑रु॒न् *karu-n*, we made him, is not used. We say सु॒ह् क॑रु॒
suh kar^u.]

क॑रि॒व *karⁱ-w^a*, we made you.

[क॑रि॒ख् *kari-kh*, we made them, is not used. We say ति॒म्
क॑रि॒ *tim karⁱ*.]

From क॑रु॒व् *kar^u-w^a*, made by you, you made.

क॑रु॒वस् *kar^u-wa-s*, you made me (or for him)

क॑रु॒वन् *kar^u-wa-n*, you made him.

क॑रि॒वख् *karⁱ-wu-kh*, you made them.

From क॑रख् *karu-kh*, made by them, they made.

क॑रहम् *kar^u-h-as*, they made me (or they made for him).

क॑रहख् *kar^u-h-akh*, they made thee (or for them).

[क॑रहन *kar^u-h-an*, they made him, is not used. We say,

सुह॑ क॑रख् *suh karu-kh*].

क॑रिहव *karⁱ-h-aw^a*, they made you.

[क॑रिहख् *karⁱ-h-akh*, they made them, is not used. We say,

तिम् क॑रिख् *tim kari-kh*. क॑रिहख् *karⁱ-h-akh*, means 'he made them for them'].

There being no suffix for the first person plural, there are no special forms for thou, he, you, or they made us.

With regard to all these forms, the full forms of the pronouns may also be used, with, or without the suffixes. Thus,—

We may say either

(a) म्य॑ क॑रमख् च॑ह् *mě kar^u-m-akh ts^ah*, by me was-made-by-me-thou thou, or

(b) क॑रमख् च॑ह् *kar^u-m-akh ts^ah*, was-made-by-me-thou thou, or

(c) म्य॑ क॑रमख् *mě kar^u-m-akh*, by me was-made-by-me-thou, or

(d) क॑रमख् *kar^umakh*, was-made-by-me-thou, or

(e) म्य॑ क॑रख् च॑ह् *mě karu-kh ts^ah*, by me was-made-thou thou, or

(f) म्य॑ क॑रख् *mě karu-kh*, by me was-made-thou.

We cannot, however, use the two following forms.

(g) म्य॑ क॑र च॑ह् *mě kar^u ts^ah*, by-me was-made thou or

(h) क॑रम् च॑ह् *karu-m ts^ah*, was-made-by-me thou.

In other words when the full form of the pronoun in the nominative is used, the corresponding suffix must always accompany it.

Other pronominal suffixes can similarly be used. Thus, क॑रमय् *kar^u-m-ay*, I made for thee.

B. SECOND CONJUGATION.

Neuter Verb (viii. iii. 77-97). (c. Forms only).

I became, &c.

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	ब्ववुस् <i>bövu-s.</i>	ब्ववुस् <i>böv^u-s.</i>	ब्ववि <i>bövⁱ.</i>	ब्वय <i>bövé.</i>
2	ब्ववुख् <i>bövu-kh.</i>	ब्ववख् <i>böv^u-kh.</i>	ब्वविव <i>bövⁱ-w^a.</i>	ब्वयव <i>bövé-w^a.</i>
3	ब्ववु <i>böv^u.</i>	ब्वव <i>böv^u.</i>	ब्ववि <i>bövⁱ.</i>	ब्वय <i>bövé.</i>

The verb मर *mar*, die, has its past tense irregular. It is thus conjugated (viii. iii. 26, 31, 59, 65, 92).

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	मूदुस् <i>mūdu-s.</i>	म्वयस् <i>mōya-s.</i>	मूदि <i>mūdi.</i>	म्वय <i>mōy^a.</i>
2	मूदुख् <i>mūdu-kh.</i>	म्वयख् <i>mōya-kh.</i>	मूदिव <i>mūdi-w^a.</i>	म्वयव <i>mōy^a-w^a.</i>
3	मूदु <i>mūd^u.</i>	म्वय <i>mōy^a.</i>	मूदि <i>mūdi.</i>	म्वय <i>mōy^a.</i>

When मर *mar* means to unite, it is regular. Thus, मरन् *marun*, he united him.

5 (a.) THE VERBAL AORIST PARTICIPLE.

This participle occurs in all three conjugations. In the first and second (viii. iii. 78) conjugations it is a true aorist. It expresses past time indefinitely, with no reference to proximity or distance. *E.g.*, कर्षेव् *karyōv*, he (was) made (by us), we made; ब्वयोव् *bövyōv*, he became. It is therefore the participle, and the aorist is the tense, of narration in these two conjugations.

In the third conjugation, it is used instead of the past participle ; and describes something which has happened lately. Thus, वुफ्योव् *wuphyōv*, he flew (a short time ago).

This participle is formed in the first and second conjugations by changing the final य y^a (ě) of the feminine plural of the past participle to योव् $yōv$. Thus, कर *kar*, do ; past participle कर्त् *kar^u*, fem. plur. कर्त् *karě* ; aorist participle कर्त्तोव् *karyōv*.

In those cases, in which the feminine plural ends in अ *a*, instead of in य y^a (ě), (see p. 42) the aorist participle ends in ओव् *ōv*, not in योव् $yōv$. Thus, दज् *daz*, burn ; past participle ददु *dad^u*, fem. plur. दज् *daz^a* ; aorist participle दज्तोव् *dazōv*. There are four exceptions (viii. iii. 49, 81). The aorist participle of क्त्त् *k^ats*, be moist, is क्त्तोव् *k^atsyōv* ; that of यत्त् *vyats*, pervade, is यत्तोव् *vyatsyōv* ; that of रोत्त् *rōts*, be preferred, रोत्तोव् *rōtsyōv* ; [and that of वुत्त् *wuts*, be burnt, वुत्तोव् *wutsyōv*]. Note that in the fem. pl. Past, in these verbs, the य *y* is elided. Thus क्त्त् *k^ats^a*, not क्त्त् *k^atsě* ; यत्त् *vyats^a*, not यत्त् *vyatsě* ; रोत्त् *rōts^a* not रोत्त् *rōtsě* (viii. iii. 49, 81).

In the third conjugation, the aorist participle is formed by adding योव् $yōv$ to the root direct. Thus, वुफ् *wuph*, fly, aorist participle वुफ्योव् *wuphyōv*, but there are exceptions which will be dealt with later on.

Īçvara-kaula spells this participle indifferently with योव् $yōv$ or with यौव् *yauv*. Both are pronounced the same, like योव् $yōv$ (viii. iii. 39).

[The true termination of this participle is $yō$, the *v*, as well as the *y* of the plural to be noted later, are only added for the sake of euphony].

Special Rules for the First and Second Conjugations.

The base of the aorist participle of the first and second conjugations being the same as the feminine plural of the past participle, the final consonant of the verbal root undergoes certain changes (viii. iii. 69, 70, 71, 72, 73, 74, 75). For the same reason, in the aorist participle, the vowel of the verbal root remains unchanged (see page 41). The following are examples of the changes. The reader is referred to pp. 42 and ff. for details.

- | | | |
|---|----------------------------------|--|
| 1 | Root थक् <i>thak</i> , be tired, | aorist participle थत्तोव् <i>thacyōv</i> . |
| 2 | „ लेख् <i>lēkh</i> , write | „ लेत्तोव् <i>lēchyōv</i> . |
| 3 | „ दग् <i>dag</i> , pound | „ दत्तोव् <i>dajyōv</i> . |

4	Root फट <i>phat</i> , be split	aorist participle फच्योव् <i>phacyōv</i> .
5	„ मठ <i>maṭh</i> , forget	„ मच्छोव् <i>machyōv</i> .
6	„ गंड <i>gaṇḍ</i> , bind	„ गञ्चोव् <i>ganjyōv</i> .
7	„ कत <i>kat</i> , spin	„ कज्जोव् <i>katsōv</i> .
8	„ व्वथ <i>wōth</i> , arise	„ व्वक्कोव् <i>wōtshōv</i> .
9	„ लद <i>lad</i> , build	„ लज्जोव् <i>lazōv</i> .
10	„ रन <i>ran</i> , cook	„ रज्जोव् <i>rañōv</i> .
11	„ चल <i>tsal</i> , flee	„ च्चञ्चोव् <i>tsajyōv</i> .
12	„ पिह <i>pih</i> , grind	„ पिश्योव् <i>piçyōv</i> .
13	„ मुह <i>muh</i> , deceive	„ मुश्योव् <i>muçyōv</i> .*
14	„ सह <i>sah</i> , bear	„ सश्योव् <i>saçyōv</i> .
15	„ ग्ह <i>g^ah</i> , grind	„ ग्श्योव् <i>g^açyōv</i> .
16	„ च्ह <i>ts^ah</i> , suck	„ च्श्योव् <i>ts^açyōv</i> .

Nos. 7–10 are also examples of the elision of य *y*. The following are further examples, see p. 42 for details.

1	Root दि <i>di</i> , give	aorist participle दिज्जोव् <i>ditsōv</i> .
2	„ हि <i>hi</i> , take	„ ह्यज्जोव् <i>hëtsōv</i> .

The past participles of these two verbs are irregular, *vide* p. 45.

3	Root दज् <i>daz</i> , burn,	aorist participle दज्जोव् <i>dazōv</i> .
4	„ बस <i>bas</i> , dwell	„ बसोव् <i>basōv</i> .
5	„ कस <i>kas</i> , fry	„ कसोव् <i>kasōv</i> .

But from,—

6	Root ठास <i>thās</i> , bury	„ ठासोव् <i>thāsōv</i> , or ठास्योव् <i>thāsyōv</i> .
7	„ दस <i>das</i> , beat	„ दसोव् <i>dasōv</i> , or दस्योव् <i>dasyōv</i> .

And from—

8	Root क्ज् <i>k^ats</i> , be wet	„ only क्च्योव् <i>k^atsyōv</i> (p. 58).
9	„ ज्जस <i>tsas</i> , laugh loudly	„ only ज्जस्योव् <i>tsasyōv</i> (p. 42).

Remember that all these changes occur only in the first and second conjugations. The rules for the third conjugation are quite different.

* My Paṇḍit prefers मुह्योव् *muhyōv*.

Special Rules for the Third Conjugation.

In this conjugation, the participle (and consequently, the tense formed from it) is not used as an aorist, but as a past; with the same meaning as the past participle of the first and second conjugations. It is *not* the tense of narration.

The aorist participle is formed by adding योव् *yōv* to the root. Thus, वुफ् *wuph*, fly, वुफ्योव् *wuphyōv*. Before this the final consonant of a root is *not* liable to change, as it is in the case of verbs of the first and second conjugations. Thus, from जेठ *zēth*, be long, a verb of the 3rd conjugation, the aorist participle is जेश्योव् *zēthyōv*, and not जेश्योव् *zēchyōv*, as it would be, if the verb belonged to the 2nd conjugation.

Note also that in this conjugation, य् *y* is not elided after च् *ts*, छ् *tsh*, ज् *z*, or ञ् *ñ* (viii. iii. 49). Içvara-kaula in this *sūtra* gives the following list of verbs, which do not elide य् *y*. It includes many of the verbs ending in these letters which belong to the third conjugation.

पृञ् *grōts*, be splashed out; च्चञ् *tsōts*, have insufficient means of livelihood; छ्चञ् *tshōts*, be empty; तेज् *tēz*, be sharp; पज् *paz*, be fit; ब्रज् *braz*, shine; बावज् *bāwaz*, be preferred; ल्यञ् *lēts*, be weak; श्रीञ् *grōts*, be pure. Thus, पृच्योव् *grōtsyōv*, not पृच्योव् *grōtsōv*.

The other verbs belonging to the third conjugation, which end in these letters, and which are not mentioned by Içvara-kaula in the above *sūtra* are the following :—

अञ् *ats*, enter; चञ् *trats*, fear; म्वञ् *mōts*, remain over and above; अह् *atsh*, be weak; गह् *gatsh*, go; पलज् *palaz*, be useful; रञ् *ranz*, be pleased; लज् *laz*, be suitable; वुज् *wuz*, be wide awake, appear. सपज् *sapaz*, become, is considered the same as सपन *sapan*, or सपद् *sapad*, and belongs to the second conjugation. According to my Paṇḍit पलज् *palaz*, above recorded, belongs to the second conjugation.

According to my Paṇḍit, of these, चञ् *trats* and अह् *atsh*, always retain य् *y*. The others retain it optionally except अञ् *ats* and गह् *gatsh*, which are irregular. See below, pp. 64 and 65.

Moreover, य् *y* is not, in this conjugation, elided after स् *s*. All the examples of the elision of य् *y* after this letter given by Içvara-kaula belong either to the first or second conjugation.

The Aorist Participle Generally.

The masculine plural of this participle is formed by changing the final योव् *yōv* to येय् *yēy*. Thus, कर्षोव् *karyōv*, plural कर्षेय् *karyēy* (viii. iii. 15). The feminine is formed योव् *yōv* to येय *yēy^a* (viii. iii. 16). The feminine singular and the feminine plural are the same. Thus, कर्षोव् *karyōv*, fem. sing. and plur. कर्षेय *karyēy^a*.

When the base of the participle ends च् *ts*, क् *tsh*, ज् *z*, or ञ् *ñ*, and elides the य *y* in योव् *yōv* of the masculine singular, the येय् *yēy* of the masculine plural becomes अय् *āy* (viii. iii. 18), and the येय *yēy^a* of the feminine, becomes अय *āy^a* (viii. iii. 17). Thus,—

- Root कत *kat*, spin. Aorist part. कञ्चोव् *katsōv*; masc. pl. कञ्चाय् *katsāy*; fem. कञ्चाय *katsāy^a*.
- „ व्वथ *wōth*, arise. Aorist part. व्वञ्चोव् *wōtshōv*; masc. pl. व्वञ्चाय् *watsāy*; fem. व्वञ्चाय *wōtshāy^a*.
- „ दज्ज *daz*, burn. Aorist part. दज्जोव् *dazōv*; masc. pl. दज्जाय् *dazāy*; fem. दज्जाय *dazāy^a*.
- „ रन *ran*, cook. Aorist part. रञ्जोव् *rañōv*; masc. pl. रञ्जाय् *rañāy*; fem. रञ्जाय *rañāy^a*.

Most verbs of the third conjugation ending in these letters do not elide the य् *y* (see page 60). So also the verbs क्त्स् *k^ats*, व्त्स् *vyats*, रोत्स् *rōts*, वुत्स् *wuts* (see p. 58) of the second conjugation. These verbs form the masculine plural either in अय् *āy* or एय् *ēy*, and the feminine in अय *āy^a* or एय *ēy^a* (viii. iii. 17). Thus,—

- Root क्त्स् *k^ats*, (second conjugation) be wet; masc. sing. क्त्स्योव् *k^atsyōv*; masc. plural क्त्साय् *k^atsāy* or क्त्सेय् *k^atsēy*.
- „ ओत्स् *ōrts*, (third conjugation) be pure; masc. sing. ओत्स्योव् *ōrtsyōv*; masc. plural ओत्साय् *ōrtsāy* or ओत्सेय् *ōrtsēy*.
- „ तेज्ज *tēz*, (third conjugation), be sharp; masc. sing. तेज्ज्योव् *tēzyōv*; masc. plural तेज्जाय् *tēzāy* or तेज्जेय् *tēzēy*.

The following verbs have irregular aorist participles. The irregularities are, of course, carried through the aorist tense.

VERB.	AORIST PARTICIPLE.			
	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
दि hi, take (17, 32).	द्विन्निव् hēt̥sōv.	द्विन्नाय hēt̥sāy°.	द्विन्नाय् hēt̥sāy.	
दि di, give (17, 32).	दिन्निव् ditsōv.	दिन्नाय ditsāy°.	दिन्नाय् ditsāy.	
खस khas, mount (12, 66).	खन्निव् khatsōv or खक्कोव् khatshōv.	खन्नाय khatsāy° or खक्काय khatsāy°.	खन्नाय् khatsāy or खक्काय् khatsāy.	
वस was, descend (12, 66).	वक्कोव् watshōv.	वक्काय watshāy°.	वक्काय् watshāy.	Same as singular.
लस las,* live long (18, 29, 67).	लक्कोव् lātsōv.	लक्काय lātsāy°.	लक्काय् lātsāy.	
लोस lōs, be weary (67).	लोसीव् lōsōv, or लोक्कोव् lōtsōv.	लोसाय lōsāy° or लोक्काय lōtsāy°.	लोसाय् lōsāy or लोक्काय् lōtsāy.	
मर mar, die (30).	मयीव् mōyōv.	मयय mōyēy°.	मयय् mōyēy.	

चि <i>yi</i> , come (53).				
Past.	आव् <i>āv</i> .	आय <i>āy</i> °.	आय् <i>āy</i> .	
Aorist.	आयोव् <i>āyōv</i> .	आयेय <i>āyēy</i> °.	आयेय् <i>āyēy</i> .	
Plup.	आयाव् <i>āyāv</i> .	आयेय <i>āyēy</i> °.	आयाय् <i>āyāy</i> .	
नि <i>zi</i> , be born (54).				
Past.	जाव् <i>zāv</i> .	जाय <i>zāy</i> °.	जाय् <i>zāy</i> .	
Aorist.	जायोव् <i>zāyōv</i> .	जायेय <i>zāyēy</i> °.	जायेय् <i>zāyēy</i> .	
Plup.	जायाव् <i>zāyāv</i> .	जायेय <i>zāyēy</i> °.	जायाय् <i>zāyāy</i> .	
नेर <i>nēr</i> , go forth (56).				
Past.	द्राव् <i>drāv</i> .	द्राय <i>drāy</i> °.	द्राय् <i>drāy</i> .	
Aorist.	द्रायोव् <i>drāyōv</i> .	द्रायेय <i>drāyēy</i> °.	द्रायेय् <i>drāyēy</i> .	
Plup.	द्रायाव् <i>drāyāv</i> .	द्रायेय <i>drāyēy</i> °.	द्रायाय् <i>drāyāy</i> .	

Same as singular.

* लस *las* is sometimes used regularly by the vulgar. Thus, लसोव् *lasōv* (viii. iii. 96).

VERB.	AORIST PARTICIPLE.					
	SINGULAR.			PLURAL.		
	Masculine.	Feminine.		Masculine.	Feminine.	
अत्त <i>ats</i> , enter (52, 57).						
Past.	त्तव् <i>tsāv</i> .	त्तय्य°.		त्तय् <i>tsāy</i> .		
Aorist.	त्तयोव् <i>tsāyōv</i> .	त्तय्य°.		त्तय्य <i>tsāyēy</i> .		
Plup.	त्तयाव् <i>tsāyāv</i> .	त्तय्य°.		त्तयाय् <i>tsāyāy</i> .		Same as singular.
प्रस <i>pras</i> , be born (52, 55).						
Past.	त्तव् <i>pyāv</i> .	त्तय्य°.		त्तय्य <i>pyāy</i> .		
Aorist.	त्तयोव् <i>pyāyōv</i> .	त्तय्य°.		त्तय्य <i>pyāyēy</i> .		
Plup.	त्तयाव् <i>pyāyāv</i> .	त्तय्य°.		त्तयाय्य <i>pyāyāy</i> .		

पि <i>pi</i> , fall (48, 60).	प्यौव् <i>pyāv</i> .	पय <i>pēy°</i> .	पय् <i>pēy</i> .
Past.	पयोव् <i>pēyōv</i> .	पयय <i>pēyēy°</i> .	पययेत् <i>pēyēy</i> .
Aorist.	पयाव् <i>pēyāv</i> .	पयय <i>pēyēy°</i> .	पयाय् <i>pēyāy</i> .
Plup.			
गङ्ग <i>gaṅg</i> , go (48, 58, 60).	गौव् <i>gāuv</i> .	गय <i>gay°</i> .	गय् <i>gay</i> .
Past.	गयोव् <i>gayōv</i> .	गयय <i>gayēy°</i> .	गयेय् <i>gayēy</i> .
Aorist.	गयाव् <i>gayāv</i> .	गयय <i>gayēy°</i> .	गयाय् <i>gayāy</i> .
Plup.			
डेष <i>deṣ</i> , see (62).	डेष्ठीव् <i>dēchyōv</i> .	डेष्ठीय <i>dēchyēy°</i> .	डेष्ठीय् <i>dēchyēy</i> .
रोष <i>rōṣ</i> , be angry (62).	रोष्ठीव् <i>rōchyōv</i> .	रोष्ठीय <i>rōchyēy°</i> .	रोष्ठीय् <i>rōchyēy</i> .
मष <i>maṣ</i> , forget (62).	मष्ठीव् <i>machyōv</i> .	मष्ठीय <i>machyēy°</i> .	मष्ठीय् <i>machyēy</i> .
ब्यह <i>byah</i> , sit (62).	बेष्ठीव् <i>bēchyōv</i> .	बेष्ठीय <i>bēchyēy°</i> .	बेष्ठीय् <i>bēchyēy</i> .
हहर <i>hahar</i> , to get a girl married (76).	Not used.	हहरीय <i>haharyēy°</i> or हरश्येय <i>haracyēy°</i> .	Not used.

Same as singular.

5 (b). THE AORIST TENSE.

This is formed from the Aorist Participle, exactly as the Past tense is formed from the Past Participle, except that a final *v* or a final *y* is always elided before a pronominal suffix (viii. iii. 41). Thus, कर्षीव् *karyōv* + अस् *am*, made-by-me = कर्षीम् *karyō-m*, not कर्षीवस् *karyōv-am*. The *a* of अस् *am*, is elided under the general rules for pronominal suffixes (*vide* p. 15). So also forms like कुमल्योस् *kumalyō-s* (*kumalyōv* + *as*), he was tender for him; कुमल्येस् *kumalyē-s*, they were tender for him.

We thus get the following forms,—

A. FIRST CONJUGATION.

(a). Transitive verb (viii. iii. 14). (c. forms only).

‘I made,’ *lit.* ‘he, she, it, &c., was (were) made by me, you, him, us, &c.’

	SINGULAR.		PLURAL.	
	Masculine. कर्षीव् <i>karyōv</i> .	Feminine. कर्षीय <i>karyēy^a</i> .	Masculine. कर्षीय् <i>karyēy</i> .	Feminine. कर्षीय <i>karyēy^a</i> .
Sing.				
1	कर्षीम् <i>karyō-m</i> .	कर्षीयम् <i>karyēya-m</i> .	कर्षीम् <i>karyē-m</i> .	कर्षीयम् <i>karyēya-m</i> .
2	कर्षीथ् <i>karyō-th</i> .	कर्षीयथ् <i>karyēya-th</i> .	कर्षीथ् <i>karyē-th</i> .	कर्षीयथ् <i>karyēya-th</i> .
3	कर्षीन् <i>karyō-n</i> .	कर्षीयन् <i>karyēya-n</i> .	कर्षीन् <i>karyē-n</i> .	कर्षीयन् <i>karyēya-n</i> .
Plur.				
1	कर्षीव् <i>karyōv</i> .	कर्षीय <i>karyēy^a</i> .	कर्षीय् <i>karyēy</i> .	कर्षीय <i>karyēy^a</i> .
2	कर्षीव <i>karyō-w^a</i> .	कर्षीयव <i>karyēy^a-w^a</i> .	कर्षीव <i>karyē-w^a</i> .	कर्षीयव <i>karyēy^a-w^a</i> .
3	कर्षीख् <i>karyō-kh</i> .	कर्षीयख् <i>karyēya-kh</i> .	कर्षीख् <i>karyē-kh</i> .	कर्षीयख् <i>karyēya-kh</i> .

As regards verbs ending in vowels, the usual rule is followed. Thus, from खि *khi*, eat, the aorist participle is खयोव् *khëyōv*; and from चि *ci*, drink, चयोव् *cëyov*.

From नि *ni*, take, we get, as usual नियोव् *niyōv*, not नयोव् *nëyōv*. दि *di*, give and हि *hi*, take, are, as in the Past, irregular. Of दि *di*, the Aorist Participle is दिज्ञोव् *ditsōv* (pl. दिज्ञाय् *ditsāy*; fem. दिज्ञाय् *ditsāy^a*), and of हि *hi*, ह्यज्ञोव् *hëtsōv* (pl. ह्यज्ञाय् *hëtsāy*; fem. ह्यज्ञाय् *hëtsāy^a*) (viii. iii. 32). See p. 61.

Double pronominal suffixes can be added, as in the case of the Past. Thus, कयोथस् *karyō-th-as*, thou madest me; कयोम्य् *karyō-m-ay*, I made for thee; कयोमस् *karyō-m-as*, I made for him. Other examples are unnecessary. The rules are exactly the same as in the case of the past tense. *Vide*, however, special cases mentioned after the Paradigm of the third conjugation (p. 70).

(b). Impersonal verb (viii. iii. 14). (c. forms only).

‘I laughed,’ *lit.* ‘it was laughed by me,’ &c.

Singular	1	असोम् <i>asō-m</i> , I laughed.
	2	असोथ् <i>asō-th</i> , thou laughedst.
	3	असोन् <i>asō-n</i> , he laughed.
Plural	1	असोव् <i>asōv</i> , we laughed.
	2	असोव <i>asō-w^a</i> , you laughed.
	3	असोख् <i>asō-kh</i> , they laughed.

When an impersonal verb is conjugated in the feminine (see pp. 22 and 48) we get

SINGULAR AND PLURAL.

Singular	1	चुब्येयम् <i>tsuvyēya-m</i> , I quarrelled.
	2	चुब्येयथ् <i>tsuvyēya-th</i> , thou didst quarrel.
	3	चुब्येयन् <i>tsuvyēya-n</i> , he quarrelled.
Plural	1	चुब्येय <i>tsuvyēy^a</i> , we quarrelled.
	2	चुब्येयव <i>tsuvyēy^a-w^a</i> , you quarrelled.
	3	चुब्येयख् <i>tsuvyēya-kh</i> , they quarrelled.

The feminine impersonal verbs चर *tsar*, &c., (see pp. 16, 22 and 49) have the following forms,—

चर्येयम् *tsaryēya-m*, I was inwardly wrathful.

चर्येयि *tsaryēyi-y* (with inserted *i*; see p. 70 *post*), thou wast inwardly angry.

चर्येयस् *tsaryēya-s*, he was inwardly angry.

And so on.

So also (viii. iii. 45) लम्ब्येयस् *tyambyēya-s* (3rd conj.), he glanced eagerly.

B. SECOND CONJUGATION.

Neuter verb (viii. iii. 39). (*c. forms only*).

‘I became, &c.’

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	बुव्योस् <i>bōvyō-s</i> .	बुव्येयस् <i>bōvyēya-s</i> .	बुव्ये <i>bōvyēy</i> .	बुव्येय <i>bōvyēy^a</i> .
2	बुव्योक् <i>bōvyō-kh</i> .	बुव्येयक् <i>bōvyēya-kh</i> .	बुव्येव <i>bōvyē-w^a</i> .	बुव्येयव <i>bōvyēy^a-w^{a.1}</i> .
3	बुव्योव् <i>bōvyōv</i> .	बुव्येय <i>bōvyēy^a</i> .	बुव्ये <i>bōvyēy</i> .	बुव्येय <i>bōvyēy^a</i> .

C. THIRD CONJUGATION.

Neuter verb बुफ *wuph*, fly (viii. iii. 39). (*c. forms only*).

‘I flew (just now),’ used in the sense of the Past, and not as the tense² of the Aorist.

1st Sing. Masc. बुफ्योस् *wuphyō-s*, &c., exactly as in the second conjugation.

In this tense, the difference between the second and third conjugations consists in the formation of the Aorist Participle, as already explained, and not in the conjugation.

¹ Içvara-kaula (viii. iii. 44) gives बुव्येव *bōvyēw^a*, but my Paṇḍit says this is a mistake. The form given above is the correct one.

The Aorist of पि *pi*, fall, used in the sense of the Past, is (viii. iii. 48, 60, 61),—

‘I fell, &c.’

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	प्यौस् <i>pyau-s</i> (not प्यौस् <i>pyō-s</i>).	प्ययस् <i>pěya-s</i> .	प्यय् <i>pěy</i> .	प्यय <i>pěy^a</i> .
2	प्यौख् <i>pyau-kh</i> .	प्ययख् <i>pěya-kh</i> .	प्येव <i>pyē-w^a</i> .	प्ययव <i>pěy^a-w^a</i> .
3	प्यौव् <i>pyauv</i> .	प्यय <i>pěy^a</i> .	प्यय् <i>pěy</i> .	प्यय <i>pěy^a</i> .

Note the specially irregular 2nd person plur. masc.

The Aorist of verb गङ् *gatsh*, go, used in the sense of the past, is (viii. iii. 48, 58, 60, 61).

‘I went, &c.’

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	गौस् <i>gau-s</i> .	गयस् <i>gaya-s</i> .	गय् <i>gay</i> .	गय <i>gay^a</i> .
2	गौख् <i>gau-kh</i> .	गयख् <i>gaya-kh</i> .	गाव् <i>gā-w^a</i> .	गयव <i>gay^a-w^a</i> .
3	गौव् <i>gauv</i> .	गय <i>gay^a</i> .	गय् <i>gay</i> .	गय <i>gay^a</i> .

When this verb is used in the meaning of ‘be proper,’ it is regular, and belongs to the 2nd conjugation. Thus, गङ् *gatsh^v*, it was proper (viii. iii. 58). In this sense it is only used in the Past. The Aorist and Pluperfect do not occur (82).

There are also other irregular Aorists of this conjugation. There are those of the roots यि *yi*, come; जि *zi*, be born; नेर *nēr*, go forth; अत्स *ats*, enter; प्रस *pras*, be born. The Aorist Participles, in the sense of the Past will be found in the list of irregular Aorist Participles, and no difficulty will be found in conjugating them. They are here given for ready reference.

AORIST PARTICIPLES.

यि <i>yi</i> , come.	आव् <i>āv</i> .
जि <i>zi</i> , be born.	जाव् <i>zāv</i> .
नेर <i>nēr</i> , issue.	द्राव् <i>drāv</i> .
अत्स <i>ats</i> , enter.	त्साव् <i>tsāv</i> .
प्रस <i>pras</i> , be born.	प्याव् <i>pyāv</i> .

The feminine and masculine plurals are given in the list of Aorist Participles. It will be seen that they must be conjugated as if they were Pluperfects. Vide p. 74.

When the suffix of the dative of the second person singular is added to a form ending in ओव् *ōv*, ओ *ō* becomes व् *wa* (ō) (viii. iii. 43). Thus, कर्योव् *karyōv* + अय् *ay*, कर्योय् *karyōy*,¹ we made for thee. वुफ्योय् *wuphyōy*,¹ he flew for thee. गौव् *gauv* (root गत्स *gats̄h*), he went; ग्वोय् *gōy*, he went for thee. प्यौव् *pyāuv*, he fell; प्योय् *pyōy*, he fell for thee. The plural of गौव् *gauv*, is गय् *gay*, and 'they went for thee' is गय् *gay*. So, 'they fell for thee' is प्यय् *pyay*.

[When the same form अय् *ay* is added to a form in य *y^a*, इ *i* is inserted. Thus, कर्येय *karyēy^a*, she was made by us; कर्येयिय् *karyēyi-y*, she was made by us for thee. Compare त्सर्येयिय् *tsaryēyi-y* on p. 68 ante].

¹ These are the forms according to the *Sūtra*. But my Paṇḍit maintains that the true forms are कर्योय् *karyō-y*, and वुफ्योय् *wuphyō-y*. The exceptional forms, he says, only occur in the case of the verbs गत्स *gats̄h*, go, and पि *pi*, fall. The *Sūtra* while making the rule absolutely general, only gives the two last-named verbs as examples.

6 (a). THE PLUPERFECT PARTICIPLE.

This participle occurs in all three conjugations. In the first two conjugations (viii. iii. 78), it expresses remote time. Thus, कर्तॄन् *karyā-n*, he made (a long time ago); बॄव्याब् *bōvyāv*, he became (a long time ago).

In the third conjugation it is used in the sense of an Aorist Participle, and expresses past time indefinitely, with no reference to proximity or distance. It is hence the participle, and the Pluperfect is the tense, of narration in this conjugation. Thus, वुफ्याब् *wuphyāv*, he flew. In order to supply the place of Pluperfect, a new tense is formed in this conjugation, which may be called the True Pluperfect. Thus, वुफियाब् *wuphiyāv*, he flew a long time ago.

The Pluperfect Participle is formed by changing the termination ओव् *ōv* of the aorist participle to आव् *āv* (viii. iii. 35). Thus Aorist Participle, कर्तॄव् *karyōv*; Pluperfect Participle, कर्तॄव् *karyāv*. In the first conjugation, the masculine plural is formed by inserting ए *ē*, before the termination of the masculine plural of the Aorist Participle. Thus, कर्तॄव् *karyōv*; masc. plur. कर्तॄय् *karyēy*; Pluperfect part. masc. plur. कर्तॄयेय् *karēyēy* (viii. iii. 36). When the Aorist masc. plural ends in आय् *āy* (*vide*, p. 61) this is changed to आयैय् *āyēy*. Thus; Aorist Participle ह्यत्तोव् *hētsōv*, taken; masc. plur. ह्यत्ताय् *hētsāy*; Pluperfect Part. masc. plur. ह्यत्तायेय् *hētsāyēy* (viii. iii. 37). The feminine singular and plural are the same as those of the Aorist Participle (viii. iii. 38).

In the second and third conjugations, the masculine plural is formed by changing आव् *āv* of the singular to आय् *āy* (viii, iii, 40). See, however, p. 74. Thus वुफ्याब् *wuphyāv*, flown; masc. pl., वुफ्याय् *wuphyāy*. The feminine (singular and plural) is formed by changing आव् *āv* to एय् *ēy*^a. Thus वुफ्येयय् *wuphyēy*^a (viii, iii. 44).

6 (b). THE PLUPERFECT TENSE.

This is formed from the Pluperfect Participle, exactly as the Aorist Tense is formed from the Aorist Participle.

We thus get the following forms.

A. FIRST CONJUGATION.

Transitive verb (viii. iii. 35). (*c.* forms only).‘I made,’ *lit.*, ‘he, she, it, etc., was (were) made by me, you, him, us, &c.’

	SINGULAR.		PLURAL.	
	Masculine. कर्याव् <i>karyāv</i> , made.	Feminine. कर्येय <i>karyēy^a</i> .	Masculine. करेयेय् <i>karēyēy</i> , made.	Feminine. कर्येय <i>karyēy^a</i> .
Sing.				
1	कर्याम् <i>karyām</i> .	कर्येयम् <i>karyēya-m</i> .	करेयेम् <i>karēyē-m</i> .	कर्येयम् <i>karyēya-m</i> .
2	कर्याथ् <i>karyā-th</i> .	कर्येयथ् <i>karyēya-th</i> .	करेयेथ् <i>karēyē-th</i> .	कर्येयथ् <i>karyēya-th</i> .
3	कर्यान् <i>karyā-n</i> .	कर्येयन् <i>karyēya-n</i> .	करेयेन् <i>karēyē-n</i> .	कर्येयन् <i>karyēya-n</i> .
Plur.				
1	कर्याव् <i>karyāv</i> .	कर्येय <i>karyēy^a</i> .	करेयेय् <i>karēyēy</i> .	कर्येय <i>karyēy^a</i> .
2	कर्याव <i>karyā-w^a</i> .	कर्येयव <i>karyēy^a-w^a</i> .	करेयेव <i>karēyē-w^a</i> .	कर्येयव <i>karyēy^a-w^a</i> .
3	कर्याख् <i>karyā-kh</i> .	कर्येयख् <i>karyēya-kh</i> .	करेयेख् <i>karēyē-kh</i> .	कर्येयख् <i>karyēya-kh</i> .

From खि *khi*, eat, we have ख्याम् *khēyā-m*; plur. ख्येयेम् *khēyēyē-m*.
So from चि *ci*, drink.

From नि *ni*, take, नियाम् *niyā-m* and नियेयेम् *niyēyē-m*.

Similarly, from, हि *hi*, take, ह्यत्राम् *hētsā-m*; plur. ह्यत्रायेम् *hētsāyē-m*;
and from दि *di*, give, दित्राम् *ditsām*, and दित्रायेम् *ditsāyē-m* (see p. 71).

Impersonal verbs are similarly conjugated. Thus, असाम् *asā-m*,
I laughed. Those that are conjugated in the feminine (see pp. 16, 22,
49 and 68), are, of course, the same as the Aorist.

Double pronominal suffixes may be added, as in the case of the Past and the Aorist. Thus, कर्थायस् *karyā-th-as*, thou madest me; कर्थाभ्यस् *karyā-m-ay*, I made for thee; कर्थाभ्यस् *karyā-m-as*, I made for him. Further examples are unnecessary. See, however, the special cases mentioned after the paradigm of the third conjugation (p. 75).

B. SECOND CONJUGATION.

Neuter verb (viii. iii. 40). (c. forms only).

'I became a long time ago.'

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	बुव्यास् <i>bōvyā-s.</i>	बुव्येयस् <i>bōvyēya-s.</i>	बुव्याय् <i>bōvyāy.</i>	बुव्येय <i>bōvyēy^a.</i>
2	बुव्यास् <i>bōvyā-kh.</i>	बुव्येयस् <i>bōvyēya-kh.</i>	बुव्याव <i>bōvyā-w^a.</i>	बुव्येयव <i>bōvyēy^a-w^a.</i>
3	बुव्याव् <i>bōvyāv.</i>	बुव्येय <i>bōvyēy^a.</i>	बुव्याय् <i>bōvyāy.</i>	बुव्येय <i>bōvyēy^a.</i>

C. THIRD CONJUGATION.

In this conjugation, the tense has merely the meaning of an Aorist, not of a Pluperfect, and is the tense used in narration. It is conjugated as follows.

Neuter verb (viii. iii. 40, 44). (c. forms only).

'I flew, &c.'

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	बुफ्यास् <i>wuphyā-s.</i>	बुफ्येयस् <i>wuphyēya-s.</i>	बुफ्याय् <i>wuphyāy.</i>	बुफ्येय <i>wuphyēy^a.</i>
2	बुफ्यास् <i>wuphyā-kh.</i>	बुफ्येयस् <i>wuphyēya-kh.</i>	बुफ्याव <i>wuphyā-w^a.</i>	बुफ्येयव <i>wuphyēy^a-w^a.¹</i>
3	बुफ्याव् <i>wuphyāv.</i>	बुफ्येय <i>wuphyēy^a.</i>	बुफ्याय् <i>wuphyāy.</i>	बुफ्येय <i>wuphyēy^a.</i>

¹ Içvara-kaula gives बुफ्येव *wuphyē-w^a*, which my Paṇḍit says is wrong.

In the plural masculine Īçvara-kaula gives वुफ्येय् *wuphyēy*, but this is directly contrary to the rule (viii. iii. 40) of which the word is given as an example.

If it is desired to give the force of the pluperfect to a verb of the 3rd conjugation, we must insert an इ *i* before the याव् *yāv* of the participle. We thus get what I call the True-Pluperfect tense, which is as follows (viii. iii. 50).

TRUE PLUPERFECT (3rd conjugation only) (c. forms only).

‘ I flew (a long time ago), &c.’

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
Sing.				
1	वुफियास् <i>wuphiyā-s.</i>	वुफियेयस् <i>wuphiyēya-s.</i>	वुफियाय् <i>wuphiyāy.</i>	वुफियेय <i>wuphiyēy^a.</i>
2	वुफियाख् <i>wuphiyā-kh.</i>	वुफियेयख् <i>wuphiyēya-kh.</i>	वुफियाव <i>wuphiyā-w^a.</i>	वुफियेयव <i>wuphiyēy^a-w^a.</i>
3	वुफियाव् <i>wuphiyāv.</i>	वुफियेय <i>wuphiyēy^a.</i>	वुफियाय् <i>wuphiyāy.</i>	वुफियेय <i>wuphiyēy^a.</i>

For the plural masculine Īçvara-kaula gives (viii. iii. 40) as examples both स्वकलियेय् *mōkaliyēy* and स्वकलियाय् *mōkaliyāy*, we or they were released. According to his own rule, of which these are examples, the latter is the correct form. For the second person plural feminine he gives (44) नवियेव *naviyēw^a*, you became new, which, according to my Paṇḍit is incorrect for नवियेयव *naviyēy^a-w^a*.

This form cannot be used after cases ending in च् *ts*, ख् *tsh*, ज् *z*, or ञ् *ñ*. Thus, plup. तेज्याव् *tēzyāv*, not तेजियाव् *tēziyāv* (viii. iii. 51).

As an example of the True Pluperfect of the feminine impersonal verbs (see pp. 16, 22, 49, 54, 67, and 68), we may give (viii. iii. 45)

त्यंबियेयस् *tyambiyēya-m*, I glanced eagerly.

त्यंबियेयिन् *tyambiyēyi-y* (see p. 70), thou didst glance eagerly.

त्यंबियेयस *tyambiyēya-s*, he glanced eagerly.

The formation of the Pluperfect and True Pluperfect participles of the following verbs is irregular :—

	PLUPERFECT PARTICIPLE.	TRUE PLUPERFECT PARTICIPLE.
यि <i>yi</i> , come.	आयोव् <i>āyōv</i> .	आयाव् <i>āyāv</i> .
जि <i>zi</i> , be born.	जायोव् <i>zāyōv</i> .	जायाव् <i>zāyāv</i> .
नेर <i>nēr</i> , go forth.	द्रायोव् <i>drāyōv</i> .	द्रायाव् <i>drāyāv</i> .
अत्त <i>ats</i> , enter.	त्तायोव् <i>tsāyōv</i> .	त्तायाव् <i>tsāyāv</i> .
प्रस <i>pras</i> , be born.	प्यायोव् <i>pyāyōv</i> .	प्यायाव् <i>pyāyāv</i> .
पि <i>pi</i> , fall.	प्ययोव् <i>pēyōv</i> .	प्ययाव् <i>pēyāv</i> .
गक्क <i>gatsh</i> , go.	गयोव् <i>gayōv</i> .	गयाव् <i>gayāv</i> .

It will be seen that these Pluperfect Participles (in the sense of the Aorist) are really Aorist Participles of the second conjugation. The feminine, and masculine plural forms, will be found in the list of irregular Aorist Participles (pp. 62 and ff.).

When pronominal suffixes are added to this tense, a final व् *v* or य् *y* is elided, as in the case of the aorist (p. 66). Thus, आयाव् *āyāv* + अस् *as*, आयास् *āyā-s*, he came to him. आयाय् *āyāy* + अस् *as*, आयास् *āyā-s*, they came to him. Other examples of these suffixes are आयास् *āyā-s* + अस् *as*, आयासस् *āyā-s-as*, I came to him; आयाक् *āyā-kh* + अस् *as*, आयाहस् *āyā-h-as*, thou camest to him; आयाव *āyā-w* + अस् *as*, आयावस् *āyā-wa-s*, you came to him (viii. iii. 41).

When अय् *ay*, the suffix of the dative of the second person singular is added; आव् *āv* becomes ओ *ō*, and आय् *āy*, अ *ā* (42). Thus, ओय् *ōy* (आव् *āv* + अय् *ay*), he came for thee; आय् *āy*, अ *ā* (42). Thus, ओय् *ōy* (आव् *āv* + अय् *ay*), he came for thee; आय् *āy*, they came for thee; द्रोय् *drōy*, he came out for thee; द्राय् *drāy*, they came out for thee; चोय् *tsōy*, he entered for thee; त्ताय् *tsāy*, they entered for thee. So वुफियोय् *wuphiyōy*, he flew for thee (वुफियाव् *wuphiyāv* + अय् *ay*).

7. PERFECT TENSE.

This tense is not described by Īçvara-kaula. It is formed by conjugating the Adjectival Past Participle with the Present tense of the Auxiliary Verb. As in the case of the other past tenses, the construction is passive in verbs of the first conjugation, and active in verbs of the second and third. The pronominal suffixes are added as in the past tenses. They are added to the Auxiliary Verb, and not to the Participle. In the first conjugation they are suffixes of the agent case, and in the other two of the nominative case. As in the case of the Past tense, there are *a*, *b*, and *c* forms,—*i.e.*, we may omit the suffixes at pleasure, except in the second person. Thus,—

- (a). त॑मि क॑र॑म॑तु कु॒ह् *taṃi kar^umat^u chuḥ*, by him has been made,—
 (b). त॑मि क॑र॑म॑तु कु॒न् *taṃi kar^umat^u chu-n*, by him has been made-by-him,—
 (c). क॑र॑म॑तु कु॒न् *kar^umat^u chu-n*, has been made-by-him,—
 all meaning 'he has made.'

In the second person, only the *b* and *c* forms are used. Thus,—

- (b). त्व॑द्य क॑र॑म॑तु कु॒व् *tōhē kar^umat^u chu-w^a*, by you has been made-by-you.
 (c). क॑र॑म॑तु कु॒व् *kar^umat^u chu-w^a*, has been made by you, both meaning 'you made.' We cannot say त्व॑द्य क॑र॑म॑तु कु॒ह् *tōhē kar^umat^u chuḥ*. In the paradigms, I shall only give the *c*. forms.

The Auxiliary Verb may either precede or follow the Participle. Thus, क॑र॑म॑तु कु॒म् *kar^umat^u chu-m* or कु॒म् क॑र॑म॑तु *chu-m kar^umat^u*, but it is considered more elegant for it to precede, when in a sentence, and not standing by itself. Thus, म्य॑ कु॒म् गर॑ क॑र॑म॑तु *mē chu-m gar^a kar^umat^u*, I have built a house. When standing by itself, the Auxiliary Verb usually follows.

The following is the conjugation of this tense. Regarding the formation of the Adjective Past Participle, and its declension, see p. 29.

A. FIRST CONJUGATION.

(a). Transitive verb, (c. Forms only).

'I have made,' *Lit.* 'he, she, it, etc., has (have) been made by me.'

		SINGULAR.		PLURAL.	
		Masculine.	Feminine.	Masculine.	Feminine.
		कर्म्मन्तु कर्म्मन्तु <i>kar^mmat^u</i> .	कर्म्मन्तु <i>kar^mmat^u</i> .	कर्म्मन्तु <i>kar^mmat^u</i> .	कर्म्मन्तु <i>kar^mmat^u</i> .
Sing.	1	कर्म्मन्तु कृम् <i>kar^mmat^u chu-m,</i>	कर्म्मन्तु कृम् <i>kar^mmat^u chē-m</i>	कर्म्मन्तु कृम् <i>kar^mmatⁱ chi-m.</i>	कर्म्मन्तु कृम् <i>kar^mmat^o</i>
	2	कर्म्मन्तु कृय् <i>kar^mmat^u chu-th.</i>	कर्म्मन्तु कृय् <i>kar^mmat^u chē-th.</i>	कर्म्मन्तु कृय् <i>kar^mmatⁱ chi-th.</i>	कर्म्मन्तु कृय् <i>kar^mmat^o</i>
	3	कर्म्मन्तु कृन् <i>kar^mmat^u chu-n.</i>	कर्म्मन्तु कृन् <i>kar^mmat^u chē-n.</i>	कर्म्मन्तु कृन् <i>kar^mmatⁱ chi-n.</i>	कर्म्मन्तु कृन् <i>kar^mmat^o chē-n.</i>
Plur.	1	कर्म्मन्तु कृह् <i>kar^mmat^u chu-h.</i>	कर्म्मन्तु कृह् <i>kar^mmat^u chēh.</i>	कर्म्मन्तु कृह् <i>kar^mmatⁱ chih.</i>	कर्म्मन्तु कृह् <i>kar^mmat^o chēh.</i>
	2	कर्म्मन्तु कृव <i>kar^mmat^u chu-w.</i>	कर्म्मन्तु कृव <i>kar^mmat^u chē-w.</i>	कर्म्मन्तु कृव <i>kar^mmatⁱ chi-w.</i>	कर्म्मन्तु कृव <i>kar^mmat^o</i>
	3	कर्म्मन्तु कृख् <i>kar^mmat^u chu-kh.</i>	कर्म्मन्तु कृख् <i>kar^mmat^u chē-kh.</i>	कर्म्मन्तु कृख् <i>kar^mmatⁱ chi-kh.</i>	कर्म्मन्तु कृख् <i>kar^mmat^o chē-kh.</i>

(b). Impersonal verb, (c. Forms only).

'I have laughed,' *lit.*, 'it has been laughed by me.'

- Sing. 1. असुमतु कुम् $as^u mat^u$ *chu-m*, I have laughed.
 2. असुमतु कुथ् $as^u mat^u$ *chu-th*, thou hast laughed.
 3. असुमतु कुन् $as^u mat^u$ *chu-n*, he has laughed.
 Plur. 1. असुमतु कुह् $as^u mat^u$ *chuh*, we have laughed.
 2. असुमतु कुव् $as^u mat^u$ *chu-w^a*, you have laughed.
 3. असुमतु कुख् $as^u mat^u$ *chu-kh*, they have laughed.

Pronominal Suffixes.

When the grammatical subject (*i.e.*, the logical object) is a pronoun, it is frequently added in the shape of another pronominal suffix (nominative form). The following are the masculine forms used. Feminine forms can be easily made on the same principle:—

करुमतु कुथस् $kar^u mat^u$ *chu-th-as*, have been made-by thee-I,
 thou hast made me.

So करुमत्तु कुथस् $kar^u mats^u$ *chē-th-as*, thou hast made me (fem.).

करिमति कुथ् $kar^i mat^i$ *chi-th*, thou hast made us (masc.).

There is no suffix for the first person plural.

करुमतु कुनस् $kar^u mat^u$ *chu-n-as*, he has made me.

करुमतु कुवस् $kar^u mat^u$ *chu-w-as*, you have made me.

करुमतु कुहस् $kar^u mat^u$ *chu-h-as*, they have made me.

करुमतु	}	$kar^u mat^u$	{	कुमख् <i>chu-m-akh</i> , I have made thee.
				कुनख् <i>chu-n-akh</i> , he has made thee.
				कुख् <i>chu-kh</i> , we have made thee.
				कुहख् <i>chu-h-akh</i> , they have made thee.

When the logical object is the third person, the forms of the first and third persons are not used in this way. This applies also to the plural. We thus have only the two following forms:—

करुमतु	}	$kar^u mat^u$	{	कुथन् <i>chu-th-an</i> , thou hast made him.
				कुवन् <i>chu-w-an</i> , you have made him.

For 'I have made him,' we must use the full pronoun; thus, सुह् कुम् $suh chu-m kar^u mat^u$, and so for the others.

करि॑मति } करि॑मति }	karimatī,	{	कि॑मव <i>chi-m-aw^a</i> , I have made you.
			कि॑नव <i>chi-n-aw^a</i> , he has made you.
			कि॑हव <i>chi-h-aw^a</i> , they have made you.
करि॑मति }	karimatī,	{	कि॑थख् <i>chi-th-akh</i> , thou hast made them.
			कि॑वख् <i>chi-w-akh</i> , you have made them.

B. SECOND CONJUGATION.

Neuter verb.

(c. forms only).

I have become, &c.

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	ब॒व॒म॒तु॑ कृ॒स् <i>bōv^umat^u chu-s.</i>	ब॒व॒म॒च॑ कृ॒स् <i>bōv^umat^s^u chē-s.</i>	ब॒वि॒म॒ति॑ कि॒ह् <i>bōvⁱmatⁱ chih.</i>	ब॒व्य॒म॒त्र॑ कृ॒ह् <i>bōvēmat^s^a chēh.</i>
2	ब॒व॒म॒तु॑ कृ॒ख् <i>bōv^umat^u chu-kh.</i>	ब॒व॒म॒च॑ कृ॒ख् <i>bōv^umat^s^u chē-kh.</i>	ब॒वि॒म॒ति॑ कि॒व <i>bōvⁱmatⁱ chi-w^a.</i>	ब॒व्य॒म॒त्र॑ कृ॒व <i>bōvēmat^s^a chē-w^a.</i>
3	ब॒व॒म॒तु॑ कृ॒ह् <i>bōv^umat^u chuh.</i>	ब॒व॒म॒च॑ कृ॒ह् <i>bōv^umat^s^u chēh.</i>	ब॒वि॒म॒ति॑ कि॒ह् <i>bōvⁱmatⁱ chih.</i>	ब॒व्य॒म॒त्र॑ कृ॒ह् <i>bōvēmat^s^a chēh.</i>

C. THIRD CONJUGATION.

Neuter verb.

(c. forms only).

I have flown, &c.

	SINGULAR.		PLURAL.	
	Masculine.	Feminine.	Masculine.	Feminine.
1	वु॒फ्यो॑म॒तु॑ कृ॒स् <i>wuphyōmat^u chu-s.</i>	वु॒फ्यो॑म॒च॑ कृ॒स् <i>wuphyēmats^s^u chē-s.</i>	वु॒फ्यो॑म॒ति॑ कि॒ह् <i>wuphyēmātⁱ chih.</i>	वु॒फ्यो॑म॒त्र॑ कृ॒ह् <i>wuphyēmats^s^a chēh.</i>
2	वु॒फ्यो॑म॒तु॑ कृ॒ख् <i>wuphyōmat^u chu-kh.</i>	वु॒फ्यो॑म॒च॑ कृ॒ख् <i>wuphyēmats^s^u chē-kh.</i>	वु॒फ्यो॑म॒ति॑ कि॒व <i>wuphyēmātⁱ chi-w^a.</i>	वु॒फ्यो॑म॒त्र॑ कृ॒व <i>wuphyēmats^s^a chē-w^a.</i>
3	वु॒फ्यो॑म॒तु॑ कृ॒ह् <i>wuphyōmat^u chuh.</i>	वु॒फ्यो॑म॒च॑ कृ॒ह् <i>wuphyēmats^s^u chēh.</i>	वु॒फ्यो॑म॒ति॑ कि॒ह् <i>wuphyēmātⁱ chih.</i>	वु॒फ्यो॑म॒त्र॑ कृ॒ह् <i>wuphyēmats^s^a chēh.</i>

8. THE PERIPHRASTIC PLUPERFECT TENSE.

This tense, also, is not mentioned by Īçvara-kaula. It is formed exactly like the perfect, except that the past tense of the auxiliary verb is used instead of the present. It is unnecessary to give full paradigms, the following examples will suffice.

करुमंतु असुम् *kar^umat^u ōsu-m*, I had made (him).

करुमंतु असुम् *kar^umat^s ās^u-m*, I had made (her).

करिमन्ति असिम् *karⁱmatⁱ āsi-m*, I had made (them, masc.).

कर्यमन्न असम् *kar^ēmat^s āsa-m*, I had made (them, fem.).

बुवमंतु असुस् *bōv^umat^u ōsu-s*, I had become.

बुफ्योमंतु असुस् *wuphyōmat^u ōsu-s*, I had flown.

Or, with double pronominal suffix.

करुमंतु असुयस् *kar^umat^u ōs^u-th-as*, thou hadst made me.

B. Imperative Mood.

1 (a). THE PRESENT TENSE.

The terminations are (viii. ii. 5).

SINGULAR.

PLURAL.

2 ह् *h*.

2 इव् *iv*.

3 इन् *in*.

3 इन् *in*.

If the root ends in a consonant, the ह् *h* of the 2nd singular is elided (6). Thus,—

कर् *kar*, make thou.

करिव् *kariv*, make ye.

करिन् *karin*, let him make.

करिन् *karin*, let them make.

From दि *di*, give, which does not end in a consonant, we get for 2nd singular दिह् *dih*, not दि *dī*.

If the root of the verb contains the letter ओ *ō*, that ओ *ō* becomes ऊ *ū*, in the Imperative (7). Thus,—

रोज् *rōz*, stand,

3rd Sing. Imperat. रुजिन् *rūzin*.

तोल् *tōl*, weigh,

” ” तूलिन् *tūlin*.

पोठ् *poṭh*, be fat,

” ” पूठिन् *pūṭhin*.

So also, if the root contains ए *ē*, it becomes ई *ī* (7). Thus,—

नेर *nēr*, go forth,

नीरिन् *nīrin*.

शैक *çēk*, fear,

शैकिन् *çīkin*.

पेड् *pēḍ*, exude,

पीडिन् *pīḍin*.

These changes, however, do not occur in the second person singular (8). Thus, we have, रोञ् *rōz*, तोल् *tōl*, पोढ् *pōṭh*, नेर् *nēr*, शेक् *ṣēk*, पेड् *pēḍ*.

We thus find the Present Imperative of रोञ् *rōz*, remain, to be conjugated as follows.

SINGULAR.	PLURAL.
1 रोञ् <i>rōz</i> .	रुञ्जिन् <i>rūzin</i> .
2 रुञ्जिन् <i>rūzin</i> .	रुञ्जिन् <i>rūzin</i> .

Every root ending in a vowel, takes the letter य *y* before all terminations, except that of the second person singular (10). Moreover a final इ *i* of the root is changed to य *ya(ě)*, except in the case of the verbs नि *ni*, take, दि *di*, give, and यि *yi*, come (11). We thus get the following conjugation of a verb whose root ends in a vowel.

(a) खि *khi*, eat.

SINGULAR.	PLURAL.
2 खिह् <i>khēh</i> .	खियिन् <i>khēyin</i> .
3 खियिन् <i>khēyin</i> .	खियिन् <i>khēyin</i> .

(b) दि *di*, give.

SINGULAR.	PLURAL.
2 दिह् <i>dih</i> .	दियिन् <i>diyiv</i> .
3 दियिन् <i>diyiv</i> .	दियिन् <i>diyiv</i> .

The root यि *yi*, come, is further irregular, in that, besides being conjugated like दि *di*, it also optionally takes the following form (viii. ii. 12).

SINGULAR.	PLURAL.
2 व्वल् <i>wōl</i> (not व्वल् <i>wōl</i>).	व्वलिन् <i>wōlin</i> .
3 व्वलिन् <i>wōlin</i> .	व्वलिन् <i>wōlin</i> .

The root व्वव *bōv*, become, has the following forms (14).

SINGULAR.	PLURAL.
2 व्वव् <i>bōv</i> .	व्वविन् <i>bōvin</i> .
3 व्वविन् <i>bōvin</i> , व्वयिन् <i>bōyin</i> .	व्वविन् <i>bōvin</i> or व्वयिन् <i>bōyin</i> .

The verbs (see pp. 16, 22, 37 and 49).

त्सर *tsar*, be inwardly wrathful.

फ़श *phōç*, be inwardly wrathful.

फ़ुह *phuh*, be inwardly wrathful.

मर्त्त *mart̄s*, be inwardly wrathful.

वुत्त *wut̄s*, be burnt.

फ़ित्त *phits*, forget.

त्यंब *tyamb*, look eagerly.

All of which are impersonal, and are only used in the third person singular, to which the appropriate pronominal suffixes of the dative are added. (viii. ii. 9).

Thus,—

त्सरिन् *tsarⁱn-ay*, let there be inward anger to thee, *i.e.*, be thou angry.

त्सरिन्व *tsarⁱn-aw^a*, be ye angry.

त्सरिन्स् *tsarⁱn-as*, let him be angry.

त्सरिन्ख *tsarⁱn-akh*, let them be angry.

Regarding the vowel changes, see the following rule.

When a pronominal suffix is added to the Imperative third person singular or plural, the इ *i* of the imperative becomes *i-mātrā*, and the preceding vowel is modified. Thus,

करिन् *karin*, let him make.

करिन्म् *karⁱn-am*, let him make for me.

The second person is,—

Sing. करम् *karu-m*, make thou for me.

Plur. कर्युम् *karyū-m*, make ye for me.

When a pronominal suffix is added to the second person singular of the imperative of a root ending in a consonant, the letter उ *u* is inserted (16). Thus, करन् *karu-n*, make him or it (a very common form); करम् *karu-m*, make for me; करस् *karu-s*, make for him; करख् *karu-kh*, make for them.

As regards roots ending in a vowel, from खि *khi*, eat, we have ख्यम् *khē-m*, &c. From नि *ni*, take, दि *di*, give, and यि *yi*, come, we have दिम् *di-m*, give thou to me, &c.

When a pronominal suffix is added to the second plural imperative of any verb, इव् *iv*, becomes यू *yū* (17). Thus, कर्तॄम् *karyū-m*, make ye for me; कर्तॄस *karyū-s*, make ye for him; कर्तॄख् *karyū-kh*, make ye for them. So from खि *khi*, eat, ख्ययूम् *khyayū-m*, &c., and from नि *ni*, दि *di*, and यि *yi*, दियूम् *diyū-m*, &c.

1 (b). THE MODIFIED PRESENT IMPERATIVE.

This, though not a respectful imperative, is more polite than the simple tense. It is formed by inserting the particle त *ta*. It expresses encouragement, like the Hindī करो तो *karō tō*! It also expresses permission; thus, 'very well, if you wish to do it, do it.' The terminations are as follows (viii. ii. 14).

SINGULAR.	PLURAL.
2 त <i>ta</i> .	इतव् <i>itav</i> .
3 इतन् <i>itan</i> .	इतन् <i>itan</i> .

The terminations are all added to the root direct (15). The ⁱ being *i-mātrā*, a preceding vowel is modified in the 2nd plural, and 3rd sing. and plur. Thus,

SINGULAR.	PLURAL.
2 कर्त <i>kart^a</i> .	कर्तव् <i>karⁱtav</i> .
3 कर्तितन् <i>karⁱtan</i> .	कर्तितन् <i>karⁱtan</i> .

So also from खार *khār*, mount, खारितन् *khārⁱtan*; from वाल *wāl*, bring down, वालितन् *wālⁱtan*; from रोज *rōz*, remain, 2nd sing. रोज्त *rōzt^a*, 3rd sing. रुजितन् *rūzⁱtan*; from नेर *nēr*, go forth, नेर्त *nērt^a*, नीरितन् *nīrⁱtan*; and from चर *tsar*, be inwardly wrathful, &c., चरितनय् *tsarⁱtanay*, &c., (see p. 82).

Regarding roots ending in vowels we have from खि *khi*, eat.

SINGULAR.	PLURAL.
2 ख्यत <i>khēt^a</i> .	ख्यितव् <i>khēyⁱtav</i> .
3 ख्यितन् <i>khēyⁱtan</i> .	ख्यितन् <i>khēyⁱtan</i> .

For नि *ni*, take, दि *di*, give, and यि *yi*, come, we have, however, the following forms.

SINGULAR.	PLURAL.
2 दित <i>dit^a</i> .	दियितव् <i>diyⁱtav</i> .
3 दियितन् <i>diyⁱtan</i> .	दियितन् <i>diyⁱtan</i> .

The pronominal suffixes are added regularly, except that in the second plural, अच् *av* becomes ओ *ō* (18). Thus, क॑रितोम् *karⁱtō-m*, make ye for me; क॑रितोन् *karⁱtō-n*, make ye him; क॑रितोस् *karⁱtō-s*, make ye for him; क॑रितोख् *karⁱtō-kh*, make ye for them.

2. THE FUTURE IMPERATIVE.

This is formed by adding इञि *i^{zi}* if the root ends in a consonant, and जि *zi* if it ends in a vowel. Before इञि *i^{zi}*, a preceding vowel is modified (viii. ii. 22, 24). This tense does not change for number or person. It means 'you, or he, should do a thing at some future time,' or 'make a practice of doing it.' Thus

- त्स॑ह् क॑रिञि *ts^h karⁱzi*, thou shouldst do.
 त्त्सि॑ह् क॑रिञि *tōhⁱ karⁱzi*, you should do.
 सु॑ह् क॑रिञि *suh karⁱzi*, he should do.
 ति॑म् क॑रिञि *tim karⁱzi*, they should do.

So also from खार *khar*, mount, खारि॑ञि *khārⁱzi*; from वाल *wāl*, bring down, वारि॑ञि *wālⁱzi*; from रोज *rōz*, stand, रुजि॑ञि *rūzⁱzi*; and from नेर *nēr*, go forth, नीरि॑ञि *nīrⁱzi*. I cannot find that this form is used with impersonal verbs like चर *tsar* etc., mentioned when dealing with the Simple Imperative.

As regards verbs ending in a vowel, we have from खि *khi*, eat, खिञि॑ *khēzi*; so also in other cases, but from नि *ni*, take, दि *di*, give, and यि *yi*, come, we have दिञि॑ *dizi*, etc.

When the pronominal suffixes अम् *am* and अस् *as* are used with this form, जि *zi* becomes ज्य *zya*. (viii. ii. 25).

Thus क॑रिज्यम् *karⁱzy-am*, you should make me, or for me.

So क॑रिज्यस् *karⁱzy-as*, you should make for him.

In other cases, the जि *zi*, is unchanged.

Thus क॑रिजि॒य् *karⁱzi-y*, he should make for thee.

[NOTE. My Paṇḍit also says क॑रिज्यन् *karⁱzy-an*, not क॑रिजिन् *karⁱzin*; so also he says क॑रिज्यव *karⁱzy-aw^a*, and क॑रिज्यख् *karⁱzy-akh*].

3. THE PAST IMPERATIVE.

This is formed by adding हे *hē* for all persons and numbers to the Future Imperative (viii. ii. 23). It means 'you should have made so and so,' implying that he had not done it.

Thus क॑रिजि॒हे *karⁱzihē*, thou shouldst, you, he, or they, should have made.

Pronominal suffixes are added regularly (25). Thus क॑रिजि॒हेम् *karⁱzihē-m*, you should have made for me.

C. Benedictive Mood.

1. FUTURE TENSE.

This tense expresses a wish. It is formed from the Pluperfect Indicative, by substituting the following terminations (viii. ii. 26).

SINGULAR.	PLURAL.
2 य॒क् <i>yakh</i> .	इ॒व् <i>iv</i> .
3 य॒न् <i>yan</i> .	य॒न् <i>yan</i> .

The tense expresses a wish. Thus, ल॒श्यन् *laṣyan*, may he live long. The following is a specimen of the conjugation of the tense of the verb कर *kar*, make; Pluperfect क॒र्यान् *karyā-n* he made.

'Mayst thou make, &c.'

SINGULAR.	PLURAL.
2 क॒र्य॒क् <i>karyakh</i> .	क॒रि॒व् <i>kariv</i> .
3 क॒र्य॒न् <i>karyan</i> .	क॒र्य॒न् <i>karyan</i> .

So from र॒न् *ran*, cook; 3rd sing. Plup. र॒ज्यान् *rañā-n*; 3rd sing. Bened. र॒ज्यन् *rañyan*. Similarly ज॒ज्ञ्यन् *zēñyan*, may he conquer.

Roots ending in स *s* change the final स *s* to श *ṣ*. Thus, from ल॒स् *las*, live long; 3rd sing. plup. ल॒त्श॒व् *lāṭshāv*; but 3rd sing. Bened. ल॒श्यन् *laṣyan*. So also, from आ॒स *ās*, be, आ॒श्यन् *āṣyan*.

The verb क्वाव *chāv*, use, has for its second singular Bened. either क्वाय्यक् *chāvvyakh* or क्वाय्यक् *chāvvyakh*. The latter form is peculiar to the second person singular (27).

The verb ब्वव *böv*, be, become, changes its final व *v* to य *y* throughout. Thus, ब्वय्यन् *böyyan* (not ब्वयन् *bövyan*), may it be; म ब्वय्यन् *ma böyyan*, may it not be, God forbid! (26).

Pronominal suffixes are added in the usual way. Thus, लय्यनय् *laçyan-ay*, may he live for thee! पोष्यनय् *pōşyan-ay*, may he be victorious for thee!

This tense only occurs in the above verbs (26).

D. Conditional Mood.

1. PRESENT FUTURE TENSE.

This is the same as Future Indicative. An example of its use is ब्वय गक् सुह् वुक्कन् *bö-y gatsh^a, suh wucha-n*. If I go, I shall see him. ब्वय् *böy* is contracted from ब्वह् *böh*, I, and अय् *ay*, if. The object is mentioned twice. First fully in सुह् *suh*, and again as a pronominal suffix (न् *n*).

2. THE PAST CONDITIONAL TENSE.

This tense is used if things are spoken of that might have, but have not, happened. Thus, रुद् अय् पयिहे खक् सपजिहे *rūd ay pëyihē, söch sapazihē*, if there had been rain, there would have been plenty. It is conjugated as follows (viii. ii. 32).

SINGULAR.	PLURAL.
1 करहा <i>karahā</i> , (if) I had made.	करहाव् <i>karahāv</i> .
2 करहाक् <i>karahāk</i> ,	करिहीव् <i>karⁱhīv</i> .
3 करिहे <i>karihē</i> ,	करहान् <i>karahān</i> .

NOTES. (1) When the last syllable contains the vowel आ *ā*, that vowel is always modified. This is not mentioned by Īçvara-kaula, but is a fact.

(2) The short *i* in the second person plural is *i-mātrā*, and modifies the preceding root vowel when possible.

Verbs ending in vowels are declined as follows, inserting म् *m* in the first person, as in the Future Indicative.

SINGULAR.

PLURAL.

- | | | |
|---|------------------------------------|---------------------------------|
| 1 | ख्यमहा khyamahā, (if) I had eaten. | ख्यमहाव् khyamahāv. |
| 2 | ख्यहाख् khyahākh. | ख्यिहीव् khëy ⁱ hīv. |
| 3 | ख्यिहे khëyihē. | ख्यान khyahān. |

From नि *ni*, take, दि *di*, give, and यि *yi*, come, we have as follows.

SINGULAR.

PLURAL.

- | | | |
|---|----------------|--------------------------------|
| 1 | दिमहा dimahā. | दिमहाव् dimahāv. |
| 2 | दिहाख् dihākh. | दियिहीव् diy ⁱ hīv. |
| 3 | दियिहे diyihē. | दिहान् dihān. |

Pronominal suffixes are added as follows :—

Added to 1st person.	{	करहाम् karahā-m, (if) I or we had made myself or for myself.	
		करहाय् karahā-y,	„ thee, or for thee.
		करहाव् karahā-w ^a ,	„ you, or for you.
		करहान् karahā-n,	„ him.
		करहास् karahā-s,	„ for him.
		करहाख् karahā-kh,	„ them, or for them.
Added to 2nd person singular.	{	करहाम् karahā-m, (if) thou hadst made me, or for me.	
		करहान् karahā-n,	„ him.
		करहास् karahā-s,	„ for him.
		करहाख् karahā-kh,	„ them, or for them.
Added to 2nd person plural.	{	करिह्यम् kar ⁱ hyū-m, (if) you had made me or for me.	
		करिह्यन् kar ⁱ hyū-n,	„ him.
		करिह्यस् kar ⁱ hyū-s,	„ for him.
		करिह्यख् kar ⁱ hyū-kh,	„ them, or for them.
Added to 3rd person singular.	{	करिहेम् karihē-m, (if) he had made me or for me.	
		करिहीय् karihī-y,	„ thee, or for thee.
		करिहेव् karihē-w ^a ,	„ you, or for you.
		करिहेस् karihē-s,	„ him, or for him.
		करिहेख् karihē-kh	„ them, or for them.

Added to 3rd person plural.	{	करहानम् <i>karahān-am</i> , if they had made me or for me.	
		करहानय् <i>karahān-ay</i> , „ thee or for thee.	
		करहानव <i>karahān-aw^e</i> , „ you or for you.	
		करहानस् <i>karahān-as</i> , „ him or for him.	
		करहानख् <i>karahān-akh</i> , „ them or for them.	

Note.—All the forms added to the second person are irregular; and also the suffix of the second person singular, when added to the verb in the third person singular.

The feminine impersonal verbs a चर *tsar*, be inwardly angry, etc., (see pp. 16, 22, 37, 49, 54, 68 and 82) are conjugated as follows:—

चरिहेम् *tsarihē-m*, (if) there had been inward anger to me; (if) I had been inwardly angry.

अस्य चरिहे *asē tsarihē*, (if) we had been inwardly angry.

चरिहीय् *tsarihī-y*, if thou hadst been „ „

चरिहेव *tsarihē-w^e*, if you had been „ „

चरिहेस् *tsarihē-s*, if he had been „ „

चरिहेख् *tsarihē-kh*, if they had been „ „

This tense may also be used in expressions like the following:—

सुय् करिहे *su-y karihē*, even he did it. That is to say, ‘why did you do it? It was his business, and he has done it already.’ (35).

APPENDIX.

LIST OF KĀÇMĪRĪ VERBS ARRANGED ACCORDING TO CONJUGATIONS AND FINAL LETTERS.

As the forms taken by a Kāçmīrī Verb depend partly on the Conjugation to which it belongs, and partly on the final letter of its root, the following list of Verbal Roots is arranged under Conjugations, and then alphabetically according to the final letter of each root.

For the meaning of these roots, and the form of the Past and Aorist Tenses of each, the reader is referred to the List of Kāçmīrī Verbs given *ante*, Vol. LXV, Pt. I, pp. 314 and ff.

FIRST CONJUGATION.

khi, ci, di, ni, hi.

khisk, chak, chik, tak, tuk, t^ok, thāk, thuk, dak, truk, thyak, thök, drök, phak, phuk, phūk, phrak, bak, brak, çēk, çrök, suk, hyak.

jakh, lakh, likh, lēkh.

tsyang, zāg, tǎg, dag, phǎg, būg, mang, rang, lang, lāg, wung, wōlang, hag.

khara^c.

khāch, tach, buch, bēch, much, rach, wuch, hyachh.

māj.

tsarts, nats, phits, marts, wǎts, wuts.

yitsh, kǎtsh, pritsh, britsh.

arz, kanz, khūnz, graz, nyawāz, pāz, pūz, prinz, baz, buz, bōz, māz, waz, sōz.

kapat, kǎt. khat, chāt, tsat, tsūt, tsēt, tshat, dāt, pit, prāt, rat, lūt, wat, wāt.

wuth.

kad, gand, tshand, tshād, tsād, tād, mand, mād, lad, sad, hyad.

prin.

kat, khut, nyat, çrut, s^{at}.

math.

ārad, gind, gund, pad, pōnd, mand, lad, wad, wand, vyand, sād.

an, ātshan, ān (=an), k^{an}, khan, chān, tsān, tsēn, tshun, zān, zēn, t^asan, dōn, d^{an}, pachān, parzan, pilan, putsan, prazan, phān, mān, mun, mēn, ran, lōn, lōn, wakhan, wan, vyatshan, wōn.

krp, khap, gup, chap, tsāp, zap, tap, tyap, tap, trap, thip, dap, nap.

chōmb, tsōmb, tōmb, trōmb, lab.

kham, cum, dam, lam, wām, hum.

kāy, dōy, d^{ay}, pay, lāy, wāy.

alar, āpar, āwar, katar, kar, kār, kūr, khār, gar, gār, gēr, gōr, cār, cīr, char, chēr, chōr, jar, jūr, tsar (be inwardly wrathful), tsār, tsūr, zar, tār, tōvar, thur, darr, dār, par, pār, pyatar, pūr, pair, phir, phukār, phyār, bagār, bar, mathār, mar (unite), mahār, mār, mutsar, musar, mūtr, mūr, yār, yēr, rāwar, latār, lār, lūr, wathar, war, wahār, wār, witsār, wōkhar, wōthar, wōphar, wur, wusar, wōr, çēr, sandar, sandār, sar, sār, sōr, hahar, hār, hōr.

anz^{ar}, ab^{ar}, āz^{ar}, āt^{ar}, ād^{ar}, kanz^{ar}, khand^{ar}, ganz^{ar}, grāç^{ar}, çak^{ar}, chind^{ar}, chōñ^{ar}, chöp^{ar}, tsīñ^{ar}, tsōk^{ar}, tsyat^{ar}, tshyat^{ar}, tshyav^{ar}, tshōt^{ar}, zīth^{ar}, zuv^{ar}, zōv^{ar}, z^{ar}jar, dakh^{ar}, tats^{ar}, tañ^{ar}, tiz^{ar}, tröp^{ar}, thaz^{ar}, dāñ^{ar}, dōb^{ar}, dūntsh^{ar}, nāñ^{ar}, nāç^{ar}, nik^{ar}, nōm^{ar}, nōw^{ar}, nōm^{ar}, paj^{ar}, paz^{ar}, pāth^{ar}, pās^{ar}, pīth^{ar}, puç^{ar}, pūth^{ar}, phas^{ar}, phās^{ar}, phut^{ar}. bad^{ar}, banz^{ar}, bal^{ar}, bāg^{ar}, bāj^{ar}, bēñ^{ar}, bram^{ar}, manz^{ar}, maç^{ar}, mōt^{ar}, mōnd^{ar}, mūntsh^{ar}, yat^{ar}, ratsh^{ar}, wad^{ar}, vēz^{ar}, vēñ^{ar}, vyath^{ar}, vyad^{ar}, vyap^{ar}, vyav^{ar}, wōw^{ar}, çūb^{ar}, sañ^{ar}, sanz^{ar}, sēz^{ar}, sōmb^{ar}, hat^{ar}, hōkh^{ar}, hōb^{ar}, hōm^{ar}.

ahal, khōl, gāl, chal, tsāl, tsyakhāl, tsyall, tshal, zāl, z^{al}, tāl, dāl, tal, tāl, tul, tōl, thal, dal, nyangal, pal, pāl, bōl, mal, lōl, wal, wāl, wōlal, sambāl.

āyav, ārav, ālav, kamav, kōkav, k^atsav, gilav, gyav, gulav, chōkav, z^arav, tōkav, ðakhav, ðulav, tav, trōmbav, thav, dabav, dav, dōgav, d^anav, nēchav, pākav, pyav, pīnav, pōrav, phālav, phētsav, phirav, manav, milav, mōlav, mōrav, ranzav, rinzav, r^akav, latav, lulav, lithav, lyav, wazav, wanav, wav, vyav, wōhav, sagav, sōkhav, surav, sulav, h^asav.

abasāv, arpāv, alarāv, āparāv, āwarāv, kapaṭāv, kamanāv, krāv, khōkhalāv, guzarāv, catāv, cāv, cukāv, chāv, tsōg^anāv, ṭhagūv, ðulanāv, tāv, tōvarāv, trakarāv, trag^anāv, trāv, thāv, dāv, dōg^anāv, dōdarāv, d^aṣrāv, nahāv, nāv, nyāv pachatāv, paṭāv, parkhāv, parzanāv, pāv, pilanāv, prazanāv, prāv, pharkāv, baḍāv, baṣ^akāv, bāv, mardāv, milanāv, mutsarāv, musarāv, mūtrāv, ranzanāv, rāwarāv, laṭāv, laḍāv, watharāv, wahārāv, wōkharāv, wuḍāv, wōtharāv, wusarāv, ṣag^anāv, saganāv, satāv, sandarāv, sāv, sōkhanāv, hāv, h^asanāv.

ad^arāv, anz^arāv, ab^arāv, ād^arāv, kanz^arāv, khaṇḍ^arāv, ganz^arāv, grāṣ^arāv, chaḥ^arāv, chaṭs^arāv, chiv^arāv, chōñ^arāv, chōp^arāv, tsīñ^arāv, tsōk^arāv, tsōm^arāv, tshyaṭ^arāv, tshyav^arāv, tshōṭ^arāv, zīṭh^arāv, zuv^arāv, zōv^arāv, ðakh^arāv, taṭs^arāv, tañ^arāv, tiz^arāv, traṭs^arāv, traṣ^arāv, trōṣ^arāv, thaṣ^arāv, daḍ^arāv, dāñ^arāv, dōb^arāv, dūntsh^arāv, drōg^arāv, d^aṣrāv, nañ^arāv, naṭ^arāv, nāṣ^arāv nik^arāv, nōm^arāv, nōv^arāv, nōm^arāv, paj^arāv, paṣ^arāv, paṭh^arāv, pās^arāv, piṭ^arāv, piṭh^arāv, puṣ^arāv, pūṭh^arāv, phāṣ^arāv, phuṭ^arāv, baṣ^arāv, baḍ^arāv, baḍ^arāv, banz^arāv, baḷ^arāv, bāg^arāv, bāj^arāv, bēñ^arāv, bram^arāv, maṭs^arāv, maṅz^arāv, maṣ^arāv, māñ^arāv, mōṭ^arāv, mōṇḍ^arāv, mōḍ^arāv, mūntsh^arāv, yaṭ^arāv, raṭsh^arāv, lyad^arāv, lūk^arāv, waḍ^arāv, vēz^arāv, vēñ^arāv, vyath^arāv, vyad^arāv, vyap^arāv, vyav^arāv, wuk^arāv, wug^arāv, wōw^arāv, ṣūb^arāv, sañ^arāv, sēz^arāv, sēñ^arāv, sōg^arāv, sōṭs^arāv, srōg^arāv, haṭ^arāv, haṇḍ^arāv, kâṭh^arāv, hōkh^arāv hōṭs^arāv, hōb^arāv, hōm^arāv.

tsuv, tuv, ðuv, riv, ruv, liv, siv, suv.

kaṣ, krēṣ, paṣ, phēṣ, phuṣ, phōṣ, phēṣ, braṣ, ṣāṣ, sōrṣ.

ḍēṣ, bāṣ, muṣ, waṣ, ṣaṣ.

abas, as, kas, kās, kh^as, tsas, zōs, ṭ^as, ṭhās, das, mus, r^as, s^as.

kuh, khah, g^ah, ts^ah, pih, phuh, muh, sah.

SECOND CONJUGATION.

thak, pak.

samakh, hōkh.

tag, lag, ṣōṅg.

k^ats, khōts, pats, rōts, vyats, hōts.

gatsh, (be proper).

daz, [palaz], rōz, wōpaz, sapaz.

[palaṭ], phaṭ, phuṭ, rōṭ (also 3rd).

bōḍ.

wāt.

wöth.

sapad.

tshyann, [pun], sapan.

wup, çrap. (Both these also optionally 3rd Conj. in Plup.).

pray, lay, way.

khar, tar, [prār], phar, phēr, [phōr], mar (die), sōr.

gal, tsal, dal, dōl (or dōl), phal, phöll, mēl.

bōv, rāv.

[naç] [tōş], döş, pōş, maş, rōş.

ās, khas, phas, bas, [bās], las, lōs, was, [wōbas].

bēh.

THIRD CONJUGATION.

zi, pi, yi.

grak, camak, tsök, thik, dök, nik, lök, wök.

thag, tang, drög, sög, srög.

bach.

mandach.

ats, gröts, tsöts, tshöts, trats, möts, lëts, çröts.

atsh, gatsh(go).

tēz, paz, bāwaz, braz, ranz, laz, wuz.

kṛt, krat, gyamat, gurat, tshyat, tshöt, töt, nat, pat, pīt, prakhat, möt, rōt (also second), wöt, hat.

kāth, kuṭh, krēth, tsamath, zēth, tyath, tōth, drēth, nāth, path, pōth, brēth, mēth, vyath, çith, çriṭh, hāth.

aḍ, pēḍ, baḍ, buḍ, möḍ, r^aḍ, lyad, wuḍ.

tūran, prān, r^an, wuṣn.

chat, zōt, tat, mat, r^at, löt, wōnnat, söt.

pāth.

and, tund, thad, pyad, bād, brād, wud, syad, çöd (this is a better spelling than çöddh).

āman, kān, kyann, kṛhan, gan, guman, chan, chōnn, tshāttshan, tan, tīlan, nan, pākan, pran, ban, basan, bākhan, byann, lahan, l^ahan, wōgan, wun, çig^an, san, syann, hān, hāman, hōn, h^an.

kāmp, kup, nāp, pap, paşp, yāp, wup (optionally in Pluperfect), vyap, çrap (optionally in Pluperfect), hap.

wuph.

kōb, göb, tyamb, dub, tyamb, phab, ramb, lūb, çūb.

garm, tsam, tham, nam, bram, wōm, çam, sam, ham.

biy, l^ay, wuy.

ad^ar, yīr, kahar, kātsar, kāyar, kāw^ar, kūr, khökhar, khōr, gīr, gōwar, cōkhar, tsar (increase), tshar, zīngar, zōngar, zōzar, thahar, ḍar,

tūr, trakar, trōr, thar, thāthar, thār, dar, dōdar, dūr, dōr, nēr, pīr, pōr, phakar, bahar, bābar, bigar, mōḍ^{ar}, mōr, lyad^{ar}, lōr, vyad^{ar}, vyalar, vyasar, wukar, wudar, wōbar, sakhur, sāgar, syand^{ar}, sīr, sōsar, hakar, haṇḍ^{ar}, har, h^{ar}.

al, kal, kumal, kōl, khal, gāgal, gēl, grāgal, chōkal, zal, ṭal, ḍyal, tambal, tēl, nīl, pil, piçal, pōl, prazal, phāphal, bal, mamal, mōkal, wigal, wōzal, wōtal, wōçal, wōl, çahal, hal, hākal, hil, h^{al}.

chiv, tshyav, zuv, nav, srav.

trōç.

āwas, ḍōs, tras, pis, pras, ras, lis, vis, wōlas, wōs.

gōh, l^{ah}, wuh.



On Indeclinable Particles in Kāçmīrī.—By G. A. GRIERSON,

C.I.E., PH.D., I.C.S.

[Read January, 1899.]

Īçvara-kaula does not formally deal with particles in his grammar, but here and there he refers to them, and the following is a collection of his scattered rules. It in no way pretends to be a complete account of Indeclinables.

Emphatic and indefinite particles have been described by me in Vol. LXVII, Part I, pp. 88, and following.

The following two conjunctions are also there mentioned. They are repeated here for the sake of completeness.

त t^a , and (iv. 178). *E.g.*, सुह त च्छ $suh\ t^a\ ts^ah$, he and thou.

ति ti , also (iv. 179). It is also used instead of त t^a with plurals. Thus, सुह ति च्छ ति $suh\ ti,\ ts^ah\ ti$, he also, you also. महनिवि ति गुपन् ति आय् $mahaniv^i\ ti\ gupan\ ti\ āy$, both the men and the cattle came. In the last sentence we cannot use त t^a .

The negative particle is न n^a , not (viii. ii. 19); but ordinarily negative forms of the verb are used, as described under the head of adverbial verbal suffixes. In other words, the न n^a is usually compounded with the verb as a suffix. Thus, चुसन् $chu-s-n^a$, I am not.

The prohibitive particle म m^a is only used with the Simple Imperative (viii. ii. 19).

म करिन् $m^a\ karin$, let him not make.

म कर् $m^a\ kar$, make thou not.

म करिव् $m^a\ kariv$, make not ye.

With the Modified Imperative मत् mat^a is used (20). Thus, मत कर्तितन् $mat^a\ kar^i\ tan$, let him not make.

Instead of म m^a and मत mat^a , we may use मा $mā$ and मता $matā$ respectively (20). Thus, मा कर $mā kar$, मता कर्त $matā kart^a$.

Other vocative particles may also be added. Thus, मबा कर् $mabā kar$, मस^१ कर $masā kar$, मतबा कर्त $matabā kart^a$, मतस^१ कर्त $matasā kart^a$, and so on (20). See forms of address given in Vol. LXVII, Part I, pp. 92 and ff.

With other tenses of the imperative न n^a is used (19). Thus, क^१रिजि न $karizi n^a$, you should not make. क^१रिजिहे न $karizihē n^a$, you should not have made.

मा $mā$ is used before or after a verb, to indicate a question in hesitation (viii. i. 29). Thus,—

करान् मा कुह् $karān mā chuh$, or मा कुह् करान् $mā chuh karān$, or
मा करान् कुह् $mā karān chuh$, is he making? (I.e., see if he
is not making it, or if he is making it or not, or perhaps
he is not making it?)

कर्योन् मा $karyōn mā$, did he make?

सुह् मा करि $suh mā kari$, will he make?

ब्वह् मा कर $bōh mā kar^a$, shall I make?

The particle ताञ् $tāñ$, or ताञ्त् $tāñat$, is used in asking a question, when the speaker is really in doubt as to whether there is anything to ask (viii. i. 26). Thus,—

क्याह् ताञ् वनुन् $kyāh tāñ wānun$, did he say anything? Here
the speaker did not notice at the time what the man said,
and afterwards recalls the fact, and, being in doubt, asks
the question?

कर् ताञ् आव् $kar tāñ āv$, did he come at any time? If so,
when?

कूतु ताञ् द्युतुन् $kūtū tāñ dyutun$, did he give anything? If so,
how much?

ताम् $tām$, or तामत् $tāmat$, may be used instead of ताञ् $tāñ$, or
ताञ्त् $tāñat$. Thus, क्याह् ताम् वनुन् $kyāh tām wānun$.

द्यठ $dyath^a$. This added to an interrogative word converts it into
an intensive one (viii. i. 27). Thus,—

कर् kar , or कन kan^a , when?

अठ कर आव् *dyath^a kar āv*, or अठ कन आव् *dyath^a kan^a āv*, he
he came a long time ago.

क्याह् *kyāh*, what? अठ क्याह् *dyath^a kyāh*, a great deal.

कूति *kūtⁱ*, how many? अठ कूति *dyath^a kūtⁱ*, a great many,

So अठ कनि *dyath^a kanⁱ*, for a long time.

The usual word for 'if' is अय् *ay*, but, with the Past Conditional (viii. ii. 33), हय् *hay* may be used instead of अय् *ay*, after the verb. Thus,—

करिहे हय् *karihē hay*, if he had made.

करहान् हय् *karahān hay*, if they had made ;

करिहेस् हय् *karihē-s hay*, if he had made it.

With the same tense 'if not' is represented by नय् *nay* (34). Thus, करिहे नय् *karihē nay*, if he had made it ; रुद् नय् प्यिहे *rūd nay pëyihē*, if rain had not fallen.

These particles can also be attached to the subject of the verb (35). Thus, सुहय् करिहे *suh-ay karihē*, if he had made ; तिम्हय् करहान् *tim-hay karahān*, if they had made : सुनय् करिहे *su-nay karihē*, if he had not made, ब्वय् ख्यम्हा *bō-y khyamahā*, if I had eaten.



On the genuineness of the Grant of Çiva-simha to Vidyāpati-ṭhakkura.—

By G. A. GRIERSON, C.I.E., PH.D., I.C.S.

[Read May, 1899.]

Regarding this grant, which is dated La-sam 292 (?), Sana 807, Samvata 1455, Çākē 1321, see the *Indian Antiquary*, Vol. XIV, p. 190, and the *Proceedings* of this Society for 1895, Plate iii. The genuineness of this plate has been doubted, but no positive proof for or against the theory has hitherto been put forward.

Dr. Kielhorn's *Inscriptions of Northern India*, No. 578, shows that the last two dates mentioned in it both correspond to Thursday, 10th July A.D., 1399; but that this day would fall in the Bengali San 806, and in the Hijra San 801 (not 807). Unless therefore there has been an error in the calculations of the writer of the deed, neither of these two latter eras can be meant by the word *sana*. There is however another era, also entitled *san*, and which is moreover the era which in these modern days, is generally current in the part of Bihār from which the inscription comes. It is the *Faşlī San*, an era introduced by the Emperor Akbar. For information regarding it, see Prinsep's *Useful Tables*, ed. Thomas, p. 170. The year runs exactly parallel with the *Vikrama Samvat*, the only difference being that, to obtain the *Faşlī* year, we must subtract 648 from the *Samvat* date. There are no dark and light fortnights in the *Faşlī* month, the days running through each month from 1 to 30, but with this exception the *Faşlī* day of the month and weekday are always the same as the *Samvat* ones. It is thus a very easy calculation to convert a *Samvat* to a *Faşlī* date, and it will be seen that *Faşlī San* 807 does as a matter of fact correspond to V. S. 1455.

This at once stamps the grant as a very clumsy forgery, for F. S. 807 never existed. The first year of the era, as founded by Akbar, was, not 1, but was 963. No date purporting to be earlier than F. S. 963 is possible. It is therefore evident that the dates in this grant must have been forged by some modern *jyautiṣa*, of whom there are hundreds of half educated ones in Tirhut, who knew the simple equation for converting *Samvat* dates to *Faşlī* ones, but did not know the history of the *Faşlī* era. In his anxiety to make the grant look as genuine as possible, he put in all the synchronous dates he knew about, and exposed his forgery in so doing.

JOURNAL

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Part I—HISTORY, LITERATURE, &c.,

Extra-Number 1.—1899.

*A Collection of Antiquities from Central Asia. Part I.¹—By A. R. RUDOLF
HOERNLE, C.I.E., PH.D. (TÜBINGEN).*

(With 19 Plates and a Map.)

INTRODUCTION.

On two portions of this collection I have already reported in this *Journal*, Vol. LXVI, for 1897, Part I, pp. 213 ff., and in the *Proceedings*, for April 1898, pp. 124 ff. In the following pages I propose to give an account of the entire collection; and it will, therefore, be necessary to briefly include the substance of those two previous papers. For the leisure, without which I should not have been able to write it, I am under great obligation to the Government of India who, with the concurrence of the Government of Bengal, placed me on special duty for the purpose of examining and reporting on the collection.

¹ This is my Report to the Government of India, published, by permission of that Government, as an Extra-Number of the *Journal of the Asiatic Society of Bengal*. [Part II. of this Report will be issued subsequently.—T. B.]

To begin with, I may briefly explain the circumstances which led to the formation of the collection. It was the discovery of the Bower and Weber Manuscripts which first drew my attention to Eastern Turk-

Origin of the Collection.

estan as a promising field for epigraphical exploration. My hopes regarding the archæological possibilities of that country were confirmed by what I heard about the success of the Russians, whose Political Agents were said to actively collect manuscripts and other antiquities for St. Petersburg. Accordingly on the 1st June, 1893, I wrote to Mr. (now Sir) Charles J. Lyall, who was then the Home Secretary of the Government of India, suggesting that the Government might send instructions to their Political Agents in different parts of Central Asia, to make enquiries and to secure such specimens as they may be able to obtain. My suggestion was heartily seconded by Sir Charles Lyall, and at his instance, (in his demi-official letter, dated the 14th June, 1893), the Foreign Secretary, Sir M. Durand, who also fully approved of the proposal, caused the necessary instructions to issue, on the 22nd August, 1893, to Lt.-Colonel D. W. R. Barr, Officiating Resident in Kashmir, and through him to the Political Officers in Gilghit, Chitral, Kashghar and Leh. Similar instructions were issued to the British Political Agents in Khorassan, and, I believe, in Meshed. In response to these instructions a large number of Central Asian antiquities has already been secured, forming a very respectable British Collection, to which additions are still being made. To me personally it is source of much satisfaction to have thus been the means of initiating the movement. It is in acknowledgment of this initiative, that all acquisitions are transmitted to me, under the orders of the Government of India, for examination and report, and their ultimate place of deposit, as recommended by me, is to be the British Museum in London. The full determination of the antiquities, especially of the manuscript portion of them, will require more time than I have at present at my disposal.

Scope of the present Report.

The present report, therefore, is only of a preliminary character, and must be limited to a detailed classification and description of the antiquities, illustrated by selected specimens and accompanied with such observations and conclusions as are obviously suggested by them. Much of the epigraphical portion of the collection, however, is clearly of the highest interest, whether from the palæographic and linguistic points of view, or as bearing upon the history of culture in Central Asia, and well deserves more elaborate treatment and more extended publication. For this purpose my approaching retirement from India, I hope, will afford me the needful leisure, as well as

the co-operation of fellow-labourers in the field of Central Asian research, and such assistance as the British Government has always been prepared to extend to endeavours for the advancement of knowledge.

Among the places above mentioned Kashghar and Leh, especially the former, are those which are most favourably situated for the object in view, the collection of antiquities from Eastern Turkestan. It is from the Officers stationed at these two places that nearly all the objects which at present form the collection have been obtained. Captain Stuart H. Godfrey, who was the British Joint-Commissioner in Leh, in 1893, when the instructions of the Foreign Department were issued, informs me (in a letter, dated the 26th September, 1897), that he already before that date, on his own initiative, commenced endeavouring to obtain Central Asian manuscripts. His endeavours, though then unsuccessful, bore much fruit later on, after he had left Leh, as may be seen from the following list of consignments. Mr. George Macartney, who is stationed in Kashghar, as Special Assistant for Chinese Affairs to the Resident in Kashmir, being in the most favourable position, has also been the most successful in his contributions to the collection. To both these officers great credit is due for the successful part they have taken in the formation of the collection. To Sir Adelbert C. Talbot, K.C.I.E., the British Resident in Kashmir, the collection is under special obligation for the hearty support given to it throughout, without which it would probably never have reached its present dimensions.

**List of
contributions.**

The following is a list, in chronological order, of the contributions to the collection, received by me from time to time :—

- (1) From Mr. G. Macartney, a collection of small fragments of manuscripts, found near Kuchar. It was received by me early in April 1895 from the Foreign Office, with their D. O. letter, dated the 28th March, 1895, and reported on in the Proceedings, As. Soc. Beng., for May 1895, and in the Journal, As. Soc. Beng., Vol. LXVI, for 1897, pp. 213-224.
- (2) From Captain S. H. Godfrey (G. 1), a collection of fragments of manuscripts, received by me towards the end of November 1895, and called the "Godfrey Manuscripts." They are said to have been found near Kuchar. A preliminary report on them was submitted by me to the Government of India on the $\frac{1}{2}$ ⁹th March, 1897, and a fuller report (with facsimiles) was published by me in the Journal

of the Asiatic Society of Bengal, Vol. LXVI, Part I, No. 4, for 1897 (pp. 225 ff.), advance-copies of which were transmitted to the Government of India on the 23rd August, 1897, and to the 11th International Congress of Orientalists in Paris in October 1897.

- (3) From Mr. G. Macartney (M. 1), a collection of six sets of manuscripts, received by me in December, 1896, from the Foreign Office with their D. O. letter, dated the 14th December, 1896, and called by me the "Macartney Manuscripts." This collection was also dealt with by me, together with the Godfrey collection (No. 2), in the two Reports above referred to.
- (4) From Mr. G. Macartney (M. 2), a collection of miscellaneous antiquities, found in the Takla Makan desert. This collection, distributed in four sets, consisting of a skull, a manuscript, pottery, bronze figures, coins, and sundry other objects, was received by me in August 1897, with a letter of the Revenue and Agricultural Department of the Government of India, No. 2283-27-1, dated the 16th August, 1897. A preliminary report on it was submitted by me to the Government of India on the 15th September, 1897.
- (5) From Captain S. H. Godfrey (G. 2) a manuscript book, said to have been found in the Takla Makan, and received by me early in October, 1897.
- (6) From Captain S. H. Godfrey (G. 3), a collection of manuscript leaves, in three sets, found in the Takla Makan, and received by me towards the end of October, 1897, with a letter of the Revenue and Agricultural Department of the Government of India, No. 3043-27-3, dated the 14th October, 1897.
- (7) From Mr. G. Macartney (M. 3), a collection of miscellaneous antiquities, procured from Khotan and the Takla Makan, consisting of (a) thirteen books, (b) pottery, (c) coins, (d) sundry objects. Seven books and the antiques were purchased by Mr. Macartney in Khotan for Rs. 95; the remaining six books were purchased by him from Badrud-din. The total cost was Rs. 150. The collection was received by me early in November, 1897, with a letter No. 3169-27-7, from the Revenue and Agricultural Department of the Government of India, dated the 26th October, 1897.

- (8) From Captain S. H. Godfrey (G. 4), a collection of miscellaneous antiquities, consisting of coins, seals and one lead figure, obtained from a merchant Miyan Ghulām Rasūl at a cost of about Rs. 30. It was received by me about the 12th November, 1897, and reported on to the Government of India on the 20th of the same month.
- (9) From Mr. G. Macartney (M. 4), a collection of miscellaneous antiquities, obtained from Khotan for Rs. 11-3, and consisting of (a) books and detached inscribed leaves, and (b) sundry other objects. This collection was received by me towards the end of November 1897, and is referred to in the letter, No. 3265-27-8, of the Revenue and Agricultural Department of the Government of India, dated the 3rd November 1897.
- (10) From Sir Adelbert Talbot, K.C.I.E. (T. 1), a small collection of twenty-four coins and twelve detached manuscript leaves, and sundry other objects, obtained from Muḥammad Ghauz of Khotan, through the Wazir Wazarat of Leh, and received by me on the 3rd December, 1897, and referred to in the letter, No. 3480-11-8, of the Revenue and Agricultural Department of the Government of India, dated the 3rd December, 1897.
- (11) From Mr. G. Macartney (M. 5), two books, from Khotan, purchased for Rs. 40, and received by me on the 27th December, 1897, with a letter, No. 3734-11-23, from the Revenue and Agricultural Department of the Government of India, dated the 27th December, 1897.
- (12) From Captain S. H. Godfrey (G. 5), a miscellaneous collection found in the Takla Makan, consisting of (a) two books and four detached leaves of manuscript, (b) three mud figures, and (c) eleven coins. It was received by me on the 9th January, 1898, and reported on to the Government of India on the 11th of the same month.
- (13) From Captain S. H. Godfrey (G. 6), a collection of pottery and three copper figures, found in the Takla Makan, and received by me on the 27th January, 1898.
- (14) From Captain S. H. Godfrey (G. 7), a miscellaneous collection of antiquities, found in the Takla Makan, and consisting of (a) three books and six detached inscribed leaves, (b) coins, (c) seals, (d) pottery, (e) metal figures, and (f) sundry other objects. This collection was received by me on the 25th of February, 1897, with a letter, No.

621-1-7, from the Revenue and Agricultural Department of the Government of India, dated on the same day.

- (15) From Mr. G. Macartney (M. 6), a collection of miscellaneous antiquities, consisting of (a) six books, (b) coins, (c) seals, (d) pottery, (e) metal figures, (f) two stone heads of Buddha, and (g) sundry other objects. Three of the books were purchased from Badruddin for Rs. 40, the other four books and all antiques from the Rev. Högberg for Rs. 200: total cost Rs. 240. This collection was received by me in Simla, on the 16th June, 1898, with a letter, No. 1297-1-14, from the Revenue and Agricultural Department of the Government of India dated $\frac{19\text{th May}}{16\text{th June}}$, 1898.
- (16) From Mr. G. Macartney (M. 7), a collection of nine books, found at Aq Talā Tūz, and purchased for Rs. 40. It was received by me on the 19th June, 1898, with a letter, No. 1645-1-21, from the Revenue and Agricultural Department of the Government of India, dated the 17th June, 1898.
- (17) From Mr. G. Macartney (M. 8), a collection of eight books, found at Kiang Tūz and purchased for Rs. 40. It was received by me on the same day as the preceding consignment.
- (18) From Captain S. H. Godfrey (G. 8), one book, purchased for Rs. 45. It was received by me on the 16th July, 1898, with a letter, No. 1884-1-29, of the Revenue and Agricultural Department of the Government of India, of the same date.
- (19) From Captain S. H. Godfrey (G. 9), one book, purchased for Rs. 40. It was received by me on the 8th August, 1898, with a letter, No. 2097-1, of the Revenue and Agricultural Department of the Government of India, of the same date.
- (20) From Mr. G. Macartney (M. 9), a collection of miscellaneous antiquities, from Khotan, purchased for Rs. 20, and consisting of (a) two books, (b) eight sheets of manuscripts in Brāhmī characters, (c) three sheets of Chinese manuscripts (two dated), (d) two painted figures in stucco (one Buddha), (e) a painted wooden board (Buddha), (f) two terracotta figures; (g) one metal figure, (h) a few coins, seals, and (i) other miscellaneous objects. This collection was received by me on the 11th October, 1898,

with a letter, No. 2776-1-41, of the Revenue and Agricultural Department of the Government of India, of the same date.

- (21) From Captain S. H. Godfrey (G. 10), a collection of miscellaneous antiquities, from the Takla Makan, sent, from Leh, and consisting of (a) three blockprints, (b) a carved wooden box, (c) seven seals, (d) 54 coins, (e) 56 terracottas. This collection was received by me on the 29th November, 1898, with his D. O. letter, dated the 19th November, 1898.

In the subsequent part of this report the contributions above enumerated will be referred to by the bracketed indications "M. 1., G. 1," etc.

With regard to the contribution No. 12 (or G. 5), I should explain that of the objects constituting the collection the two books, also two leaves, one mud figure and three coins have been retained for the British collection. These were replaced by objects of a similar character taken from other portions of the British collection; and the whole, thus reconstituted, Captain Godfrey was permitted by the Government of India (see No. 159-1-4 of the Revenue and Agricultural Department, dated the 19th January, 1898), to give to Mr. Dauvergne for presentation to the "French Archæological Society." They are now, as I learn from a letter received by me from M. A. Barth, in the hands of M. E. Senart in Paris.

In addition to the antiquities, above enumerated, I may here mention one which I have also seen and examined, but which does not belong to the British collection, but is the private property of Captain Godfrey.

Gold coin from Khotan. It is a gold coin regarding the acquisition of which Captain Godfrey, in private letters, dated the 30th October and 25th November, 1897, informs me as follows: "I had heard that gold coins were occasionally found by native treasure-seekers in the Takla Makan. As such coins are not liable to oxidisation, it was fairly certain that any obtainable might be of considerable numismatic, if not historical, interest. I accordingly requested Munshi Ahmad Din and other native gentlemen to make enquiries as to whether a specimen could be procured. Dr. Chiraghu-d-din, formerly Hospital Assistant at Kashghar, very kindly obtained one for me from a Muhammadan priest in Khotan who had himself purchased it, together with certain seals, from a treasure-seeker there. The coin was, it is stated, exhumed from the soil in the desert together with those seals. For the latter a very high price was asked, for which reason the doctor did not buy

them.² Little over the intrinsic value of the gold was, however, asked for the coin itself. The latter fact seemed to lend added interest to the scientific character of the find, since it was clear that if the coin had been a spurious one, manufactured for sale as an antiquity, a much higher price would have been demanded." According to Munshi Ahmad Din, "two other gold coins, seemingly of a similar description, were presented by the Russian Consul-General at Kashghar to H. I. M. the Tsar." Captain Godfrey's gold coin is shown on Plate I, fig. 1. Being but imperfectly supplied with reference-books, I have not been able to fully identify it; but it appears to be a Byzantine coin, perhaps of the Emperor Constantinus V, Copronymous, who died in 795 A.D.

With the exception of the antiquities, composing the contribution G. 4, all the others were procured from Eastern (or Chinese) Turkestan. The antiquities G. 4 (coins and seals) come from Samarkand, Tashkand, and other places of Western Turkestan. The rest of the antiquities come from the neighbourhood of two places, Kuchar and Khotan, in Eastern Turkestan. Their find-spots are shown in red on the accompanying Map. The town of Kuchar lies to the North, and Khotan to the South of the Great Sandy Desert, which occupies nearly the whole of the space intervening between the Tian Shan Mountains in the North and Kuen Luen Range in the South. The southern portion of this great desert which lies immediately North of Khotan, bears the name of Takla Makan, and most of the find-places are situated within the limits of this portion of the sandy desert. In fact, there are only two places near Kuchar, from which, any antiquities in the British collection have been procured. These are a mound and a "tower" (*i.e.*, a stūpa), situated 1 mile and 16 miles respectively to the west of that town. In the stūpa the Bower and Weber Manuscripts were found. In the same place were also found some of the Macartney Manuscripts (*viz.*, M. 1, Set I *a* and *b*). The fragments, composing the Godfrey Manuscripts (G. 1), as well as some fragments, included in M. 3 and T. 1, are also said to have been found near Kuchar, but the exact place of their discovery is not known. As all these fragments are strikingly alike with respect to paper, writing and general appearance, it is probable that they were all found at the same time and in the same place. On this point the only information available is that given by Captain Godfrey (in a private letter to myself; see my Report in the Journal of the Asiatic Society

² Possibly the seals here mentioned are identical with the pieces of yellow crystal referred to in Mr. Macartney's Note quoted below (p. xxxii).

of Bengal, Vol. LXVI, pp. 225, 226), that he received his fragments (G. 1) in the autumn (September) of 1895, and that he was told that they were dug up "near some old buried city in the vicinity of Kuchar." This last statement would seem to show that they were not found on or near the old "tower" of the Bower Manuscript; for the latter locality was not the site of a sand-buried city. The fragmentary state of the manuscripts (specimens are shown on Plates ii-viii of my Report, above referred to) tends to prove that they were really the proceeds of indiscriminate digging on some ancient site, which was probably being explored with the hope of finding treasure. A good number of such fragments must have been carried off at that time by the diggers; for only a portion of them were given to Captain Godfrey in September, 1895. He received them through certain Afghan merchants trading to Yarkand. Another (very small) portion was included (so far as I can now recollect) in the consignment M. 3, the items of which were purchased by Mr. Macartney "from some treasure-seekers" in Khotan when he visited that town in the spring of 1897. A third (also small) portion is included in the consignment T. 1, the items of which were purchased in October, 1897, by Sir Adelbert Talbot from a certain Muhammad Ghaus of Khotan through the Wazir Wazarat of Leh. The manner in which the treasure-seekers treated their find clearly illustrates their policy, of which more examples will be found further on. It is to divide their spoils into small portions which they dispose of to different purchasers at different times. On the whole I am rather disposed to believe that all these fragments (G. 1, M. 3 and T. 1) really come from the neighbourhood of Khotan, and were dug out (probably in the summer of 1895) from some sand-buried place in the Takla Makan. I suspect that in the statement made to Captain Godfrey about the "old buried city in the vicinity of Kuchar," there is some mistake, and that Khotan is really meant instead of Kuchar. There is, however, a third collection, also of fragments, which was really found near the latter town. They are the first consignment on my list, above given, and were dug out (apparently in September or October 1894) from a large mound, a little more than one mile west of Kuchar, by the orders of the Chinese Amban of that place. See my Report on these Fragments, printed in the Journal of the Asiatic Society of Bengal, Vol. LXVI, pp. 213, 214. According to the Amban's account, that mound had already been dug into "several years" previously, and on that occasion "some" manuscripts had been found of which no further information could be obtained. It is quite possible that some of the G. 1, M. 3 and T. 1 fragments, which in point of paper and script resemble the Weber MSS., may have come out of that find.

The Macartney MSS., as already stated, were dug out, together with the Bower and Weber MSS., from an ancient Buddhist stūpa situated sixteen miles west of Kuchar, on some barren rocky hills, close to the left bank of the river Shahyar. These manuscripts have had a curious history of which I may give a brief account. It is mainly based on a Note by Munshī Aḥmad Dīn, kindly procured for me by Captain S. H. Godfrey. In a few particulars it corrects the accounts previously published by me in the *Journal of the Asiatic Society of Bengal*, Vol. LXVI, pp. 238-240, and in the *Proceedings for 1898*, pp. 63, 64. It appears that some time in 1889 some people of Kuchar undertook to make an excavation in the stūpa in question. Their object in digging into the stūpa was to find treasure, as it was well known that in the time of Yaqūb Beg much gold had been discovered in such ancient buildings. Whether or not they found any "treasure," is not known, but what they did find was a large number of manuscripts and detached papers together with the bodies of a cow and two foxes standing. The hole which they made into the stūpa was excavated straight in, level with the ground, and the manuscripts, accordingly, would seem to have been found, in the centre of the stūpa on the ground level, exactly in the spot, where the original deposit of relics is usually met with in such monuments. The manuscript books and papers were taken to the house of the chief Qāzī of the town, where a couple of days afterwards they were seen by Hājī Ghulām Qādir, heaped up in a corner, there being "a big *sabad*, or 'basket,' full of them. On enquiry having been told the whole story by the Qāzī, he brought away a few of them, and later on, early in 1890, he gave one of them, now known as the Bower Manuscript, to Major (then Lieut.) Bower.³ The others he sent to his younger brother Dildār Khān in Yarkand. These the latter took with him to Leh in 1891. Here he gave one portion of it to Munshī Aḥmad Dīn, who in his turn presented his acquisition to Mr. Weber, a Moravian Missionary. The latter transmitted it to me in Calcutta, where, under the name of the Weber Manuscripts, specimens of it were published by me in the *Journal of the Asiatic Society of Bengal* (Volume LXII, for 1893). The remaining portion, Dildār Khān took with him to India, where he left it with a friend of his at Aligarh, a certain Faiz Muḥammad Khān. On a subsequent visit to India in 1895, he re-took it from his friend, brought it back to Turkestan, and

³ Major Bower calls him a "Turki" merchant; but he is only such by reason of having married a Turkī woman, and having been settled in Kuchar for nearly 30 years. Originally he is an Afghan from Ghazni, and elder brother of Dildār Khān.

presented it to Mr. Macartney. The latter forwarded it in 1896 to the Foreign Office in Simla, whence it was transmitted to me, in Calcutta. It was named by me the Macartney MSS. and specimens of it were published by me in the *Journal of the Asiatic Society of Bengal* (Volume LXVI, for 1897). What became of the rest of the manuscripts in the Qāzī's house is not exactly known. It is probable that Andijani merchants in Kuchar, who are Russian subjects, must have got hold of some of them and transmitted them to Mr. Petrovsky, the Russian Consul-General in Kashghar. The latter forwarded them to St. Petersburg, where specimens of them were published in 1892 by Dr. S. von Oldenburg in the *Journal of the Imperial Russian Archæological Society*, Vol. VIII. As late as 1894, "ten manuscripts" were reported by Dildār Khān, on the information of his brother in Kuchar, to be in the possession of a certain Yūsuf Beg. Unfortunately the negotiations, set on foot by Mr. Macartney for the purchase of these manuscripts, fell through, owing to the Beg's denial of possession, from fear of the Chinese authorities.⁴ It is believed that subsequently Mr. Petrovsky succeeded in purchasing them. If this is correct, they should now be in St. Petersburg. The exact details of the find are so curious that it may be best to quote Dildār Khān's account, kindly procured for me by Mr. Macartney in January 1898. I translate from the original Urdū: "I heard from my brother Ghulām Qādir Khān that there was a dome-like tower near Kuchar at the foot of a mountain. Some people said that there was a treasure in it; it must be searched out. Accordingly some people making a hole in the tower, began to excavate it, when they found inside a spacious room (*ghar khānadār*), and in it a cow and two foxes standing. On touching them with the hand, the cow and foxes fell to the ground as if they were dust. In that place those two books were found packed in wooden boards. Also there is in that place a wall made as if of stone (*dīwār sang-ke mūāfiq*), and upon it something is written in characters not known. It is said that a few years ago an English gentleman (that is, Major Bower) went there, and having visited the place came away. Nothing more is known." With regard to the cow and the foxes mentioned in the above-account Mr. Macartney remarks in his covering letter: "As far as I can make out, they must have been found in the tower in a mummified condition. The art of stuffing animals would not appear to have been unknown in ancient times. M. Petrovski, the Russian Consul in Kashghar, informs me of having,

⁴ This appears to be the incident, referred to in the Chinese Amban's letter, published by me in the *Journal, Asiatic Society of Bengal*, Vol. LXVII (for 1897), . 213. The owner of the MSS. is there called Timūr Beg.

some years ago, received from Kuchar a fish contained in a box, found buried in the ground." Dildār Khān's remark about the inscribed stone-wall (a stone slab let into the wall?) is curious. It is, as I learn from Munshī Aḥmad Dīn, based on a statement by Qādir Ḥakim Beg of Kuchar, who, passing through Yarkand in 1895 on a pilgrimage to Mecca, was questioned on the subject of the discovery of the manuscripts. He was requested at the time by Mr. Macartney to procure a copy of the inscription; but owing to his death in Mecca, nothing more was heard of the slab. The truth of the report is well worth further enquiry: if true, the inscription might prove to be a most valuable record. At the same time, considering that the "room" must have been in almost complete darkness and that the explorers probably had no means of lighting it, it is not quite easy to understand, how, with the exception of the manuscripts which they brought away with them, they could identify the exact nature of what they found inside. I may note, however, that also in the stūpas of Afghanistan occasionally similar curious deposits have been found. Thus Masson relates (in the *Ariana Antiqua*, p. 110) that in "Tope No. 11 of Hidda" there were found in "an interior cupola" "some human bones and two or three animal teeth," which were afterwards identified as those "of the ass, the goat and a species of deer." Also with reference to the "spacious room" I may note that similar large chambers, in the form of "cupolas" or cubical "apartments" have been found in many of the "Topes and Tumuli" of Afghanistan. Thus, in "Tope No. 2 of Kotpur there was discovered a large cupola with a diameter of 12 feet."⁵ In Buner, Dr. Stein found in the Takhtaband stūpa a cubical chamber, of 7 feet dimensions, which was lined with large and carefully cut slabs." This may illustrate the presence of an inscribed slab in the Kuchar stūpa.

Most of the antiquities, including all the pottery, coins and other miscellaneous objects, as well as many manuscripts and all block-print books, have come from Khotan, from various sand-buried sites in the Takla Makan desert. Fifteen of these sites, situated at various distances, from 5 to 150 miles distant from Khotan, are now known, though, only two of them, Borazān and Aq Safil, have been verified by European visitors. For the remainder we have only the information given by native treasure-seekers, principal among whom appears to be a certain Islām Ākhūn of Khotan. These fifteen sites are:—

(1) BORAZĀN (بورزان). This place was visited by Messrs. Högberg and Bäcklund, Swedish Missionaries in Kashghar, in 1897. It was

⁵ See *Ariana Antiqua*, pp. 65, 69 et passim.

also visited by Mr. Macartney in the spring of the same year. In his demi-official letter, No. 121, dated 21st July, 1897, he states that "It is a largely populated village about 5 miles west of the Khotan Chinese city. Some gold ornaments, beads, precious stones (diamonds and *hakik*) and terracotta images have been discovered there." In a private letter, dated the 20th October, 1897, Mr. Macartney informs me that when he visited Borazān, he "found a number of villagers engaged in digging into the side of a loess cliff, the lower portion of which visibly contained a large quantity of broken pottery, bones and decomposed vegetable matter. The stratum in which the excavations were being made was about 12 feet below the level of the present village. The layer which lies immediately above this formation, and on which stands the village, is also of loess; but it is noteworthy that this upper layer shows no streaks or stratification, a fact which points to the conclusion that the deposit was formed during one single flood. Geologically speaking, therefore, there appears nothing furnishing an indication of the time during which the lower stratum had been covered. I enquired of the villagers whether there was any tradition about Borazān having once been destroyed by flood; but no information could be elicited on this point. They knew nothing about it." Mr. Bäcklund, however, informs me, in a letter, dated the 10th October, 1898, that "Borazān is said to have been a large town with forty gates, which was conquered by a Rustam who burnt it and led a rivulet into the place. These things are said to have taken place before the Moslim time." He adds that "the town in the place seen by me is now buried under the mud up to 25-30 feet, as it seemed to me. It is a find-place for clay images. We also found there a bone, measuring 16.75" in circumference. Whether it be a bone from a yak or an elephant, we could not judge." Most of the pottery, coins and other miscellaneous objects, comprised in M. 2 and M. 3, are believed by Mr. Macartney to come from Borazān, while the similar objects, comprised in M. 6, are stated by Mr. Högberg, from whom they were acquired, to have been dug out in that place. It appears to me most probable that Borazān marks the ancient site of the town of Khotan. At the present day Khotan lies close to the left bank of the Yūrung Qāsh (or 'white jade') river, and apparently about 8 or 10 miles to the east of the Qarā Qāsh (or 'black jade') river. In olden times, however, it seems to have occupied a site nearly midway between those two rivers. According to the Geography of the Ming dynasty (from 1368 A.D.) the Yūrung Qāsh flowed 30 *li*, or 6 miles East of Khotan, and the Qarā Qāsh, 27 *li* or 5½ miles West of that town.⁶ According to other Chinese estimates

⁶ See Abel Remusat's *Histoire de la Ville de Khotan*, p. 112; also p. 19.

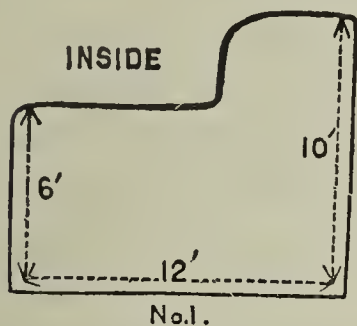
the distance from the Yūrung Qāsh to Khotan was only 20 *li* or 4 miles.⁷ Anyhow, in those days Khotan appears to have stood on a site lying about 4–6 miles West of its present one, and therefore coincident with the site of Borazān, which is said to be “about 5 miles west of Khotan.”

(2) Aq SAPĪL or Aq SAFĪL (اق سفيل “white battlements”), an uninhabited place in the desert, was visited by Messrs. Högberg and Bäcklund in the summer of 1897. It lies about 20 miles north-east of Khotan. From this place was procured in the summer of 1896 a number of coins and miscellaneous objects of metal and glass, comprised in M. 2, Set II, as well as the manuscripts, comprising M. 1, Set II. A description of these manuscripts, together with facsimile specimens, has been published by me in the *Journal of the Asiatic Society of Bengal*, vol. LXVI, pp. 237 and 251, 252. The coins include some of the curious ancient bilingual (Chinese and Kharōṣṭhī) ones, which are referred to by me in my Presidential Address in the *Proceedings of the Asiatic Society of Bengal*, for 1898, p. 69. As these are referable to the 1st and 2nd centuries A.D. (see below pp. 10–15), they indicate Aq Sapīl to be a very ancient site. Turkī and Chinese coins of the early middle ages were also found here. Among the miscellaneous objects are several old metal seals, a small metal figure of Buddha in meditation, and broken pieces of glass. The following notes, made by Mr. Macartney from Mr. Högberg’s account of his visit, are of much interest: “Aq Sapīl is a town or rather the remains of a town in the Takla Makan desert. It is one day’s journey north-east of Khotan, to be reached through the oasis of Hangni.⁸ Before coming to Hangni village, the remains of an old city may be seen. On leaving Hangni, the traveller is at once in the midst of sand dunes which rise from 10 to 30 feet high. Between Hangni and Aq Sapīl, the sites of two other ancient cities may be seen, evidenced by the fragments of pottery and bones on the ground. At this portion of the route, Mr. Högberg picked up a few old seals and coins. As Aq Sapīl itself is reached, the remains of an irrigation canal are noticeable, which canal must have once carried water to the city and the surrounding country. It is from 8 to 10 feet broad and, in places not choked up by sand, rather deep. At Aq Sapīl the

⁷ See *ibidem*, pp. 21, 30.

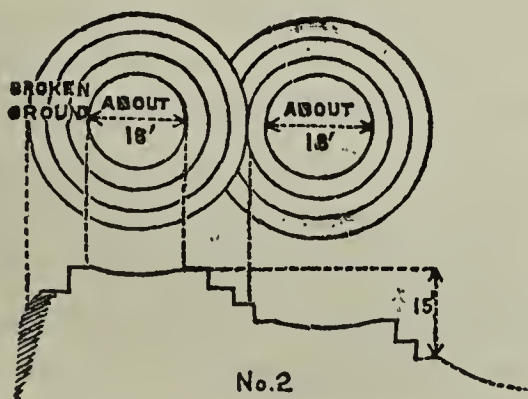
⁸ The real approximate distance (about 20 miles) may be judged from the following account of his tour by Mr. Bäcklund. “Mr. Högberg and I started from Hangni at 5 o’clock in the morning, and arrived at Aq Sapīl at 10 or 11 o’clock, having marched slowly partly because we crossed places covered with pottery, and partly because of the soft high sand dunes. At Aq Sapīl we wandered about for a while, took some food, and returned to Hangni. Having taken some rest there, we started for Khotan, where we arrived a little before midnight, the same day, having then had rather a strong march.”

remains of the city wall are still extant. The wall is from 10 to 12 feet high, and is made of square unburnt bricks ($20 \times 20 \times 4$ inches). On most of these bricks one of the following marks is to be found, 𐎧-𐎧-𐎧-𐎧.⁹ Other bricks, again, have on them the prints of the human foot. The section of the wall is shown in Woodcut No. 1.



Only about 25 feet of the wall can now be seen. About the middle of it there is an opening which must have been once occupied by a gate. The ground outside the wall is trough-shaped, and shows that Aq Sapil was once surrounded by a ditch. Near the gate and on the further side of the ditch, the remains of two towers

(stūpas?) are visible. They are filled with sand inside, and made of earth on the outer side. Regarding the interior of the city the remarkable thing is that although no houses are left, yet the thoroughfares and the places where the houses had once been can be easily distinguished on whatever spot has not been overwhelmed by the sand.¹⁰ The ground occupied by the streets is particularly hard owing to its having formerly been constantly trodden upon, and the same observation applies to the interior of the houses, but the comparatively soft soil on which the house walls stood has been scooped out and forms a hollow. This curious fact may possibly be attributed to the action of sandstorms which have had less corroding effect on the trodden ground than on the once wall-protected soil. The whole of the interior of the city, where it is not covered with sand, is overstrewn with fragments of pottery. The ground at one spot has the form of a couple of reversed amphitheatres, there being two elevated circular stands, slightly hollowed out like ponds, surrounded by terraces descending in widening circles. This is illustrated by Woodcut No. 2. Treasure-seekers would



appear to have worked a great deal amongst the debris of Aq Sapil as evidenced by the heaps of sifted earth, which may be seen here and there." The exact spot where the manuscripts M. 1, Set II were found by Islām Ākhūn is not known. It is only stated that "the MSS.

⁹ These letters might be Kharōsthī, and might mean *da-di-dē-sa*.

¹⁰ By way of illustration I may quote Dr. Bellew's description of the sand-buried "city of Nucta Rashid" about 36 miles south-east of Yangī Hişār: "It

were found wrapped up in a piece of woollen cloth and buried in about 3 feet of earth." To judge, however, from the circumstances in which manuscripts were found at Kök Gumbaz and at Qarā Yāntāq, it is not impossible that the manuscripts M. 1, Set II, were actually dug out from the hollow of one of the two mounds described by Mr. Högberg.

- | | |
|------------------------------|------------------------------|
| (3) AQ TALĀ TŪZ. | The position of these |
| (4) QARĀ QÖL MAZĀR (KHOJAM). | five places may be approxi- |
| (5) QARĀ TĀGH ĀGHĀZĪ. | mately determined from the |
| (6) QARĀ YĀNTĀQ. | following itinerary of Islām |
| (7) KÖK GUMBĀZ | Ākhūn, which he gave to Mr. |

Macartney. He stated that on one of his search-expeditions he started from Guma which lies about 100 miles W. N. W. of Khotan. Leaving that town, "with two other men, about the beginning of January (apparently 1898) and travelling in a generally easterly direction, he came to Qarā Qöl (قره قول *lit.* 'black lake') where there is a salt water lake covered with reeds. Qarā Qöl is reached from Guma in one march (say 12 miles), the intervening ground being through cultivation. Qarā Qöl itself is not inhabited. A Mazār (or 'shrine') may however, be seen there. From Qarā Qöl, Islām Ākhūn went for about 20 miles in a south-easterly direction through the sands to Qarā Tāgh Aghāzī (قره تاغ اغازي or 'master of the black mountain'), a village surrounded by sand and having about 45 houses. Water had to be carried on a donkey from Qarā Tāgh Aghāzī. After three days' march (say 24 miles) in the desert, in a generally easterly direction, Kök Gumbaz was reached. After another march of about 8 miles going in the same direction, and over sandy ground covered with withered reeds, Islām Ākhūn arrived at Qarā Yāntāq, where the remains of an ancient town were seen. The walls were no longer visible, but the place where they once stood was still distinguishable. These traces extended in all directions for a long way, and evidently Qarā Yāntāq had once been the site of a large town. The remains of an old canal of about two yards wide were also noticed. There is a tradition that Qarā Yāntāq was inhabited by Hindis (the name by which Buddhists are generally called in Chinese Turkestan), and that they were converted to Muhammadanism by one Mīrzā Aba Bakrī. A Tazkira of this person is in the hands of an Imām named Sādiq Ākhūn, now living at Qarā Tāgh Aghāzī. From Qarā Yāntāq, Islām Ākhūn went about 60 miles east over sand dunes, and came to

presents nothing to view but the outlines of the foundations of rampart walls and bastions, now mostly buried by the drifting sand. Here and there, where the sands have been swept away by the winds, the surface is strewn with fragments of pottery and glass." (*Report of a Mission to Yarkand in 1873*, p. 129).

Aq Talā Tūz, where a number of books were found. At Aq Talā Tūz (اق تله توز or 'white salt-hill') the remains of mud walls were extensively seen, whilst the ground was found to be strewn with pieces of old iron, fragments of pottery, and bits of wood. There was only one house which had the roof on, and that was half buried in the sand which was heaped up against it at one corner. As the door was not visible, a hole was made on one of the exposed sides. This done, Takhtāsh, one of Islām Ākhūn's companions, crept in, and found himself in a small room of about three yards square. This room was considerably filled with sand, so much so that it was impossible for a person to stand up in it without his head touching the ceiling. Takhtāsh found the books while digging in the sand. There were many other books, but these were in such a dilapidated condition that they crumbled to pieces on being handled. Islām Ākhūn was too frightened to inspect the interior of the house himself. At Aq Talā Tūz water was found by digging about a yard into the ground." This account, of course, must be taken *quantum valeat*; but there is nothing intrinsically improbable in the local descriptions, and the distances fairly agree with those given of the same places at other times. Whether the discoveries of books said to have been made in Aq Talā Tūz, were really made, is a quite different question. The description of this place and of Qarā Yāntāq fairly agrees with that given by Mr. Högberg of Aq Sapil. The distance between Guma and Kōk Gumbaz, by this itinerary which was related to Mr. Macartney in February, 1898, should be about 5 or 6 marches. The same distance was mentioned to Mr. Macartney in October, 1896, in connection with the find of M. 1, Set V, when Kōk Gumbaz was "said to be 5 days' march east of Guma." (See my Report in the Journal, Asiatic Society Bengal, Vol. LXVI, p. 238.) At that time, M. 1, Set IV, is stated to have been found in Qarā Qöl Mazār Khōjam, which is said to be situated "in the desert at 50 miles east of Guma" (see *ibidem*, p. 238). There can hardly be a doubt that this place is identical with the Qarā Qöl of the itinerary, where a Mazār is stated to exist. There, however, it is, said to be only one day's march from Guma. I am disposed to believe that the earlier report contains a mistake; for 50 miles probably 5 miles should be read, which would be about one day's march.¹¹ The distance, by the itinerary, between Guma and Aq Talā Tūz is about 119 miles. Natives of Turkestan, as Mr. Bäcklund

¹¹ Can this be identical with the "ancient city" which Dr. Sven Hedin visited from the village of Muji, at a distance of about 2½ miles north-east of the caravanserai (see p. 736 in his book *Through Asia*)? The ruins there are said to have "consisted principally of a number of tombs" (*mazār*).

informs me, are very untrustworthy in their estimates of distances. Allowing a discount of 25 per cent. for this uncertainty, and also for windings of the march, the distance measured on the map may be taken to be about 90 miles. This places Aq Talā Tūz not far to the west of the Qarā Qāsh river, at a distance of about 30 or 40 miles northwards of Khotan city. In favour of this determination it may be noted that the itinerary does not mention the passage of either the Qarā Qāsh or the Yūrung Qāsh rivers. As Islām Ak̄hun's expedition took place in January, both rivers would have been, at that season, in a very low state: still the total omission of the mention of the passage of either river, if it did take place, would be very strange. The probability, therefore, is that Aq Talā Tūz as well as all the other place mentioned in the itinerary are situated in that part of the Takla Makan desert, which lies to the west of the Qarā Qāsh river, and at a distance from 10 to 20 miles north of the caravan route from Guma to Khotan. At Aq Talā Tūz those nine block-prints are said to have been found which are comprised in M. 7. Of their discovery an exceptionally circumstantial account is given, which must be taken for what it may be worth. As a rule, the only information obtainable about the block-prints was that they were found near Khotan. The finders or the Khotanese merchants from whom they were obtained either could or would give no further information.

At Qarā Qöl Mazār (قره قول مزار خواجه) or 'black lake shrine of my lord'), where there is said to be "an immense grave-yard in ruins, about 10 miles long" was found by Islām Ak̄hun, in August, 1895, the manuscript M. 1, Set. IV, described and figured by me in my Report in the Journal, As. Soc. Beng., Vol. LXVI, pp. 238 and 253, Plates xviii and xix. It was found simply lying on the sand, probably uncovered by the action of the wind which had blown away the superincumbent sand. When found, it is said to have been "bound between two little wooden boards" in the Indian fashion. These, having been broken on Islām Ak̄hun's journey to Kashghar, where he sold the manuscript to Munshī Aḥmad Dīn for Mr. Macartney, were apparently thrown away by him. This is a pity, as in the present state of our knowledge of these Central Asian manuscripts every means of information is valuable.

At Kōk Gumbaz (کوک گمباز) or 'blue dome' were found by the same Islām Ak̄hun, in October, 1895, the two manuscripts M. 1, Set. V and M. 1, Set. VI, also described and figured in the same Report, pp. 238 and 253, 254, Plate xx. The latter manuscript is said to have been simply "picked up from the ground" similarly to that (M. 1, Set. IV) found at Qarā Qöl Mazār; but the other manuscript

(M. 1, Set. V.) was found, enclosed in the remnants of "an iron box," in a hole situated apparently on the top of a circular platform. According to Islām Ākhūn's account, he "saw a circular wall of baked bricks three feet high, and at about 15 paces from it, there was another wall, in which a hole plastered over with mud was discovered: in removing this mud, the manuscript was found, contained in the remnant of what once was an iron box." This description reminds one of the similar erections described by Mr. Högberg as having been seen by him in Aq Sapil. To judge from the latter description, which is much more circumstantial, it would seem that what Islām Ākhūn saw were two circular platforms about 3 feet high, the upper surfaces of which were hollowed out to hold relics.

At Kōk Gumbaz were further found the manuscripts G. 3, Set III. and the objects comprised in M. 2, Set IV. Captain Godfrey, in a demi-official letter, No. 5208, dated the 15th September, 1897, and addressed to Sir Adelbert Talbot, Resident in Kashmir, gives the following account of the discovery of the manuscripts. They were "enclosed in what seem to be the rotten remnants of a cloth or cotton covering. This I have not attempted to open, since the whole should possibly be carefully steamed in order to prevent the brittle contents breaking up. This work would be best performed by trained hands. One point of interest in connection with it is the alleged fact that it was found along with another manuscript said to have been purchased by Mr. Macartney and transmitted to the Royal Geographical Society in London. They were both brought to Kashghar by a treasure-seeker (apparently Islām Ākhūn), from whom the majority of the manuscripts have been purchased by Mr. Macartney and Munshī Aḥmad Dīn. Both—the manuscript above alluded to and that now sent—were wrapped in different bags, and were stuck fast one upon another to a human skull. The site of the discovery was a place called Kōk Gumbaz, five days' march from Khotan.¹² This place is seemingly an old graveyard. A small mound of earth was seen there in the middle of the surrounding sand. The treasure-seeker examined this. The dust crumbled away at the touch, and two feet underneath the surface he found the manuscripts and the skull referred to." On receipt of the bag, it was opened by me, and was found to contain two folded sheets, each inscribed on one side. The manuscript, mentioned by Captain Godfrey as having been transmitted to the Royal Geographical Society, is now deposited in the British Museum, as will be seen from the following extract from a

¹² In other accounts it is said to be five days' march east of Guma. Both may be correct, for it will be seen from the map, that Kōk Gumbaz lies roughly midway between Guma and Khotan, east of the former and north-west of the latter town.

private letter to myself of Mr. Cecil Bendall, dated London, the 1st October, 1897: "I think it may interest you to know that Mr. Macartney sent us here two collections of fragments similar to some of those described by you at pp. 38 ff. (of Extra-copies, corresponding to pp. 250 ff. of my Report in the Journal, As. Soc. Beng., Vol. LXVI). We have (1) a "book," very similar to that described by you and figured in your Plate xx. The peg is wood, not metal, but it comes through in about the same part of the leaves, which are very dirty brown paper like yours. The "book" has blank leaves at both ends. The writing is mostly that figured in your Plate xv; but several leaves (apparently occurring at random) are writing in the script of your Plate xvii with those odd 'ligatures', some of which, I think, must be of Syriac (Nestorian) origin. (2) A few leaves, showing rulings in double lines and folded over. The writing here is certainly of Mongol origin." A comparison of these different accounts suggests that the "mound", in which the skull with its pillow of manuscripts was discovered, is an erection similar to those described by Mr. Högberg and Islām Ākhūn. The exact time when the discovery was made is no where stated. But it is probable that it was made in October, 1896. For with regard to the objects comprising M. 2, Set. IV, Mr. Macartney states that "these images and Chinese coins were found by Islām Ākhūn in October, 1896 along with manuscripts." Moreover from Kōk Gumbaz, Islām Ākhūn appears to have gone on to Qarā Yāntāq where, in the November following, he dug out the skull with its MSS. pillow which I shall next describe.

At Qarā Yāntāq (قره يانتاق or 'black thorn') was found, by Islām Ākhūn in November, 1896, the skull with its MSS.-pillow just referred to. In the same place were found two small horsemen of bronze, some old coins and a large quantity of broken metal. The whole constitutes M. 2, Set I. The story of the discovery, from information given by the discoverer, is thus related by Mr. Macartney in his D. O. letter, No. 58, dated Kashghar, the 31st March, 1897 and addressed to the Resident in Kashmir. "The skull with the manuscript adhering to it was found by him in November, 1896, at Qarā Yāntāq, situated in the desert at about five days' journey east of Guma. The soil of Qarā Yāntāq is described to be of loess. Here and there are to be seen, along what must have been once the bed of a river,¹³ some rushes still rooted in the ground, but withered and blackened by want of moisture and by exposure. At Qarā Yāntāq, there is one solitary mound, circular in shape, and about 5 feet in diameter and 2 feet in height. The skull with the manuscript adhering to it was discovered on this elevation, and was partially buried.

¹³ This, as may be seen from the Map, should be the dry bed of the river which flows past Pialma, on the caravan route from Yarkand to Khotan.

The two images of horsemen were dug up from the interior of the mound. The other objects were picked up from the surrounding country." The whole of the find was transmitted to me by Mr. Macartney, especially the skull resting on its bag, exactly as it had been found. On opening the bag, it was found to contain a manuscript book, similar to those found at Kōk Gumbaz and Qarā Qōl Mazār, but with its leaves cut in a very peculiar shape. The skull, on examination by Dr. Alcock, Superintendent of the Indian Museum in Calcutta, was found to be of the Mongolian type. The mound in which it and the horsemen were found is no doubt similar to those existing in Kōk Gumbaz, Aq Sapil and other places. The combination of the objects found in it would seem to indicate it to be the sepulchral monument of an ancient chieftain. This and the finding of old coins indicates Qarā Yāntāq to have been a very ancient settlement.

(8) YĀBŪ QŪM (يابو قوم or 'load-ponies' sands)¹⁴ is said to be situated 50 or 60 miles north-east of Khotan, and is the place where the manuscripts of M. 1, Set III, are said to have been found. These have been described and figured by me in the *Journal of the Asiatic Society of Bengal*, Vol. LXVI, pp. 238 and 253, Plate xvii. The exact time of their discovery is not known, but they were purchased from Islām Ākhūn, the finder, in July 1896. Probably they were found in the autumn or winter of 1895, about the time when the finds at Qarā Qōl Mazār and Kōk Gumbaz were made. Islām Ākhūn stated that "at Yābū Qūm some ruins of a mud wall are still visible," and that "the manuscripts were found wrapped up in a piece of cloth and mixed up with human bones, the whole lying on some partially exposed boards of a wooden coffin." Putting this together with what we know of the circumstances of the finds at Aq Sapil, Kōk Gumbaz and Qarā Yāntāq, it may be concluded that the "mud wall" belonged to one of those circular mounds, and that the "human bones" may have been the fragments of a skull, which had rested on the wrapped-up manuscripts. As to the real nature of the boards of the so-called "wooden coffin," it is premature to make any conjecture. It appears to me probable that the manuscript sheet G. 3, Set I, was also found at Yābū Qūm. For that manuscript is said (in Captain Godfrey's demi-official letter, No. 5208, dated the 15th September 1897, and addressed to the Resident in Kashmir) to have been found "at a place 50 or 60 miles north-east of Khotan in the midst of the Takla Makan desert;" and Yābū Qūm is also said "to be situated at 50 or 60 miles north-east of Khotan in the midst of the Takla Makan desert" (see my

¹⁴ Mr. Bäcklund suggests that the name marks a spot where a caravan was lost in the sands.

Report in the Journal of the Asiatic Society of Bengal). It may however, also have come from Dandān Uiliq, which, to judge from the bearings and distance given of it (as may be seen from the Map) cannot be very far distant from Yābū Qūm.

(9) KIANG TŪZ (perhaps incorrect for *كان توز* *Kān Tūz* or 'salt mine') is said to be a place situated about 150 miles east of Khotan, on the road to Charchan. Here the eight block-print books, comprised in M. 8, are said to have been found by Islām Ākhūn; but this information requires to be received *cum grano salis*.

(10) DANDĀN UILIQ.	None of these six places are speci-
(11) IMĀM APTAḤ MAZĀR.	fically mentioned as spots where any
(12) KHITĀI UILIQ.	of the objects comprised in the
(13) QOTĀZ LANGAR.	British Collection have been found,
(14) SULTĀN WAIS QIRĀN.	though some of the objects of which
(15) TĀM AGHĪL.	the exact find-place is not stated may

have come from one or the other of them. All six are stated to be places which are frequented by treasure-seekers from Khotan. They are described by Mr. Macartney in a Note, attached to his demi-official letter, No. 121, dated Kashghar, the 21st July, 1897, as follows:

DANDĀN UILIQ (*دندان اویلیق* or 'Ivory House'), at about 6 days' journey north-east of Khotan; the remains of a Bazar, half-buried in sand, is said to be here, the stalls, which contain piece-goods, crumbling to dust at the touch, being still visible. The ruins of a Serāi, But-khāna (or 'idol-house') and a Mill can also be discerned. Being situated right in the desert, it is considered to be a difficult place to reach. There is no water on the way; but water may be found at the place itself by digging at the foot of a solitary tree which is still green. Discoveries: manuscripts, tea, weaving machines, coins, *hakik* and *lajwar* stones, and pearls.

IMĀM APTAḤ MAZĀR (*امام افتح مزار* or 'Shrine of Imām Aftah or Aptah, one of Khalif 'Omar's men), about 14 miles north-west of Khotan; inhabited. Discoveries: seals, money, and *hakik* stones.

KHITĀI UILIQ (*ختابی اویلیق* or 'Chinese House') said to be situated about 1½ march north of Khotan, near the Aksu road. It appears that the ruins of a few houses are extant here.

QOTĀZ LANGAR (*قوتاز لنگر* or 'resting place of yaks'); on the Khotan-Polu road, at about 1½ march from the Khotan city. The place is described as situated in the midst of sand-hills and inhabited by two families. Discoveries: manuscripts and gold coins.

SULTĀN I WAIS I QIRĀN (*سلطان وایس قران*, perhaps the name of a Governor); one march north-east of Khotan. Discoveries: manuscripts, silver hooks, coins, and one wooden idol.

TĀM AGHĪL (تام اغیل) or 'a walled enclosure for cattle'; half-march north-east of Khotan; inhabited; gold ornaments and seals are said to have been found in this village. A human skull, with a layer of gold and with a ring attached to the nose, appears to have been picked up here.

For convenient reference the following Table gives a summary of all the antiquities, the localities and times when they were found or received, and the persons who found them or through whom they were received. By "MSS." are understood manuscript or xylograph books, or *pothī* bound in the Indian fashion; also detached leaves or sheets. By "books" are meant volumes, either manuscript or xylograph, which are bound in the European fashion. Dates, placed within brackets, are those of the receipt of the antiquities, their dates of discovery being unknown.

No.	Consign-ment.	Objects.	Find-place.	Time.	Finder or Transmitter.
1	Fragments.	MSS.	Kuchar.	Sept., 1894.	Through the Amban of Kuchar.
2	G. 1.	MSS.	Kuchar (Khotan?)	(Sept., 1895).	Through anonymous merchants.
3	M. 1, Set I.	MSS.	Kuchar.	1889.	Dildār Khān, Afghan, and another Turki merchant.
4	M. 1, Set II.	MSS.	Aq Sapīl (Khotan).	1895.	Islām Ākhūn, treasure-seeker of Khotan.
5	M. 1, Set III.	MSS.	Yābū Qūm (Khotan).	1895.	do.
6	M. 1, Set IV.	MSS.	Qarā Qöl Mazār (Khotan).	August, 1895.	do.
7	M. 1, Sets V, VI.	MSS.	Kök Gumbaz (Khotan).	October, 1895.	do.
8	M. 2, Set I.	MSS., Antiqu.	Qarā Yāntāq (Khotan).	November, 1896.	do.
9	M. 2, Set II.	Antiques.	Aq Sapīl (do.)	1895-96.	do.
10	M. 2, Set III.	Antiques.	Borazān (Khotan).	(31st March, 1895).	Through Akram Khān and Badruddīn Khān, Afghan traders in Khotan.
11	M. 2, Set IV.	Antiques.	Kök Gumbaz (Khotan).	October, 1896.	Islām Ākhūn, treasure-seeker of Khotan.
12	G. 2.	Book.	Takla Makan.	(11th Sept., 1897).	do.
13	G. 3, Set I.	MSS.	Yābū Qūm (Khotan).	1895.	do.?
14	G. 3, Set II.	MSS.	Unknown.	Unknown.	Unknown.
15	G. 3, Set III.	MSS.	Kök Gumbaz (Khotan).	October, 1896.	Islām Ākhūn, treasure-seeker of Khotan.
16	M. 3.	MSS., 13 books, Antiquities.	Borazān (Khotan).	(31st July, 1897.)	Six books and some antiquities through Badruddīn; 7 books, MSS. and antiques. bought by Mr. Macartney in Khotan.

No.	Consign-ment.	Objects.	Find-place.	Time.	Finder or Transmitter.
17	G. 4.	Antiques.	Western Tur-kestan.	(20th Oct., 1897.)	Through Miyān Ghulām Rasūl, merchant.
18	M. 4.	MSS., books, Antiques.	Takla Makan.	(3rd Sept., 1897).	Brought to Mr. Macartney from Khotan.
19	T. 1.	MSS.	do.	1895.	Muḥammad Ghauz of Khotan through the Wazīr Wazarat of Leh.
20	M. 5.	Books (2).	do.	(6th Oct., 1897).	Brought to Mr. Macartney from Khotan.
21	G. 5.	Books (2), MSS.	do.	December, 1897.	Unknown.
22	G. 6.	Antiques.	do.	January, 1898.	Through Munshi Aḥmad Dīn.
23	G. 7.	Books (3).	do.	1st February, 1898.	Unknown.
24	M. 6.	Books (6), Antiques.	Khotan, Borazān.	Summer, 1897.	Two books through Badruddīn; rest from Rev. Högberg.
25	M. 7.	Books (9).	Aq Talā Tūz.	January, 1898.	Islām Ākhūn, treasure-seeker of Khotan.
26	M. 8.	Books (8).	Kiang Tūz.	(13th April, 1898).	do.
27	G. 8.	Book (1).	Unknown.	(7th July, 1898).	Through Muḥammad Bakhs̄h, a Panjābī trader in Kashghar.
28	G. 9.	Book (1).	do.	(25th July, 1898).	Through Sayyid Gul Muḥammad, Kashghar merchant.
29	M. 9.	MSS., books, Antiques.	Khotan.	(11th July, 1898).	Through Badruddīn.
30	G. 10.	Books, Antiques.	Takla Makan.	(November, 1898).	From Leh.

The Takla Makan desert appears to have received its name from the large quantities of broken pottery, which are found strewn about in many places,¹⁶ and which show that, in ancient times, parts of

Description of the Takla Makan Tract.¹⁵

¹⁵ Compare the account of this Tract in the *Report of a Mission to Yarkand in 1873*, pp. 25 ff.

¹⁶ Mr. Bäcklund informs me that "Takla Makan is a peculiar word which the natives apply to places covered with pottery. Such places are very numerous. Also many skeletons can be found in those places." Mr. Macartney also writes to me that "the fragments of ancient pottery, images, etc., are not always found imbedded as at Borazān. They are often seen lying on the surface of the ground. I was much struck, along the road between Guma and Jhanguiā, with the frequent appearance of pieces of broken earthen-ware vases (of no artistic value) covering large areas of ground, such areas being themselves situated in the midst of a sand-desert, and often 5 or 6 miles from habitation." The word 'Takla Makan' is not as Dr. Sven Hedin appears to state (pp. 450, 457, 785, 801 in his most interesting book *Through Asia*) the proper name of any one particular place.

it must have been the seat of an advanced civilization. Among the peculiar features of the tract of country which comprises that desert and the adjoining belt of cultivation are the numerous rivers which come from the valleys of the Karakorum and Kuenlun Ranges, and traverse its surface to their final junction with the Tarim river. In the present day it is only the two largest of these rivers, the Yūrung Qāsh on which Khotan lies, and the Qarā Qāsh on which the homonymous town lies, which, uniting north of Khotan, reach that termination. The smaller rivers, some of which may have been tributaries of the two large ones, after emerging from the valleys, now soon lose themselves in the sandy desert. "These rivers large and small, are the seats of the fixed population and the entire productive industry of the country." "Numerous canals are drawn off from them to the lands on each side, and thus convert considerable tracts of what would be otherwise desert-waste into fertile and populous settlements." At present the extent of these settlements is very limited, but formerly—many centuries ago—they extended much further into the interior, probably some 30 to 50 miles beyond the present borders of the sandy desert. The climate of the country is notable for "the extreme dryness of its atmosphere at all times and the trifling amount of its rainfall." As a consequence "the soil everywhere is characterised by its aridity and barrenness, and is more or less highly charged with salines, which retain sufficient moisture to form, in the desert, mud bogs and marshes on which grow coarse reeds and dwarf tamarisks." In these circumstances it is only by careful irrigation that the area of cultivation can be preserved and the encroachments of the moving sands of the desert prevented. The appearance and action of these moving sands has thus been described by Dr. Bellew: "During the spring and summer months a north or north-west wind prevails, blowing with considerable force and persistence for many days consecutively. As it sweeps over the plain, it raises the impalpable dust on its surface, and obscures the air by a dense haze resembling in darkness a November fog in London; but it drives the heavier particles of sand before it, and on the subsidence of the wind, they are left on the plain in the form of ripples, like those on the sandy beach washed by an ebbing current." In course of time, there is formed "a perfect sea of loose sand, advancing in regular wave lines from north-west to south-east. The sand dunes are mostly from ten to twenty feet high, but some are seen like little hills, fully a hundred feet high, and in some spots higher. They cover the plain, of which the hard clay is seen between their rows, with numberless chains of two or three or more together in a line, and follow in successive rows,

one behind the other." When, during the earlier centuries of the Christian era, in consequence of the troubles attending the tribal migrations and the Muhammadan conquests, the population became reduced and irrigation fell into neglect, the advancing sands gradually overwhelmed one outlying settlement after the other, and narrowed the belt of settlement and cultivation to its present limits. Many traces of these ancient settlements and the water-courses on which they lay are still met with in the desert; and some of them have been named and described above (pp. xii ff.)¹⁷ The recollection of the desert having been once a fertile and populous country still survives in that region. Mr. Macartney, in his demi-official letter, No. 121, dated the 21st July, 1897, reports that "it is believed by the natives of Kashgharia that the Takla Makan desert was once a fertile and cultivated country. There is a tradition that before the introduction of Muhammadanism [in the 10th and 11th centuries A. D.], forty-one cities¹⁸ flourished in that region under the rule of a certain Zewar Shāh, king of Katak, and that by reason of the disbelief of the inhabitants in the religion of the Prophet, which three Imāms from Bukhāra had come to preach, their country was suddenly and miraculously destroyed by a sandstorm. This story is told at considerable length in the Taskirah of Kamaluddīn, Zahiruddīn and Khwaja Arush.¹⁹ The natives believe that the antiques which are constantly found in the Takla Makan desert belonged to the cities which once formed part of the kingdom of Zewar Shāh." The exact site of the city of Katak, here mentioned, is not known, but it probably lay about three marches or 40 miles south-west of Lop Nor, on the great trade-route from China to Khotan, which ran by way of Chārchan.²⁰ Its destruction by the sands occurred about 1330 A.D., and it is prob-

¹⁷ A most interesting account of some others which Dr. Sven Hedin discovered during his travels in the Takla Makan is given in his book *Through Asia*.

¹⁸ On p. 496 of Dr. Sven Hedin's book *Through Asia*, another tradition concerning the former existence of "forty towns" is mentioned.

¹⁹ This Taskirah had been transmitted to me in the box which contained the consignment M. 3. It has been returned to Mr. Macartney for the purpose of translation and eventual publication.

²⁰ This is the view advocated by the late N. Elias in his Translation of the *Tārīkh-i-Rashīdī*, pp. 11, 12, footnote. Dr. Sven Hedin discovered a place, called Katak, on the banks of the Khotan river (see p. 819 of his book *Through Asia*); but he also met with the name further east, near the Yarkand river (see *ibidem*, p. 473), and also further west, "a long way" south of the Achik (or old Tarim) river (see *ibid.*, p. 850). It would seem probable that *katak* should really be *köttek* or 'dead forest' (see *ibid.*, p. 811, 850), and that the name is *shahr-i-köttek* or 'town in the dead forest.' Like *Takla Makan* it is not the proper name of a particular place, but a general name common to a number of old sites.

ably on account of this comparatively modern date that we possess a detailed account of the catastrophe. It may be seen in Mīrza Muḥammad Ḥaidar's *Tārīkh-i-Rashīdī* (English Translation by N. Elias, p. 10 ff.,) written between 1541 and 1546 A.D. That writer thus describes the condition of the desert in his time (*ibidem*, p. 295): "To the east and south of Kashghar and Khotan are deserts which consist of nothing but heaps of shifting sands, impenetrable jungles, waste lands and salt-deserts. In ancient times there were large towns in these wastes, and the names of two of them have been preserved, namely Lob and Katak; but of the rest no name or trace remains: all are buried under the sand. Hunters who go there after wild animals, relate that sometimes the foundations of cities are visible, and that they have recognized noble buildings, such as castles, minarets, mosques and colleges, but that when they returned a short time afterwards, no trace of these was to be found; for the sand had again overwhelmed them." This fact of the recurrent disappearance and reappearance of sand-buried sites and ruins naturally follows from the action, above described, of the winds on the sands, and has also been noticed by modern travellers.²¹ It also forms a welcome occasion for the visits of treasure-seekers, especially in Khotan, where, as Mr. Macartney informs us, they make a regular livelihood of that occupation, being in the habit of visiting, after a sandstorm or a flood, such localities as seem most promising, in the hope of picking up some objects in gold or silver which have been laid bare by the wind or water. As an example of such a visit the itinerary of Islām Khān has been given above.

As already stated the process of submergence of the ancient civilization of Eastern Turkestan under the advancing sands of the desert had already commenced long before the Muhammadan period. It was already in full operation at the time of the Chinese Buddhist pilgrim, Hiuen Tsiang, in the seventh century A.D., when Buddhism was still the prevailing religion and culture of Khotan and the rest of Eastern Turkestan. On his return from India to China, in the year 644 A.D., he took the southern route passing through Khotan and Pima to Chārchān: the northern route, by which he had travelled from China to India, passed through Kuchar and Kashghar. In those days Pima was a comparatively new settlement, lying on the outskirts of the Takla Makan desert, and it still existed for many centuries afterwards, for in 1274 A.D. Marco Polo saw it on his way to China. At the present day it has disappeared in the sands, and its exact site is not known. According to the data furnished by Hiuen Tsiang's itinerary, it must have

²¹ See, e.g., Dr. Bellew's observations on the subject in the *Report of a Mission to Yarkand in 1873*, pp. 28, 29, 37, 38.

lain about 100 miles East of Khotan, which would place it somewhere to the north or north-west, of the present town of Kiria. The latter would seem to have taken the place of Pima, when it was overwhelmed by the sand, just as, according to Hiuen Tsiang's account, Pima itself took the place of the still more ancient town of Ho-lo-lo-kia, which lay further north-west. Possibly Ho-lo-lo-kia may have occupied the site of the present Dandān Uiliq, which is said to lie 6 marches or about 80 miles north-east of Khotan. The description of that place, given above, would well enough suit a place such as Ho-lo-lo-kia might have been.

The physical conditions of the Takla Makan desert, with the extreme dryness of its atmosphere and the trifling amount of rainfall, above referred to, are very favourable to the conservation, for an indefinitely long period, of everything buried under its sands. This has been repeatedly observed by travellers; see, *e.g.*, the remarks of Dr. Bellew in the *Report of a Mission to Yarkand in 1873*, p. 38, quoted by me in the *Journal of the Asiatic Society of Bengal*, Vol. LXVI, p. 256. It has been amply confirmed by Dr. Sven Hedin's discoveries in Qarā Dung and elsewhere. That explorer more than once, in his book *Through Asia*, remarks on the fact that "the dry fine sand of the desert unquestionably possesses the property of preserving organic matter for a very long time; see pp. 540, 802, 816 ff. There is, therefore, nothing intrinsically improbable in the claim of the manuscripts and xylographs, contained in the British Collection, to be of a very great antiquity.

One of the places where antiques have been found, Qarā Qöl Mazār, near Guma, is described as "an immense graveyard in ruins, possibly ten miles long," and there is also a Mazār or Muhammadan shrine²² there. It is possible that this place may be the site of one of those great Muhammadan defeats which took place at the end of the 11th and beginning of the 12th century A.D. At that time the fierce struggle for mastery took place between the Muhammadans of Kashghar and the Buddhists of Khotan, which finally established the Muhammadan Faith in Eastern Turkestan. Dr. Bellew, in the *Report of a Mission to Yarkand*, describes several "vast cemeteries" in the sandy desert marking the sites of the slaughter of Muhammadan warriors. One is at Ordām Pādshāh, about 30 miles east of Yangī Hiṣār, where there is a

²² A *mazār* is a shrine and place of pilgrimage, consisting of the tomb of some holy person with a kind of mosque built near it.

shrine of 'Ali Arslān Khān and the graves of his 300 fellow martyrs. Another is about three miles south-west of that town at Chuchām Pādshāh where there is a "vast cemetery consecrated to the dust of 10,000 warrior martyrs."²³ Possibly Qarā Qöl Mazār may be a similar ancient Muhammadan cemetery; but all the available indications rather point to the sites of the finds being ancient Buddhist "graveyards." Kök Gumbaz, where the skull with the pillow of manuscripts was dug out, is said to be "seemingly an old graveyard." Qarā Yāntāq, clearly, is a similar place, where also a skull with a bag of manuscripts was dug out from the top of a circular mound. In Yābū Qūm, the manuscripts, M. 2, Set III, were found "mixed up with human bones, lying on some partially exposed boards of a wooden coffin." Mr. Högberg says with reference to the "books," purchased from him by Mr. Macartney and comprised in M. 6, that he believes "they were all discovered in the sands or buried in coffins with the dead, in ancient graveyards in the neighbourhood of Khotan, probably not more than a day or two's journey from the town." One of these places, Aq Sapil, Mr. Högberg visited himself; and the "two elevated circular stands," which he describes as having been seen by him, curiously suggest themselves as being the surviving bases of two stūpas erected in the closest propinquity: apparently twin-stūpas built on slightly differing levels. Buddhist stūpas, as is well-known, used to stand on a series of circular, concentric basements or terraces, decreasing upwards in diameter, the basements thus forming steps to the uppermost platform, on which the stūpa or cylindrical dome itself was erected. These stūpas were mostly relic-towers, and the relics used to be placed in a small chamber made in the top-most platform, immediately below the cylindrical dome. This exactly agrees with Mr. Högberg's description of the "circular stands." The "slight hollow" on the top-most platform would be the remains of the relic-chamber, from which, *e.g.*, the skull with its bag of manuscripts was dug out at Kök Gumbaz. Occasionally a Buddhist stūpa contained several deposits of relics placed at different levels, one above the other. This would seem to have been the case at Qarā Yāntāq. There, it is said, "the two images of horsemen (in M. 2, Set I) were dug up from the interior of the mound," on the top of which the skull was discovered "partially buried." The skull, clearly, had been placed in a chamber, near the surface of the top-most terrace, while the horsemen had been deposited at a lower level, perhaps near the surface of a lower terrace. It would seem that in all the cases reported, the stūpa *proper* or the cylindrical dome, has disappeared, the circular

²³ See the *Report of a Mission to Yarkand in 1873*, at pp. 37, 129.

basements only remaining.²⁴ This cannot surprise, seeing that these erections were made of unburnt bricks. As Dr. Sven Hedin remarks (p. 740 of his book *Through Asia*) “the natives themselves have observed that the erosive action of the wind is incomparably greater than that of water.” Buddhist stūpas used to be coated with a hard, brilliant plaster, to protect them against the erosive action of wind and weather. This was, no doubt, also the case in Khotan; but when outlying settlements were abandoned, and the plastering of the stūpas fell into disrepair, their more exposed domes naturally were corroded and gradually swept away by the periodical sandstorms, the less exposed and stronger basements only surviving.

It is well-known that Buddhism was introduced into Khotan from North-Western India (Kashmir), including Afghanistan and the countries immediately north of it. In connection with this circumstance it is curious to observe numerous points of coincidence in the stūpas of Khotan and those of Afghanistan; and these coincidences themselves are a further argument to support the theory that the find-places of antiquities around Khotan are the sites of groups of stūpas or tumuli, and, in that sense, of ancient places of sepulture. It was a common practice among the Buddhists to build a stūpa, or memorial tower, over the relics of a Saint, and to group round it minor stūpas or tumuli of lesser personages, whether religious or secular. Instances of this practice are repeatedly noted by Hiuen Tsiang in the account of his visit to India.²⁵ The existence of numerous such groups of stūpas and tumuli in Afghanistan is well-known. Many of them have been opened at different times. In Wilson's *Ariana Antiqua*, there is a long memoir by Masson on the “Topes and Tumuli” opened by him, and the relics found in them. Among them are ornamented funeral jars of a globular form with bones, ashes, and fragments of charcoal; further coins, beads, rings, seals and other trinkets, coloured stones, pieces of crystal, etc.,—all being objects which we shall see represented in the Khotanese collection: some indeed having the very same form. More curious still, in one tumulus which Masson opened, belonging to the group at Passani, he found “in the centre a human

²⁴ It would be interesting to know why *Kök Gumbaz* or the “blue or green dome” is called so. Could it be the dome of a stūpa still standing? In the Swat country, as Dr. Stein informs us in his *Report of an Archæological Tour with the Buner Field Force*, pp. 11 and 66, the word *gumbaz* is uniformly applied to ruined stūpas.

²⁵ See Beal's *Buddhist Records of the Western World*, Vol. I, pp. 46, 175 *et passim*.

skull, and beneath it a large steatite vase," containing ashes, coloured stones, beads, etc., also a fragment of a birch-bark leaf inscribed with "Bactro-Pali" (*i.e.*, Kharoṣṭhī) characters.²⁶ The similarity of this find with that of the skull at Qarā Yāntāq is very striking. There is a passage in the account of the mission of the Chinese Buddhist Sung-yun to India in 518 A.D., which seems to bear on the subject of such sepultures. Speaking of the customs of Khotan, the account says: "they burn their dead, and, collecting the ashes, erect towers over them. When the king dies, they do not burn his body, but enclose it in a coffin and carry it far off and bury it in the desert. They found a temple to his memory, and, at proper times, pay religious service to his manes."²⁷ This would seem to suggest, that Kōk Gumbaz, Qarā Yāntāq and similar spots are ancient sites of the sepulture of kings and chiefs of Khotan. The discovery of the two miniature figures of horsemen, (M. 3, Set I) in the same grave with the skull tends to corroborate this conjecture.

The existence of early Buddhist culture in Khotan is thus amply borne out. Much more evidence on this point is afforded by the pottery and terracotta figures, and will be found noticed in that portion of the report which will deal with these objects. Here I will only note that the occurrence of the numerous figures of monkeys and elephants clearly points to an intimate connection of the culture of Khotan with that of India; for these animals are not found in Khotan, while they are indigenous in India. A very early connection of Khotan with India and China is also established by the discovery of Indo-Chinese and Indo-Scythian coins on the one hand, and coins of the Han Dynasty on the other. But further there are distinct traces of Grecian and Parthian influence. For the latter, it is true, there is only one piece of pottery (in M. 2), which bears ornamentation of a distinctly Parthian character. For Grecian influence such as prevailed on the western borders of India, in the earliest centuries A.D. and B.C., there is much more evidence. The style of Graeco-Buddhist ornamentation and sculpture is well marked on many pieces of pottery and sculptured stones. The syrinx, or musical instrument made of a series of graduated reeds, on which monkeys are represented as playing, is distinctly Greek or Grecian: that kind of instrument was not known in India or the Orient. Altogether the treatment of the monkeys, in their varied festive or amorous postures, curiously reminding one of Satyrs and Fauns, is instinct with the ideas of Greek or Roman culture. The Pegasus and Centaur, which are found represented on some seals, are

²⁶ See *Ariana Antiqua*, p. 94.

²⁷ See Beal's *Buddhist Records of the Western World*, vol. I, p. lxxxvii.

also distinctly Grecian. Mr. Macartney in his Note on the find-places (see p. xxii) says: "Some of the relics which have been found near Khotan are undoubtedly of Greek origin. In May, 1897, I was shown by a Russian merchant in that town a coin with an inscription in Greek, and three pieces of yellow crystals of an oval shape in which there were beautiful carvings of the classical type."

Local tradition with regard to the makers of the habitations and sepultures around Khotan is very uncertain, and possibly not altogether spontaneous. With reference to Qarā Yāntāq, in Islām Ākhūn's itinerary, already quoted above, Mr. Macartney was informed, that it was once inhabited by "Hiudis," a name by which Buddhists are said to be generally called in Eastern Turkestan, and which clearly points to the direct Indian origin of the Buddhism of that country. With regard to Kōk Gumbaz Captain Godfrey reports (in his demi-official letter, No. 5208, dated 15th September, 1897) that "local opinion seems to incline to the belief that the cemetery was either Jew, Kalmuk or Greek. The people to whom these graveyards are attributed are called in the Turkī language *Ujāt* which I believe now means "strangers." This word is, however, I am informed, now obsolete. Dr. Bellew, in his History of Kashghar, says that *Ujāt* means Native Christians, and refers I think, to Native Christians having lived near Khotan."²⁸ With reference to the last observation of Captain Godfrey's I may note that at Aq Sapīl some sheets and leaves of manuscript were found (in M. 2, Set II) inscribed with characters in white ink, which seem to be Uighur writing such as was once used by the Nestorian Christians.

Considering how much we are at present dependent on native information with regard to every thing connected with these sand-buried sites near Khotan, and how cautiously such information must be received, it is very desirable that the localities should be visited, examined and reported on by some European explorer with archæological experience. This is an undertaking well worth the support of the Indian Government and of Learned Societies.

²⁸ See the *Report of a Mission to Yarkand*, p. 127. Mr. Shaw in his *Grammar of the Language of Eastern Turkistan* (in the Journal, As. Soc. Bengal, Vol XLVI for 1877), pp. 336 and 345, disputes this and says that *Ujāt* is the name of a village near Khotan, the inhabitants of which were "bad Musalmans." But the passage from the *Taskiratu-l-Bughra*, which he quotes, really only proves that the people of *Ujāt* were considered insincere Muhammadans at the time of its composition. At the time to which Dr. Bellew refers Khotan had not yet been converted to Islām. It was still Buddhist; and the people of *Ujāt*, if they were not Buddhists, must have been Nestorian Christians. Probably they were the latter, and being forced to adopt Islām, did so only in outward appearance.

CENTRAL ASIAN ANTIQUITIES.

The Central Asian Antiquities which are comprised in the British Collection distribute themselves into the following main classes: (1) manuscripts; (2) xylographs; (3) terra-cottas and pottery; (4) coins and seals; and (5) figures of stone, metal or wood, and other miscellaneous objects.

As the coins present the most serviceable historical and chronological data, it may be best to commence with their description.

SECTION I.—COINS AND SEALS.

The following is a Summary of the Coins in the Collection:—

I.	Indo-Chinese	coins,	72
II.	Chinese	„	148
III.	Scytho-Bactrian	„	36
IV.	Indo-Scythian	„	10
V.	Sassanian	„	7
VI.	Mediæval Hindū	„	8
VII.	Mediæval Muhammadan	„	127
VIII.	Modern Turkī	„	18
IX.	Modern Indian	„	59
X.	Modern European	„	1

Total Coins 486

I. INDO-CHINESE COINS.

There are altogether seventy-two of these coins in the Collection: nine large and sixty-three small ones. They all come from Khotan and

its neighbourhood; and they formed part of the consignments M. 2, M. 3, M. 6, M. 9, G. 5, G. 7, G. 10, and T. 1.

Two coins of this description, one large and one small, were first published by Mr. Gardner in the *Numismatic Chronicle*, Vol. XIX (1879), pp. 275, 276. These likewise were procured from Khotan by Sir T. D. Forsyth. They have been republished by Dr. Terrien de Lacouperie in the *British Museum Catalogue of Chinese Coins*, p. 394. The large one is also republished in the *British Museum Catalogue of Indian (Greek and Scythic) Coins*, p. 172. Both coins, especially the small one, were in too imperfect a condition to admit of being fully read. In the present collection there are some much better preserved specimens.

All these coins are of copper. They are not of iron, as was at first erroneously supposed.

Of the large coins, there are three varieties, distinguished by the arrangement of the obverse legend. Of these varieties there are one, three and one specimen respectively. Four specimens cannot be determined. Of the smaller coins there are five varieties, distinguished by differences in the reverse design, and in the arrangement of the legends. Of these five varieties there are 17, 13, 3, 3 and 3 specimens respectively. Twenty-three specimens are too worn or corroded to admit of being determined.

The following is a detailed list of all the coins, large and small, with their weights and measures. Their exact find-place has also been noted, when known: in the other cases it must be understood that the coin came either from Khotan itself or from one of the buried sites near it:—

(a) Large Coins.

Ser. No.	Variety.	Weight in grains.	Size in inches.	Consign-ment.	Find-place.	Figure.
1	I	246·5	1·0	M. 2.		Plate I, 6.
2	II	228·0	1·0	T. 1.		
3	II	200·5	1·0	G. 10.		
4	II	154·0	0·875	M. 9.		
5	III	234·0	1·0	G. 10.		
6	Undeterm.	223·0	1·0	M. 2.	Aq Safil.	
7	do.	213·0	1·0	M. 2.		
8	do.	211·5	1·0	G. 10.		
9	do.	202·0	1·0	M. 2.		

Total weight : 1921·5

Average weight : 213·44 grs.

(b) Small Coins.

Ser. No.	Variety.	No.	Weight.	Size.	Consign-ment.	Find-place.	Figure.
1	I	1	76·0	0·75	M. 2.		Pl. I, 9.
2	I	2	66·0	0·75	M. 2.		
3	I	3	59·0	0·75	M. 2.		Pl. I, 13.
4	I	4	56·5	0·75	M. 2.		Pl. I, 10.
5	I	5	53·0	0·75	G. 10.		
6	I	6	52·0	0·75	M. 3.		
7	I	7	52·0	0·75	G. 10.		
8	I	8	50·5	0·75	M. 6.		
9	I	9	50·0	0·75	M. 2.		Pl. I, 11.
10	I	10	48·5	0·75	G. 5.		Pl. I, 8.
11	I	11	48·5	0·75	M. 2.		
12	I	12	46·5	0·75	G. 7.		
13	I	13	45·0	0·75	M. 2.	Aq Safil.	
14	I	14	41·5	0·75	G. 5.		Pl. I, 18.
15	I	15	39·5	0·625	M. 2.		
16	I	16	32·0	0·625	M. 2.		
17	I	17	21·0	0·625	M. 2.	Aq Safil.	
18	II	1	78·5	0·75	M. 2.	do.	
19	II	2	62·5	0·75	M. 3.		
20	II	3	61·5	0·75	M. 6.		
21	II	4	59·5	0·75	T. 1.		
22	II	5	57·5	0·75	M. 2.	Aq Safil.	Pl. I, 14.
23	II	6	53·0	0·75	T. 1.		Pl. I, 15.
24	II	7	51·5	0·75	T. 1.		Pl. I, 12.
25	II	8	50·0	0·75	M. 2.	Aq Safil.	
26	II	9	49·0	0·75	G. 7.		
27	II	10	48·0	0·75	M. 6.		
28	II	11	46·0	0·75	M. 2.	Aq Safil.	
29	II	12	44·0	0·75	M. 9		
30	II	13	44·0	0·75	G. 10.		
31	III	1	61·5	0·75	M. 6.		
32	III	2	48·5	0·75	T. 1.		Pl. I, 16.
33	III	3	47·0	0·75	G. 10.		Pl. III, 3.
34	IV	1	40·0	0·75	M. 2.		
35	IV	2	30·0	0·625	M. 2.		Pl. I, 17.
36	IV	3	22·5	0·70	G. 10.		Pl. III, 1.
37	IV	4	13·0	0·5	M. 2.	(Mutilated).	Pl. III, 4.
38	V	1	63·5	0·83	G. 10.		Pl. III 2.
39	V	2	60·5	0·75	G. 10.		
40	V	3	59·0	0·80	G. 10.		
41	Undeterm.	1	60·0	0·75	M. 2.		
42	do.	2	59·0	0·75	M. 9.		
43	do.	3	58·5	0·75	G. 10.		
44	do.	4	57·0	0·75	G. 10.		
45	do.	5	55·0	0·75	M. 3.		

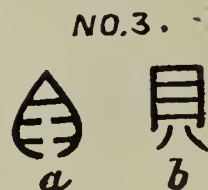
Ser. No.	Variety.	No.	Weight.	Size.	Consign-ment.	Find-place.	Figure.
46	Undeterm.	6	54.5	0.75	M. 2.		
47	do.	7	54.0	0.70	G. 10.		
48	do.	8	50.5	0.75	G. 7.		
49	do.	9	49.5	0.75	M. 3.		
50	do.	10	48.5	0.75	G. 10.		
51	do.	11	48.0	0.75	M. 2.	Aq Safi.	
52	do.	12	47.5	0.75	G. 10.		
53	do.	13	47.0	0.75	M. 2.	do.	
54	do.	14	40.5	0.75	M. 2.	do.	
55	do.	15	40.5	0.625	G. 10.		
56	do.	16	39.5	0.75	G. 7.		
57	do.	17	39.5	0.69	M. 2.		
58	do.	18	35.5	0.69	M. 2.		
59	do.	19	34.0	0.75	G. 10.		
60	do.	20	33.5	0.75	M. 2.	Aq Safi.	
61	do.	21	26.0	0.583	G. 10.		
62	do.	22	25.0	0.625	M. 2.		
63	do.	23	24.0	0.625	M. 9.		

Total weight: 3015.0 Average weight: 47.857 grs.

The following is a description of the coins:—

(a) Large Coins. (Plate I, No. 6).

Obverse: Two concentric circles, of which the outer one consists of an ornamental band. In the small area within the inner circle is placed an old form (a) of the Chinese symbol (b) for 'money.' See Woodcut No. 3. Between the area and the ornamental band runs a Chinese legend, consisting of six symbols. This legend is arranged in three different ways, making three varieties, on which see below, p. 8.



Reverse: Two concentric linear circles; in central area, bare horse with stiff, upstanding mane, trotting to right. Between the circles, an inscription in Kharoṣṭhī characters.

No. 1 of the list, shown in Pl. I, 6, is nearly identical with that figured in the British Museum Catalogue, p. 394, but the Chinese legend, partially read by Dr. T. de Lacouperie, is far more legible.

(b) Small Coins. (Plates I, 8-18 and III, 1-4).

Obverse: Chinese legend of three symbols, in old forms; the same on all five varieties.

No. 6	× × <i>rajuthabira</i> ×	× × × × ×	(Pl. I, 15).
No. 7	× × × <i>juthabiraja</i>	<i>Gu(gra)</i> × × ×	(Pl. I, 12).
No. 8	× × × <i>juthubi</i> × ×	× × × × ×	
No. 11	× × × <i>juthabi</i> × ×	× × × × ×	
No. 12	× × × <i>juthabi</i> × ×	× × × × ×	
No. 13	× × × × × × <i>raja</i>	<i>Gugra</i> × × ×	

Of the coins of the fourth variety, any thing of the legend is only visible on No. 2, where the following fragment can be read :

maharaja × × × × × × × ×

The longer legend is found on the coins of the third variety. On these the letters are written in long, narrow shapes, closely crowded together; and calculating from what of the legend is preserved, it may be seen that the face of the coin affords room for 20 letters. On the coins of the second variety, the letters are formed large and square, taking up much more space, so that the surface of the coin, to judge from what remains of the legend, cannot have admitted more than 13 letters. The same is the case with the coins of the first variety, where the letters are formed small and square, but are set wider apart from one another than on the coins of the third variety. On the two coins of the latter variety, the legend reads as follows :

No. 1	× × × × ×	× × × × × × ×	× × <i>ta(sa)</i>	<i>Gugra(da)ma</i> ×
No. 2	<i>maharajasa</i>	<i>ra(jati)</i> × (<i>jasa</i>)	(<i>ma</i>) × × (<i>sa</i>)	<i>Gugramadasa</i> .

(Pl. I, 16).

The same long legend, as already observed, occurs on the large coins, with a slightly different form of the name, viz., *Gugramayasa*. It reads as follows :—

			(Pl. I, 6).
No. 1,	(<i>ma</i>) <i>harajasa</i>	(<i>ra</i>) × × × × ×	× × × × × (<i>Gugramayasa</i>)
No. 3,	(<i>mahara</i>) × ×	× × × × × × ×	× × × × × (<i>Gu</i>) <i>gra</i> × × <i>sa</i> .

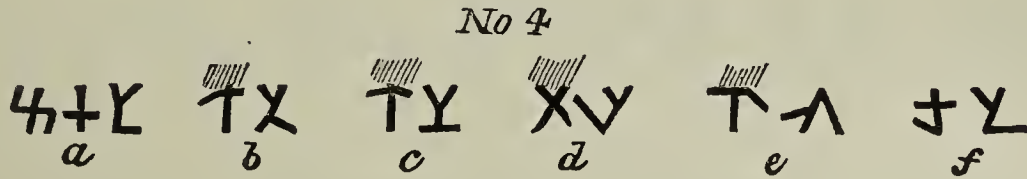
The bracketed letters are distinguishable;¹ the others are perfectly clear. The whole of the visible letters (eleven) occupy slightly more than one-half of the circle; hence the total inscription must have comprised about 20 letters.

Accordingly the complete legends, probably, stood as follows :

- (1) longer legend: *Maharajasa Rajatirajasa Mahatasa Gugramayasa*
(or *Gugramadasa* or *Gugradamasa*),
- (2) shorter legend: *Maharaj-uthabiraja-Gugramadasa* (or *Gugrad-masa* or *Gugramodasa* or *Gugratidasa*). With variants *yuthabi* and *juthubi*.

¹ Some of these bracketed letters do not show sufficiently on the photographs though they are quite distinguishable on the original coin.

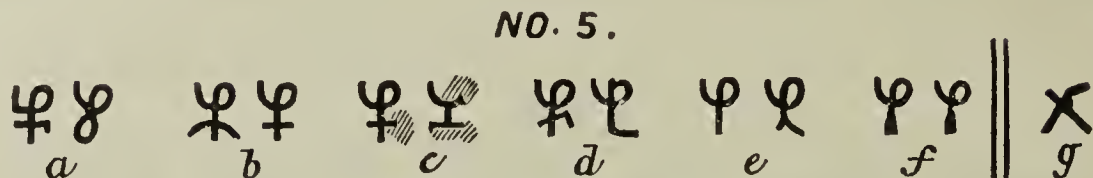
The letters which I read *juthabi* or *yuthabi* (or *juthubi*) are puzzling. Their forms, as seen on some of the coins, are clear enough and are shown in the subjoined Woodcut No. 4. Thus (a) is seen on



Var. II, No. 11, (b) on Var. II, No. 12, (c) on Var. II, No. 4, (d) on Var. I, No. 1, (e) on Var. I, No. 4, and (f) on Var. II, No. 8. Of these (a) signifies *juthabi*, (b, c, d) signify *jutha*, (e) signifies *yutha*, and (f) signifies *juthu*. The form of the syllable *bi* never varies. In (a) and (f) the vowel *u* is formed in an unusual way, but similar to its formation in (d) of Woodcut No. 5, below. I would venture to offer the following explanation, which must be understood to be altogether tentative only. I would suggest that the legend might be the equivalent of the not uncommon title Sanskrit *Prthvī-rāja* or Pāli-Prākṛit *Puthavī-rāja* or *Puthuvī-rāja*, i.e., 'King of the earth.'² The complete title on the coins, accordingly, would run Sanskrit *Mahārāja-prthvīrāja*, or Pāli-Prākṛit *mahārāja-puthavīrāja* or *mahārāya-puthavīrāja*. In Prākṛit, as is well-known, the initial consonant of a conjunct word may be elided, and the resultant hiatus-vowels may be contracted: in the present case °*apu*° may be changed to °*aii*°, and contracted to °*o*° or even to °*u*°. We thus obtain the form of the title *maharāj-uthabīrāja* or *mahārāy-uthabīrāja*, with the provincialism of hardening *v*. This explanation postulates a somewhat advanced stage of Prākṛit phonetic change; but the existence of such a stage in Khotan at the period of these coins is rendered probable by the change of *j* to *y* in the form *mahārāya*.

² I was disposed at one time to find some confirmation of my suggestion in the Chinese *Pi-çi-pi-lien*, which, according to Abel Remusat's *Histoire de la Ville de Khotan*, p. 30, was the royal title of Khotan, and which I thought might represent the Sanskrit *Viçva-rāya* (for *Viçva-rāja*) or 'king of the world,' a synonym of *Prthvīrāja*. The context in Remusat seemed to imply that *Pi-çi-pi-lien* was the title of the Khotanese Kings from ancient times up to the beginning of the 7th century A.D., when the 'Weï-si family (*ibidem*, p. 35) succeeded the Wang family. But from what Prof. Sylvain Levi kindly writes me (15th February, 1899) it appears that *Pi-çi-pi-lien* was only the proper name of a particular king of the Wang family which reigned in the 6th and 7th centuries, A.D. *Pi-çi-pi-lien*, accordingly, is more likely to be the Chinese transliteration of some Turkī name, similar to *Mekelien*.

The two first letters *gugra* of the name appear in the following forms:—



Perhaps the group might also be read *gurga*. The form (a) is the commonest; it occurs in Nos. 2, 3, 4 of the first variety, and can be seen very distinctly in No. 3 (Pl. I, 13); it is also seen in the large coin No. 1 (Pl. I, 6). The form (b) occurs in No. 1, (c) in No. 10, and (e) in No. 14, all of the first variety. The form (f) occurs in the third variety, and the absence of the conjunct marks at the foot of the two letters is accounted for by the crowded state of the legend.

The final letters *dasa* appear in a curiously conjunct form in the coins Nos. 2 and 4 of the first variety. They are shown as (g) in the above Woodcut No. 5. The conjunction is probably merely due to the negligence of the engraver.

There are altogether five varieties of the royal name, all commencing with *Gugra*; viz., *Gugramada*, *Gugradama*, *Gugramaya*, *Gugramoda*, and *Gugratida*. Perhaps *n* may be read for *d* (*Gugramana*, etc.), in every case, or in some of them, seeing that the Kharoṣṭhī *d* and *n* are hardly distinguishable. Seeing also that sometimes *y* occurs for *j* in the title *mahārāja* (*mahārāya*), it may be that, by a similar phonetic process, *Gugramaya* is only another form of *Gugramada*. It is also possible that *Gugramoda* is really intended for *Gugramada*, as what looks like the vowel *o* may be a mere slip of the engraver. In any case there still remain three names which cannot be identified with one another: *Gugramada*, *Gugradama* and *Gugratida*. Accordingly these coins must be ascribed to three, if not five different kings. As all their names begin with *Gugra* (perhaps *Gurga*), they would all seem to have belonged to the same family.

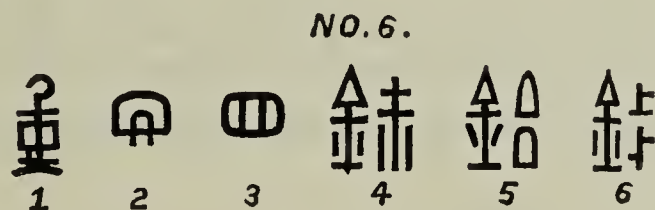
(d) The Chinese Legend.

The Chinese legend, also, occurs in two different versions; a longer and a shorter one. The longer, consisting of six symbols, is found on the large coins, while the shorter, consisting only of three symbols, is seen on the smaller coins.

The longer legend is arranged in four different ways, three of which occur in our collection. In the first variety, the legend commences op-






posite the apex of the central symbol (seen at the bottom of the figure in Plate I, 6) and then runs round from right to left. In the second variety it also commences opposite the apex, but runs in the opposite direction, from the left to the right. In the third variety it commences on the left of the central symbol, and runs round from the left to the right. The British Museum Catalogue, No. 1799*a*, presents a fourth variety, in which the legend runs from the right to the left, and commences on the right side of the central symbol.

In all four varieties the legend is identical, as shown in the subjoined Woodcut No. 6:—



A portion of this legend was read by Dr. T. de Lacouperie, in the British Museum Catalogue, p. 394. I read the whole as follows:—

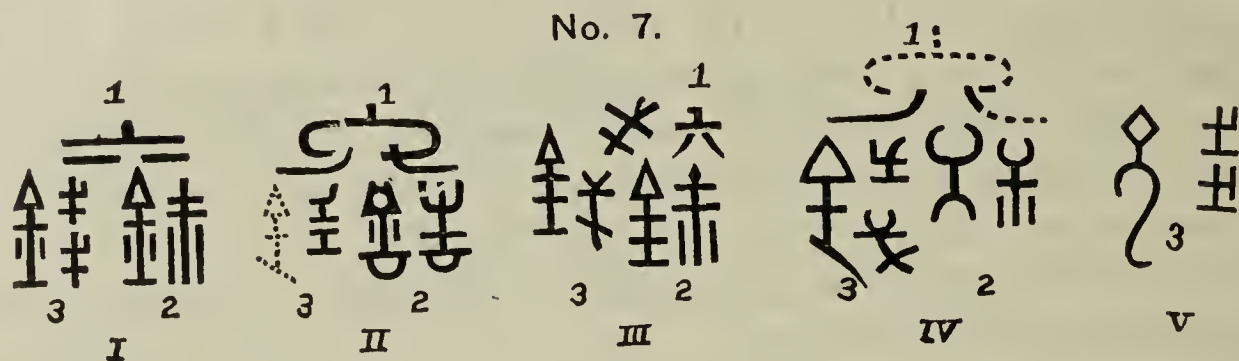
tchung (1) *liang* (2) *sze* (3) *tchu* (4) *t'ung* (5) *tsien* (6), *i.e.*, “Weight (one) Liang (and) four Tchu (of) copper money.”

The symbol which Dr. T. de Lacouperie reads *yh* ‘one’ does not occur in any of the coins of our collection, nor can I find it on the coin figured by him in the Catalogue, No. 1799*a*. The 5th and 6th symbols were too indistinct on his coin to be read by him. They are clear enough on some of our coins, and are those shown in the above Woodcut. No. 6 is the well-known sign for *tsien* or ‘money’ (*British Museum Catalogue*, p. xviii). No. 5 is a sign which I have not been able to find in Morrison’s dictionary,³ the only one available to me; nor is it known to any of the Chinese Literati whom I could consult. I take it to be an old form of the symbol  *t'ung* ‘copper’ (see *ibid.*, p. lxiv), made by omitting the long side-strokes of the upper quadrangle of its right-hand portion. A similar modification occurs in the old form  of the symbol  *kuan* (see *ibid.*, p. 191), and in the old form  of the symbol  *liang* (see *ibid.*, p. 300).

The shorter legend is also identical on all the small coins, though the symbols are drawn in rather varying forms. This is not at all an uncommon practice, as an inspection of the British Museum Catalogue will at once show. The legend, with the varying forms of its symbols,

³ *A Dictionary of the Chinese Language in three Parts*. By R. Morrison, D.D., 1820.

is shown in the subjoined Woodcut No. 7, which also shows the relative position of the three symbols in the legend.



No. I is the usual form, seen in Plate I, 11. Nos. II, III, IV may be seen in Plate I, 8, 14, 16 respectively. No. V shows a form of the 3rd symbol which I have noticed on coins of the 3rd and 4th varieties, shown in Plate III, 1, 3.

I read the symbols as follows:—

luh (1) *tchu* (2) *tsien* (3), *i.e.*, “six Tchu (of) money.”

The second and third symbols of this legend are the same as the fourth and sixth of the longer one. The first symbol, as shown in Figure III, is that given by Dr. T. de Lacouperie, on page xl of his Introduction to the British Museum Catalogue, for *luh* ‘six.’ The corresponding forms in fig. I, II and IV are merely ornamental modifications. A form of *luh*, much like that in fig. II and IV, occurs in coin No. 453, of the Br. Mus. Cat., p. 423. Compare also the forms of *luh* in coins No. 753, 816, 159-161.

The Chinese legends state the weight of the coins. According to them the large coins should normally weigh one *liang* and four *tchu*, while the small coins should weigh six *tchu*. As we shall see presently, these Indo-Chinese coins must be referred to the first and second centuries A.D., *i.e.*, to the time of the Han dynasty in China. That dynasty followed the monetary system of the preceding Tsin dynasty which had doubled the ancient standard. According to this doubled standard the *liang* weighed about 195 grains, and the *tchu*, about 8.12 grains.⁴ Accordingly the normal weight of the large coins should be approximately 227.48 grains, and of the small coins, 48.72 grains. A reference to the preceding list (see pp. 2-4) will show that the actual weights of the coins vary widely from this normal, even fully allowing for much wear and tear. This, however, was the usual condition of the currency in China. Dr. T. de Lacouperie in his Introduction to the British Museum Catalogue (pp. xxiii, xxiv) shows how numerous the variants in weight were, and how “far they were from being

⁴ See Introduction to the Br. Mus. Cat., pp. xlii-xliv.

approximate to the current standard." The variations of the actual from the normal weight appear to have been particularly great under the Han dynasty, for the intermediate usurper Siu Wang Mang (6–25 A.D.) "began by annulling the decrees enacted by the Han dynasty, as he wanted to return to the money of the Tchou dynasty, where 'the mother and the child' (*i.e.*, divisionary piece) weighed in proportion to each other, similarly to those issued by king Wang in 523 B.C."⁵ In order to see how far the Indo-Chinese coins conform to the normal weight, we must test them by their average weight. Judged by this test they, curiously enough, very nearly agree with what should be their normal weight. For the average weight of the nine large coins is 213.44 grains (normal 227.48),⁶ and of the 63 small coins, 47.857 (normal 48.72). The agreement in the case of the large coins would probably be still greater, if we had a larger number of them to make up the average.

The date of these Indo-Chinese coins can be approximately determined by the following considerations. The fact of their superscriptions being in Indian and Chinese characters and language shows that both those languages must have occupied a recognised position in Khotan at the time when the coins passed current. In the case of the bilingual Indo-Greek coins, Indian was the language of the population of the country, while Greek was the language of the administration or the ruling power. Khotan, so far as known to us, never had a Chinese population; but it fell under the power of China at a very early date. In the sixth year of the Emperor Ming-ti of the Later Han dynasty, in 73 A.D., Kuang-te, the king of Khotan, submitted to the Chinese General Pantchao. Thenceforward the kingdom of Khotan became a regular dependency of China, which formed that kingdom, together with Kashghar and other Central Asian principalities, into an administrative unit under the name of the "Western Countries" and under a Chinese Governor-General,⁷ and placed Chinese Governors in Khotan and the other chief towns. Shortly afterwards, King Kanishka of India (about 78–106 A.D.) is said to have held hostages from the Chinese "tributary Princes to the west of the Yellow River," that is, from the princes

⁵ See p. 365 of the Brit. Mus. Catalogue.

⁶ The weight of the Brit. Mus. specimen, figured on p. 394 of the Catalogue, would seem to be 220 grains; for on p. xliii of the Introduction it is said "the Bactro-Chinese coin of 2 *liang* 4 *tchu* = 220 grs." There is here some confusion. The weight inscribed on the coin is 1 *liang* 4 *tchu* of the Han standard, which is equal to 2 *liang* and 8 *tchu* of the old standard; and both alike are equal to 227.48 grains (normal).

⁷ See Abel Remusat's *Histoire de la Ville de Khotan*, p. 3 and *passim*.

included in the Chinese "Governor-Generalship" of the "Western Countries."⁸ It is true that there had been some political intercourse between China and Khotan since the days of the Emperor Wuti (140–87 B.C.) of the Earlier Han dynasty, but Khotan only lost its independence in 73 A.D., when it was included in the Chinese "Governor-Generalship" of the Western Countries. The Chinese currency of Khotan cannot be placed earlier than that year. The native kings continued to reign under the Chinese supremacy, and this fact explains why the coins bear bilingual legends. It is distinctly a Chinese currency, because the standard of the coins is Chinese, inscribed in Chinese language and characters, and this fact clearly indicates Chinese supremacy. On the other hand, the reverse of the coins bears the symbols and names of the native kings, in native (Indian) characters,—a fact which indicates both that native kings still continued to reign, and that the language and characters, used by the native administration, were Indian.

The first connection of India with Khotan dates back to the time of king Açoka (264–233 B.C.). Ancient Khotanese chronicles, quoted by Chinese writers, relate that the eldest son of that king, when dwelling in Takşaçilā in the Panjāb, had had his eyes put out, and the tribal chief who had been guilty of the outrage was banished, together with his tribe, across the Himālayas. There the tribe settled and later on chose a king from among themselves. Soon afterwards they came into collision with another tribe settled to the east of them, whose king had been expelled from his own country. In the result, the western or Indian tribe was conquered, and the eastern king, now uniting both tribes under his rule, established his capital in the middle of the country, at Khotan.⁹ This must have been about 240 B.C. The eastern tribe would seem to have been the Uighurs, of the Turkī race. They gradually occupied the whole of Eastern Turkestan before 200 B.C., being pushed forward from the north-east by the Hiungnu or Huns, another Turkī tribe. The latter, in their westward movement, displaced two Turkī tribes, the Yuechi (or Yueti) and the Uighur; the former migrated to the north, the latter to the south of the Tian Shan mountains, displacing in their turn the Saka tribe which had formerly dwelled there. The Yuechi were gradually driven across the Ili and the Yaxartes. From 163 to 126 B.C., they occupied the country between the latter river and the

⁸ See Beal's *Buddhist Records of the Western World*, Vol. I, pp. 57 and 173; also *Numismatic Chronicle*, Vol. IX (1889), p. 272.

⁹ See Abel Remusat's *Histoire de la Ville de Khotan*, pp. 37, 38, and Beal's *Buddhist Records of the Western World*, Vol. II, p. 310.

Oxus, and by 26 B.C. they had extended their settlements beyond the Hindukush into Afghanistan. Here they formed a great kingdom under the two Kadphises and under Kanerkes and Hverkes from about 25 B.C. to 180 A.D. Their rule gradually comprised the whole of North-Western India in addition to Eastern Afghanistan. On their coins they used both the Greek and Indian-Kharoṣṭhī characters: the former they retained from their Greek predecessors whose official script it had been; the latter was the script of secular commerce of their Indian subjects. Co-existing with these scripts there were in use also the Indian-Brāhmī characters, favoured by the religious and learned, especially the Buddhists.

Concurrent with the great Yuechi kingdom there was in North-Western India a smaller one of another Turkī race under the kings Maues, Azes, and their successors, from about 50 B.C. to 80 A.D. It did not extend beyond the Panjāb, and the Turkī invaders who founded it, must have entered India through Kashmir and over the Karakorum passes from the direction of Khotan. Here, we have seen, the Uighur tribe, which still continues to form the main stock of the population of the whole of Eastern Turkestan,¹⁰ had gradually established itself in the second century B.C., in constant warfare with the Hiungnus and Sakas. It was no doubt the Uighurs who, similarly to the Yuechis further west, pressed forward and extended their rule into India in the first century B.C. Here they became the neighbours and rivals of the Yuechis, and here also they became acquainted with Greek and Indian culture; for, like the Yuechi Indian kings, the Uighur Indian kings Maues, Azes and their successors have both Greek and Indian-Kharoṣṭhī legends on their coins. The Uighur kingdom, which in the South, (in India), had to contend with the Yuechi, and in the North, (in Eastern Turkestan), with the Hiungnu, at last declined in power. In order to secure the assistance of the Chinese empire, its Northern portion submitted to China and consented to pass under its administration. This happened, as we have seen, in 73 A.D.¹¹ About the same time its southern portion was annexed by the Yuechi king Kanishka, who extended his rule over Kashmir up to the Karakorum (Tsung-ling) range, and took hostages from the remainder of the Uighur kingdom.¹² Under these altered conditions, the Uighur coinage in Khotan was conformed to the Chinese standard, and its obverse legend, which had hitherto been Greek, was replaced by a Chinese inscription. The reverse legend, on the other hand, continued, as hitherto, to be expressed

¹⁰ See N. Elias' *Tarikh-i-Rashidi*, p. 92.

¹¹ See Abel Remusat's *Histoire de la Ville de Khotan*, pp. 3 ff.

¹² See Beal's *Buddhist Records of the Western World*, Vol. I, pp. 56, 57.

in the official Indian language and Indian-Kharoṣṭhī characters. This explains the use of the latter amongst a Turkī population, such as that of Khotan must have been. They were the language and script of the Uighur Government, having originally been adopted in India, and surviving in Khotan after the Indian portion of the kingdom had been lost. Similarly the use of the Indian-Uighur types of the bare horse and the Bactrian camel were continued. These types are found on the coins of Maues, Azes, and their successors;¹³ and indeed, they rather point to Turkestan as their home-land.

That a species of Indian script was current in Khotan, is well known from Chinese writers. The case is not quite so clear with respect to the language of the country. Hiuen Tsiang (about 645 A.D.) relates that "the written characters and the mode of forming their sentences resemble the Indian model; the forms of the letters differ somewhat; the differences, however, are slight. The spoken language also differs from that of other countries."¹⁴ Another account says that "they have chronicles, and their characters, as well as their laws and their literature, are imitated from those of the Hindūs, with some slight alterations. This imitation has diminished their barbarism, and modified their manners and their language which (latter) differs from that of other people."¹⁵ These statements clearly indicate that the Uighur population of Khotan, originally totally unlettered and uncultured, derived the whole of their ancient culture from India; and this fact well agrees with, and is well explained by, the ancient extension of Uighur rule over North-Western India. At the same time, it is not probable that the Chinese statements about the written characters refer to the Indian-Kharoṣṭhī script. They rather indicate a modified form of Indian-Brāhmī. The Kharoṣṭhī, as seen on the Indo-Chinese coins, does not merely "resemble the Indian model," but is identical with that once current in North-Western India and Eastern Afghanistan. Hiuen Tsiang was a Buddhist monk, and on his travels he resided in Buddhist monasteries, and came in contact almost exclusively with Buddhist culture. The Indian-Brāhmī was the home-script and the peculiar script of Buddhism, and was carried by them wherever they went. It went

¹³ See British Mus. Cat., pp. 72, 89, 96, 112. On their coins, as well as on the Indo-Chinese coins, the horse is standing or walking, and is turned to the right. The horse occurs also on the coins of other kings (Euthydemus, Heliocles, Menander, etc.), but it is turned to the left, or is prancing. So also the camel is found on Menander's coins, but it is turned to the left, while on the Indo-Chinese coins it stands to the right.

¹⁴ See Beal's *Buddhist Records of the Western World*, Vol. II, p. 309.

¹⁵ See Abel Remusat's *Histoire de la Ville de Khotan*, p. 37.

with them, as we know from the Bower and Weber Manuscripts to Kuchar, and it is equally probable that it went with them to Khotan. The introduction of Buddhism into both these places may be traced back to as early a time as the first or second centuries B.C. In both places, as the Chinese note, the Indian Brāhmī developed "slight alterations,"¹⁶ known to us in Kuchar as the peculiar Central-Asian Brāhmī.¹⁷ Hiuen Tsiang, in the passage above quoted seems to distinguish between the spoken and the written language of Khotan. By the latter, which he calls "the mode of forming their sentences," and which he says "resembles the Indian model," I presume he means Sanskrit or Pāli, such as was used in Buddhist literature, and which can have been known only to a very limited class of people, the Religious and Learned. The "spoken language," which I take to have been that of the general population, must have been the Uighur Turkī, and this as Hiuen Tsiang says, differed "from that of other countries," *i.e.*, China and India. This view is confirmed by a remark of Sung-yun (518 A.D.) respecting Yarkand. Of this town he says, "their customs and spoken language are like those of the people of Khotan, but the written character in use is that of the Brāhmans,"¹⁸ *i.e.*, the Indian Brāhmī. Moreover, Fahian (400 A.D.) reports expressly with regard to the whole of Eastern Turkestan, that though the people speak different Turkī (*Hu*) dialects, "the professed disciples of Buddha among them all use Indian books and the Indian (Sanskrit) language."¹⁹ None of these Chinese Buddhist pilgrims appears to have noticed the existence of the Kharoṣṭhī script, whether in Khotan or in its Indian home-land. The only script of the Semitic class which Hiuen Tsiang noticed, he mentions in connection with the kingdom of Kesh,²⁰ and this script cannot have been the Kharoṣṭhī, though it may have been allied to it. Possibly in their time, Kharoṣṭhī had practically ceased to exist. In Khotan, at the time of the Indo-Chinese coins, it was evidently the secular official script of the native Government, though not quite exclusively so, as is shown by the Kharoṣṭhī manuscript found near that town by M. Dutreil de Rhins and containing a portion of the Buddhist Dhammapada.²¹ It does not seem probable that, after the

¹⁶ With regard to Kuchar, see Hiuen Tsiang's remark, in Beal's *Buddhist Records of the Western World*, Vol. I, p. 19.

¹⁷ See a description of it in my Report, in the *Journal, As. Soc. Beng.*, Vol. LXVI (1897), p. 242, LXII, p. 4.

¹⁸ See Beal's *Buddhist Records of the Western World*, Vol. I, p. lxxxix.

¹⁹ See *ibidem*, Vol. I, p. xxiv.

²⁰ See *ibidem*, Vol. I, p. 38.

²¹ See *Comptes Rendus de L'Académie des Inscriptions*, Vol. XXV, (1897), pp. 251 ff.

severance of the Indian connection of the Uighur kingdom of Khotan, the use of the official Kharoṣṭhī script survived for any great length of time. Its forms, as seen in the Dutreil de Rhins Manuscript and on the Indo-Chinese coins, are much alike, and both are identical with that form of it which prevailed under the Kushana (Yuechi) kings in India, that is, in the first and second centuries A.D. Though its form remained practically unchanged for a century or two longer in its home-land, it is very improbable, to judge from the parallel case of the Indian-Brāhmī, that this would have been the case in a foreign country like Khotan. It is not probable, therefore, that the Indo-Chinese coins can be placed later than the end of the second century A.D. They show, as already remarked, four, if not five, different regal names. Four or five reigns, at an average of 20 or 25 years, occupy a period of about 100 years. This brings us to, at least, the year 173 A.D., as none of the coins can have been struck before 73 A.D. The initial date is certain; the terminal date must be near the end of the second century. The period 73–200 A.D., therefore, is a safe date to give to the Indo-Chinese coins of Khotan.

Within that period, the Chinese records mention the names of four or five kings of Khotan: (1) *Kuang-te* in 73 A.D., who first submitted his country to the overlordship of the Chinese; (2) *Tang-t'sian* in 129–131 A.D., (3) *Kian*, (4) 'An-kue, son of *Kian*, who succeeded his father in 152 A.D., and (5) *Shansie* in 220–226 A.D.²² None of these names agrees with any of those on the coins; but they rather look like true Chinese names, so that it would seem that the kings bore duplicate names, native Turkī and Chinese. At that early period, as the Chinese relate, the kings of Khotan were devoted Buddhists, and as such, it may be surmised that they bore names which were the Uighur equivalents of Indian Buddhistic terms. Dharma being a common prefix of many Buddhistic names, *Gugra* might be its Uighur equivalent. A long list of ancient Khotanese royal names, all beginning with *Vijaya*, is given by Rai Sarat Chandra Das from Tibetan sources.²³ If this list can be trusted, *Gugra* might represent *Vijaya*.

II. CHINESE COINS.

My knowledge of Chinese is very small, and the only numismatic aid, available to me, is the Catalogue of Chinese Coins in the British Museum' by Dr. Terrien de Lacouperie, and an article on Chinese Coinage in the Transactions of the China Branch of the Royal Asiatic

²² See Abel Remusat's *Histoire de la Ville de Khotan*, pp. 3, 6, 8, 15, 17.

²³ See *Journal, Asiat. Soc. Beng.*, Vol. VI (1886), pp. 197, 198.

Society, Part II for 1848–1850, by C. B. Hillier. I hope that this disadvantage under which I am labouring may be accepted as a sufficient excuse for the imperfections of my descriptions of the Chinese coins in the collection.

With reference to numismatic evolution, Chinese round coins fall into three periods. In the first period, they have no inscriptions whatever. In the second period, they have a legend on the obverse, consisting at first of two symbols, placed to the right and left of the central hole, and afterwards of four, there being two additional symbols above and below the hole: the reverse is blank. In the third period, they have inscriptions both on the obverse and reverse sides, generally consisting of four symbols on each side, distributed on the four sides of the central hole. The first advance to a double-sided inscription consisted either in repeating the obverse legend on the reverse, or in placing on it one new symbol, in most cases a numeral indicative of the value of the coin. There are found occasional anticipations as well as survivals; but roughly speaking, the course of numismatic evolution appears to have been as above explained.²⁴ This is amply borne out by the coins in our collection.

In point of chronological sequence the coins of the collection also happen to fall into three distinct periods: ancient coins of the 1st to the 3rd centuries A.D., mediæval coins of the 7th to the 13th centuries, mostly of the two dynasties of the T'ang (618–907 A.D.) and the Sung (960–1279 A.D.), and modern coins of the 18th and 19th centuries, issues of the ruling Manchu dynasty. The circumstance of the two large gaps of several centuries each is curious, but perhaps altogether accidental. The presence of the numerous coins of the T'ang and Sung dynasties is probably accounted for by the fact that during the periods of their rule, as shown by the Chinese records,²⁵ an exceptionally lively intercourse was kept up between China and Khotan.

The total number of Chinese coins in the collection is 148. Among these there are 43 ancient, 77 mediæval, and 28 modern coins. All the ancient and many of the mediæval coins were found in the desert around Khotan. The modern ones came from Khotan itself. They all formed part of M. 2, 3, 4, 6, 9; most of the ancient ones belong to M. 2.

²⁴ See *British Museum Catalogue*, pp. xxvii and 319. Examples of repetition are *ibidem*, Nos. 1727–1731, 1786–1790, 1877, 1880. Examples of the addition of numerals are Nos. 1767–1778, 1807–1814, of other symbols, Nos. 1782, 1815, 1816, 1818, 1820, 429–436. Exceptional anticipations of a double-sided legend are Nos. 1752, 1753. Examples of survivals of a two-symbol legend are Nos. 426–438, 1852–1855.

²⁵ See Abel Remusat's *Histoire de la Ville de Khotan*, pp. 67 ff.

All the ancient coins are of copper, except one which appears to be of lead. All the mediæval and modern coins are of a species of bronze or brass.

(a) *Ancient Coins*.

(1) Coins without legends. (Plate II, figs. 1a-d.)

These coins number 27. They are of three different sizes :

large,	11 specimens,	size 0.7-0.9'',	weight 21.5-31 grs.
middle,	11	„ „ 0.66-0.75'',	„ 11.5-15.5 grs.
small,	5	„ „ 0.5'',	„ 5-8 grs.

Two good specimens are shown in the British Museum Catalogue, large, No. 180 (p. 340), and middle, No. 407 (p. 399), weighing 38 and 19 grains respectively. Most of the specimens in our collection are not in an equally good condition. Their weight is much lighter, their shape is very irregular (some nearly square), and their rim in many cases is very narrow (down to $\frac{1}{2}$ of an inch). They have clearly been subjected to much clipping.

This class of coins appears to have been current under both Han dynasties, the Former or Western as well as the Later or Eastern. Those of our collection must belong to the later period, *i.e.*, 25-220 A.D., as Khotan came into closer contact with China only from about the middle of the first century A.D.

(2) Coins with an obverse legend of two symbols. (Pl. II, 2, 3). The coins of this class number 16. They consist of the following :

(a) With the legend *Wu-Tchu* or 'Five Tchus'; 9 specimens; five well preserved (Pl. II, fig. 2), weighing 33-38 grains and measuring 1 inch; four considerably rubbed and clipped, weighing 15-25.5 grains and measuring 0.75-1.0 inches. Compare *British Museum Catalogue*, Nos. 315, 316, 398-403 (pp. 361, 396).

(b) With the legend *Ho-tsiuen* or 'Spring of goods'; 2 specimens, weighing 34 and 20 grains, and measuring 0.875 and 0.8 inches; too indifferently preserved to be figured, but like *British Mus. Cat.*, No. 365 ff. (p. 334).

(c) With unread legend, see Plate II, fig. 3; apparently lead; one specimen; weight 78.5 grs.; size 1.0625''.

The *Wu-tchu* currency was introduced by the Han dynasty, and the *Ho-tsiuen* currency, by the usurper Sin Wang Mang (9-22 A.D.). Both currencies continued into the period of the Later Han dynasty, 25-220 A.D., and the specimens of our collection must be ascribed to that period.

(b) *Mediæval Coins.*

(1) Coins with an obverse legend of four symbols.

(Pl. II, 4–18 and Pl. III, 6, 7.)

The coins of this class number 76. They consist of the following currencies :—

(a) With the legend *K'ai-yuen-tung-pao*, or 'Current money of the K'ai-yuen period.' This period comprised the years 713–741 A.D., under the Emperor Yuen-tsung of the T'ang dynasty.²⁶ There are two coins of this period; weight 49 and 50 grs.; size 1". Plate II, 9.

(b) With the legend *K'ien-yuen-tchung-pao*, or 'Current money of the K'ien-yuen period.' This period comprised the years 758–763 A.D., under the Emperor Su-tsung of the T'ang dynasty.²⁷ Of this period there is a very large number of coins in the collection; altogether 45. They are of three different sizes:

large, 12 specimens; size 1.0625"; weight 71–136 grs. (Pl. II, 7).

middle, 3 " ; " 1"; " 48.5–49.5 grs. (Pl. II, 6).

small, 30 " ; " 0.875"; " 23–41.5 grs. (Pl. II, 5).

Many of these coins were in M. 3; some in M. 2.

(c) With the legend *Ta-li-yuen-pao*, or 'Principal money of the Ta-li period.' This period comprised the years 763–780 A.D., under the Emperor Tai-tsung II of the T'ang dynasty. There are ten coins of this period, of three different sizes :—

large, 4 specimens; size 0.9375"; weight 45.5–59.5 grs. (Pl. II, 4).

middle, 5 " ; " 0.875"; " 37–51 grs.

small, 1 " ; " 0.75"; " 36 grs.

These belong to M. 2, M. 4, M. 6. A Chinese manuscript petition dated in this period is in the collection of MSS.

(d) With the legend *Che-tao-yuen-pao* or 'Principal money of the Che-tao period.' This period apparently comprised the years 984–998 A.D., under the Emperor Tai-tsung (976–998 A.D.) of the Sung dynasty.²⁸ There is one coin of this period; legend in "running hand"; weight 58 grs., size 1". Figured by Hillier, No. 124 (p. 63). From M. 2.

(e) With the legend *King-t'i-yuen-pao*, or 'Principal money of the King-t'i period.' This period apparently comprised the years 998–1008 A.D., under the Emperor Chin-tsung I (998–1023 A.D.) of the Sung dynasty.²⁹ There is one coin of this period; weight 36 grs., size 0.9375". Plate II, 16; and in Hillier, No. 126 (p. 63). From M. 2.

²⁶ See Abel Remusat's *Histoire de la Ville de Khotan*, p. 70.

²⁷ See *ibidem*, p. 70.

²⁸ Compare *ibidem*, p. 88. The preceding period was 976–983 A.D.

²⁹ Compare *ibidem*, p. 86. The following period was 1008–1116 A.D.

(f) With the legend *T'ien-çing-tung-pao*, or 'Current money of the T'ien-çing period.' This period comprised the years 1023–1034 A.D., under the Emperor Tin-tsung of the Sung dynasty.³⁰ There is one coin of this period; weight 55 grs.; size 1". Plate II, 18.

(g) With the legend *Kia-yeu-tung-pao*, or 'Current money of the Kia-yeu period.' This period comprised the years 1056–1064 A.D., under the Emperor Jin-tsung of the Sung dynasty.³¹ There are two coins of this period; weight 47.5 and 55 grs.; size 1". Plate II, 15.

(h) With the legend *Che-ping-yuen-pao* or 'Principal money of the Che-ping period.' This period comprised the years 1064–1068 A.D., under the Emperor Ying-tsung of the Sung dynasty.³² There is one coin of this period; weight 52.5 grs., size 1". Plate II, fig. 8; and in Hillier No. 138 (p. 68). From M. 2.

(i) With the legend *Yuen-fung-tung-pao* or 'Current money of the Yuen-fung period.' This period comprised the years 1078–1085 A.D., under the Emperor Chin (Shin)-tsung II of the Sung dynasty.³³ There are two coins of this period; one with the legend in "running hand," the other, in ordinary script; weights 35 and 32.5 grs., size 1" and 0.9375". Plate II, 12, and Hillier No. 140, p. 71. From M. 2.

(k) With the legend *Yuen-yu-tung-pao* or 'Current money of the Yuen-yu period.' This period comprised the years 1086–1093 A.D., under the Emperor Che-tsung of the Sung dynasty.³⁴ There are three coins of this period; two with the legend in "running hand," and one with it in "seal-characters." Weight of the former, 60.5 and 39 grs.; size 0.9375" and 0.875"; Plate II, fig. 13. Weight of the latter, 68.5 grs.; size 0.9375"; in Hillier, the 2nd under No. 141 (p. 71). From M. 2 and M. 6.

(l) With the legend *Chao-çing-yuen-pao* or 'Principal money of the Chao-çing period.' This period comprised the years 1094–1097 A.D., under the Emperor Che-tsung of the Sung dynasty.³⁵ There are two coins of this period, one with the legend in "running hand," the other with it in "seal-characters." Weight, 54 and 51 grs.; size 1" and 0.9375" respectively. Plate II, fig. 17 and fig. 14; in Hillier, No. 142 (p. 72). From M. 2.

(m) With the legend *Tsung-ning-tchung-pao* or 'Weight-money of the Tsung-ning period.' This period comprised the years 1101–

³⁰ See *ibidem*, p. 90.

³¹ See *ibidem*, p. 91.

³² Compare *ibidem*, p. 91.

³³ Compare *ib.*, pp. 92, 95, 97. The preceding period was *Hi-ning* 1068–1077 A.D.

³⁴ See *ibidem*, p. 97.

³⁵ See *ibidem*, p. 98.

1106 A.D., under the Emperor Hwei-tsung (1101–1126 A.D.) of the Sung dynasty.³⁶ There is one coin of this period; weight 176 grs.; size 1.416". Plate III, 7 (inverted), and Hillier No. 145 (p. 74). From M. 9.

(n) With the legend *Kuang-ting-yuen-pao* or 'Principal money of the Kuang-ting period.' This period was current under Shin-tsung in the State Hear, apparently in the 13th century; see Hillier, No. 194 (p. 104). There is one coin of this period; weight 58.5 grs.; size 1". Plate II, fig. 10. From M. 2.

(o) With the legend *King-hing-tung-pao* or 'Current money of the King-hing period.' The exact date of this period appears to be unknown; see Hillier, No. 308 (p. 154); it should be somewhere in the time of the T'ang or Sung dynasties. There is one coin of this period; weight 41.5 grns.; size 0.9375". Plate III, No. 6. From M. 2.

(p) With unread legends. There are three coins of this kind, which I cannot identify in Hillier's article. They all have the term *tung-pao* which refers them to the time of the T'ang or Sung dynasties. One of them is shown on Plate II, fig. 11. Weights 39.5, 51.5, 58 grs.; size 0.9375–1". From M. 2.

(2) Coins with obverse and reverse legends. (Pl. II, fig. 19).

There is only one coin of this class, which I have not been able to identify in Hillier's article. I read the obverse legend *Li-yung-tung-pao* or 'Current money of the Li-yung period.' The reverse has only one symbol *chen* or 'a bazar.' In Hillier's article I find this symbol only on the reverses of certain coins of Yung-ming-wang and Chang-hin-chung (Nos. 254 and 259, pp. 136 and 139), who are said to be princes at the close of the Ming dynasty, *i.e.*, 1644 A.D. Weight 55 grs., size 0.9375".

(c) Modern Coins.

The total number of modern coins is 28. They fall into the following classes:

(1) Coins with Chinese legends on both sides. Of these there are altogether 24, of the following reigns:—

(a) With the obverse legend *Kang-hi-tung-pao* or 'Current money of the Emperor Kang-hi,' who reigned from 1661–1722 A.D. Of his reign there are two coins, with the same reverse legend of two words in Manchu characters *pao tsiuen* or 'source of money,' *i.e.*, mint Peking. Weight 70 and 50 grs.; size 1.0625" and 0.875". Plate II, 20.

(b) With the obverse legend *K'ien-lung-tung-pao*, or 'Current money of the Emperor K'ien-lung,' who reigned 1735–1796 A.D. Of

³⁶ Compare *ibidem*, p. 99. The following period was Tai-Kuen 1107–1111 A.D.

his reign there are 14 coins. The reverse has varying Manchu legends of two words. Weight 44–70 grs., size 0·875–1". Plate II, 21.

(c) With the obverse legend *Hien-fung-tchung-pao*, i.e., 'Weight-money of the Emperor Hien-fung,' or *Hien-fung-yuen-pao*, i.e., 'Principal money of Hien-fung,' who reigned from 1850–1861 A.D. Of his reign there are eight coins. One is of bronze, very large, and has a tri-lingual reverse legend, in Chinese (above and below the hole) *tung* 100 or 'value 100 cash,' in Persian (to the right) *ياركند* or (mint) 'Yār-kand,' and in Manchu (to the left), see Plate II, 30. The other seven coins are of brass, of two different sizes, and with a bi-lingual reverse legend. The larger one (Plate III, 5) has in Chinese (above and below) *tung* 15 or 'value 15 cash,' the smaller ones have *tung* 10 or 'value 10 cash.' In addition all seven coins have a Manchu legend (right and left). (Plate II, 22).

Very large,	1	specimen	;	size	2·0826"	;	weight	576	grs.
large,	1	"	;	"	1·75"	;	"	351	grs.
small,	6	"	;	"	1"	;	"	76–118	grs.

(2) Coins with Persian legends on both sides. There is one coin of this kind, of copper. Plate II, No. 23. It is made in the Chinese fashion, but is probably a coin struck during one of the more recent periods of Muhammadan independence of Kashghar. The legend is not fully read.

Obverse.

سید غازی راشیدین خان

Reverse.

ضرب (دار السلطنة) كوجا

The reverse (over *salṭanat*) apparently bears the date 1283 H., nearly obliterated, which would be 1866–1867 A.D., or the second year of Yaqūb Beg's revolt,³⁷ and with which the number 2 on the obverse would agree. Kūjā, which is quite distinct, may be intended for *kūchā* (Kuchar), but the words in brackets are uncertain; and I am unable, with the means at my command, to identify the ruler's name recorded on the obverse. Weight 48 grs.; size 1 inch. From M. 2.

(3) Coins or Tokens with a Chinese legend on one side only. There are three of these pieces which are perhaps rather tokens than coins. I can obtain no information on them. They are shown on Plate II, fig. 25. They first bears the symbol for *tsien* or 1000; the two other symbols I do not know. They are of bronze, and weigh 89·5, 80·5 and 108·5 grs.; size 0·83". From M. 2.


³⁷ See Dr. Bellew in Sir T. D. Forsyth's *Report of a Mission to Yarkand in 1837*, pp. 208-213.

III. SCYTHO-BACTRIAN.

With the exception of two doubtful specimens, probably all the coins of this class, numbering 36, have come from Western Turkestan (Samarkand, Tashkend, etc.). They belong to G. 4, and were briefly reported on by me in my letter to the Under-Secretary, Government of India, Department of Revenue and Agriculture, dated the 20th November, 1897. The two exceptions belonged either to M. 2 or M. 6, and come from one of the buried sites lying to the north of Khotan.

(a) *Imitations of Bactrian Coins.*

There are seven of these; all silver tetradrachms. They imitate the coins of Euthydemus and Heliocles. The former reigned in Bactria about 210–190 B.C.; the latter, who appears to have belonged to a rival family, about 160–120 B.C. During the reign of the former, Saka tribes occupied the Northern provinces of the Bactrian empire between the Oxus and Yaxartes. During the reign of the latter, the Sakas, being driven out by Kushan (or Yue-chi) tribes, occupied Bactria south of the Oxus.³⁸ Their chieftains imitated the coins of their contemporary Bactrian rulers. These coins can be easily recognized by their degradation, both in point of design and of weight.

The best of the seven coins are two in imitation of Heliocles, of his well-known type: Bust of King on obverse, and Standing Zeus on reverse, as in the British Museum Catalogue, plate vii, fig. 2. One, which weighs 231 grains (full weight 264), measures 1.25", and is fairly good in design (with ringlet for omikron), though much worn, may possibly be a genuine coin of Heliocles. It has the monogram of Brit. Mus. Cat., No. 4 (p. 21). The other weighs only 219 grains (size 1.25"), and, as the semi-barbarous reverse shows, is clearly a Saka imitation: but the curiosity of it is, that while it has an imitated Heliocles reverse, it has retained an apparently genuine Eukratides obverse; see Plate III, 10. Eukratides (c. 190–160 B.C.) was the predecessor, and perhaps father, of Heliocles. The imitated Heliocles reverse is very fairly done, it has the full Greek legend, but with a dot for omikron, and a rather rude figure of Zeus. Its monogram is . Both this and the first-mentioned coin must be early imitations, and may be referred to about 150 B.C.

The remaining five coins are imitations of Euthydemus, of his well-known type with Head of King on obverse, and Sitting Heracle

³⁸ See the outlines of Bactrian history in the Introduction to the British Museum Catalogue, pp. xviii, ff.

on reverse, with club resting on his knee. One of them, which is the heaviest, weighing 170 grains and measuring 1", has the king's portrait as shown in *Brit. Mus. Cat.*, pl. ii, fig. 1-4. It had also an entirely Greek legend, which, however, is almost totally obliterated. The other four coins, which only weigh from 155 to 144 grains, show the king's face as portrayed in *Brit. Mus. Cat.*, pl. i, fig. 11, (also *Ariana Antiqua*, pl. i, figs. 2-4, and Rapson's *Indian Coins*, pl. i, fig. 18, in the *Indo-Aryan Encyclopedia*). Both types of face, however, are very fairly imitated, see Plate I, Nos. 2 and 3. One of the four coins, which weighs 144 grains (size 1"), had an entirely Greek legend, now badly effaced; but sufficient traces remain to show that it had the name of Heliokles struck over that of Euthydemus. The two names were not struck accurately in the same line, consequently M (of Euthydemus) is still seen slightly projecting over the line of Heliokles, of which latter name K is fully, and ΛI partially recognizable; as No. 8.

shown in the annexed woodcut; see Plate III, 11.

The other three coins are bilingual, having the king's name in native Bactrian letters, while the



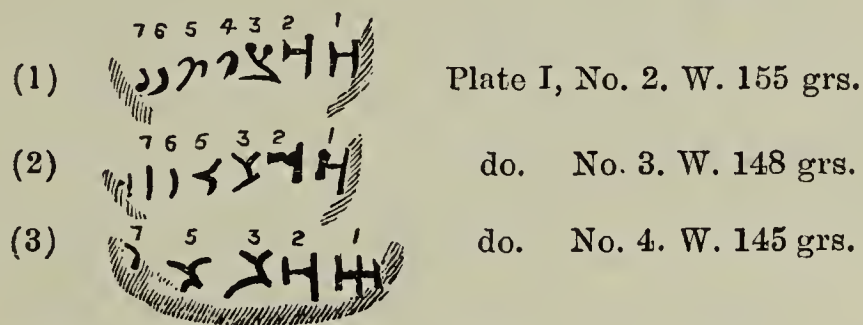
title in Greek characters is seen in its usual place to the right, or behind the back, of the Sitting Heracles; see Plate I, Nos. 2-4. Of the Greek title ΒΑΣΙΛΕΥΣ only the three letters ΣΙΛ or ΣΙΛV (i.e., with inverted Λ) together with traces of Α before and Ε after them are clearly legible.³⁹ Coins of this description, that is, with the title to the right and the name in Bactrian letters to the left of Heracles, appear to have been found previously. Two such coins, from the collection of General Fox (if I understand the account correctly) are described by Mr. Thomas in his edition of Prinsep's *Indian Antiquities*, vol. I, p. 32. But, so far as I know, none of them has ever been figured. Similar coins, but with the Greek and Bactrian legends transposed, that is, the title in Bactrian and the name (Euthydemus) in Greek, have been published. One, in rather good preservation, has been figured by Sir A. Cunningham in the *Numismatic Chronicle*, vol. IX (1889), pl. xiii, (also in Rapson's *Indian Coins*, pl. i, 19). Another series of similar coins has the whole legend in Bactrian characters, see *Numismatic Chronicle*, vol. IX., pl. xiii, 6, also *Ariana Antiqua*, pl. i, 9, 10, *Indian Antiquities*, pl. ii, 6. It is probable that, as Sir A. Cunningham says (*Num. Chron.*, vol. IX, p. 307), the oldest imitations are those with Greek legends only, next come those with mixed legends of rude Greek and Bactrian letters, the latest are those with Bactrian characters only. In the second class,

³⁹ On the photographic plates they are not so distinct as on the original.

I suppose, those coins which preserve the Greek fashion of arranging the legends, and show the title on the right in Greek, and the name on the left in Bactrian, may be considered to be older than those which show the mixed legends in the reversed position, *i.e.*, the name in Greek on the left, and a Bactrian legend on the right, the latter also being a name. Accordingly the bilingual coins of the present series may be referred to about 130 B.C. It would also seem, if Dr. Gardner's theory of the change of standard is correct (see *Brit. Mus. Cat.*, *Introd.*, pp. lxxvii, lxxviii), that these coins are didrachms of the Persian standard (full weight 160-170 grains), such as began to be minted in Heliccles' reign.

Seeing that the Bactrian legend ⁴⁰ on our coins takes the place of the Greek name, it seems reasonable to assume that, like the latter, it runs parallel to the Greek title and must be read from the outside of the coin. This assumption is certainly supported by the general appearance of the characters, which, after the Semitic fashion must be read from the right to the left. They are shown in the subjoined woodcut.

No. 9.



The third, fourth and fifth letters of No 1 legend have a distinct resemblance to the Kharōṣṭhī letters *ja*, *a* and *ka*; and at first I was disposed to take the second letter as a crude Kharōṣṭhī *ra*, and to read the whole as a mutilation of (*ati*)*raja Aka(thukleyasa)*. But the

⁴⁰ In order to prevent any misunderstanding I may explain that I use the term Bactrian in the definite sense of referring to Bactria *proper*, and the immediately adjacent northern provinces of what was once the Bactrian Kingdom. What I wish to suggest (the suggestion only to be taken for what it may be worth) is that corresponding to the modified Aramaean script current to the South of the Paropamisus and known as Kharōṣṭhī, there may have been another modified and allied Aramaean script current to the north of that range, of which the letters on the coins in question may be witnesses. This suggestion refers only to the script whether the language hidden in the legends of the coins was a species of old Turkī or old Iranian is a point on which I hazard no opinion. For a similar suggestion, if I understand it rightly, see Isaac Taylor's *The Alphabet*, Vol II, pp. 232, 233.

remaining signs do not suggest Kharōṣṭhī letters. The fifth letter of Nos. 2 and 3 suggests the Kharōṣṭhī \bar{e} ; but on the whole the three legends suggest themselves as identical; for the first three letters in all are clearly the same; so are most probably the sixth and seventh; and the fifth letter of Nos. 2 and 3 may be only a badly drawn form of the corresponding letter in No. 1. The only apparent difference between the three legends is, that the fourth letter of No. 1 is wanting in Nos. 2 and 3. I am not able to decipher the legend; but considering the juxtaposition with the other coins of Euthydemus and Eukratides which bear the name of Heliocles, I would like to suggest that the Bactrian legend might also contain that name. The alphabet current in Bactria must have been one of the very early modifications of the Aramaean, similar to the ancient Pahlavī and Kharōṣṭhī. The first and fifth letters are very like the Pahlavī *h* and the Kharōṣṭhī *k* respectively. The second letter resembles the Kharōṣṭhī *l*. The third and fourth letters resemble the Pahlavī *aleph* and *vau* respectively, and together might have been used to express the vowel *o*. In Nos. 2 and 3 the fourth character is omitted; and the third might also be taken to represent the Aramaean *'ayin* and to express the vowel *o*. Anyhow the initial four or five characters may easily be interpreted to represent *h-l-o-k*, the initial portion of the name *Heliok(les)*. It is more difficult to fit-in the remainder, unless we may assume that the name was pronounced with *r* instead of *l*, as in its Indian form *Heliyakreya*. In that case the sixth letter is *r*, in its form closely resembling the corresponding Pahlavī and Kharōṣṭhī characters. The seventh letter appears to be mutilated, and there may have been an eighth; but I do not know what the genitive inflection of the local Bactrian or Scythian dialect may have been in those days. Thus the characters may represent the letters *h-l-o-k-r*, which would well enough make up the name of Heliokles.

(b) *Coins of Hyrkodes.*

There are twenty-six coins of Hyrkodes, about 110 B.C., silver obols; mostly of the two well-known types, with Head of King on obverse, and either Standing Figure (17 specimens), or Head of Horse (7 spec.) on reverse, as shown in Brit. Mus. Cat., pl. xxiv, 10 (10 spec.), *ibidem*, pl. xxiv, 11 (7 spec.), and *ibid.*, pl. xxiv, 12 (7 spec.). But there are two obols, one being a new variety of the well-known type, the other an entirely new type. The new variety (see Plate III, No. 8) shows on the reverse the Standing Figure holding a spear in his left hand, while the usual variety shows the spear in his right hand. Weight 13 grs.; size 0.5". The new type (see Plate III, No. 9) shows the usual Head of King on the obverse, but the reverse has a standing figure to the

right, apparently Nike standing on a scroll (cloud?) with traces of a Greek legend. The King's head is distinctive for this coin. Size 0·5625". Weight 17 grs.

(c) *Coin of Azes.*

There is one coin of Azes, c. 30 B.C., silver; nearly the entire legends of both sides clipped away; of the well-known type with mounted King on obverse, and Zeus holding Nike on reverse; apparently in every respect (incl. of monograms) the same as Brit. Mus. Cat., No. 32, p. 75. Weight 36 grs., size 0·5625".

(d) *Uncertain Coins.*

These are two copper coins, from the neighbourhood of Khotan; apparently Indo-Bactrian, but too much worn to permit of identification. One is a small round coin, measuring $\frac{1}{2}$ inch, weighing 18·5 grs., and showing on one side traces of a bull's head facing (?), within an irregular square, enclosed within a marginal circle of dots, without any legend: the other side is entirely indistinguishable. The only, hitherto known, Indo-Bactrian coins with a bull's head facing, so far as I know, are two square copper coins of Menander, in Brit. Mus. Cat., No. 66, p. 49 and No. 4, p. 169 (pls. xii, 5 and xxxi, 10). The other is a small, apparently square coin, measuring $\frac{5}{8}$ of an inch, weighing 11 grs., and showing on one side traces of a conventional stūpa (?) surrounded by an illegible legend: the other side is quite indistinguishable. The only, hitherto known, coin with a stūpa, I believe, is a square copper one of Agathocles, in Brit. Mus. Cat., No. 15, p. 12 (pl. iv, 10).

IV. INDO-SCYTHIAN COINS.

The coins of this class number 10, and belong to two distinct periods, an earlier from about 50–130 A.D., and a later from about 490–570 A.D.

(a) *Early.*

These coins, numbering 9, were found in the collections M. 2, M. 3, M. 6, G. 10, and T. 1. They came from the Khotan country, and their condition shows that they have been dug out from ancient sites.

(1) Kadphises II, c. 50 A.D., two coins, copper; obv. and rev. designs just discernible, legends quite obliterated; type (obv. King Standing; rev. Çiva and Bull) as shown in British Museum Catalogue, pl. xxv, No. 12. Size 1·0". Weight 240, 5 and 181·5 grs.

(2) Kanerkes, c. 78–110 A.D., six coins, copper, of two different sizes; all in very poor condition.

(a) four coins; obv. King standing to right, rev. figure standing to right, its posture resembling MIOPO or MAO or AΘPO; there are only faint traces recognizable; on one obverse also traces of the Greek legend. Two weigh 54 grs., one 64, and one 46 grs., but a piece of the last is broken off its edge. Size of all, 0·7".

(b) two coins; size 0·5"; weight 31·5 and 20·5; one reverse shows figure and legend MAO; the other shows traces, apparently of OADO (figure stepping to right, with both arms uplifted).

(3) Hoerkes, c. 110–130 A.D., one coin, copper, in poor condition; size 0·875"; weight 78·0 grs., obv. King standing to right; rev. faint traces of Çiva and Bull to left.

(b) *Late*.

(1) Toramāṇa, c. 495–510 A.D., one coin, copper, indifferent condition. See Cunningham's *Coins of Mediæval India*, p. 42, pl. iii, 1, 2. Size 1·0". Weight 83·0 grs.

V. SASSANIAN COINS.

(c. 458–484 A.D.).

There are seven (or six) of these, all apparently of Firūz II (458–484 A.D.) Plate I, Nos. 5 and 19. They belong to M. 2. They are of some mixed metal, and inextricably baked together in two clumps, one consisting of three and the other, apparently of four coins, weighing 192·5 and 205·6 grs. respectively, and measuring 1·125".

VI. MEDIÆVAL HINDU COINS.

(c. 900–1100 A.D.).

These coins number 8, and belong to the following two classes,

(a) *Mahārājas of Kashmir*.

The Kashmir coins number 6. They belong to M. 6, and were procured from Khotan, probably found in its Bazars, and not in sand-buried sites. They are similarly still found in Kashmir and India. There has always been commercial intercourse between Khotan and Kashmir.

(1) A very early coin, but unknown. No legend on obverse, one akṣara, illegible, on reverse.

(2) Sugandha, c. 924–926 A.D., one coin, copper. As in *Journal, As. Soc. Beng.*, vol. XLVIII (1879), p. 281, pl. xi, No. 4.

(3) Dikṣēma Gupta, c. 971–979 A.D., one coin, copper. As in *ibid.*, pl. xi, No. 6.

(4) Diddā, c. 1001–1024 A.D., one coin, copper. As in *ibid.*, pl. xi, No. 11.

(5) Harṣa, c. 1062–1072 A.D., two coins, copper. As in *ibid.*, pl. xii, No. 15.

(b) *Brāhman Kings of Kabul.*

Sāmanta Deva, about 926–940 A.D.; 2 coins, silver; of the so-called “Bull and Horseman” type, as in Prinsep’s *Indian Antiquities* (ed. Thomas), Vol. I, Plate XXV, 3, 4, 5; weight 46 and 44 grs.; size 0·7 and 0·625”. From G. 4.

VII. MÆDIEVAL MUHAMMADAN COINS.

(c. 800–1585 A.D.).

The total of these coins is 127. Many of them, as will be noticed under the several coins, belong to G. 4, and were obtained in Western Turkestan. Of the others, belonging to M. 2, M. 6, many were found in the Takla Makan desert; but it is probable that the more modern ones were procured in Khotan itself and its bazars.

These coins belong to very different classes and ages. In the following list they are arranged in chronological order.

(a) ‘*Abbāsī Khalīfahs.*

Ar-Rashīd; 1 coin, silver, like *British Museum Catalogue*, Vol. I, Plate V, No. 224 (p. 83); with a loop for suspension; mint Madinat-*l-Islām*, date 192 H. (=807 A.D.): weight 47·5 grs., size 0·83”. Belongs to G. 4.

(b) *Khāns of Turkīstān.*

(1) Yilik *Khān*; 3 coins, silver, like Br. Mus. Cat., Vol. II, Plate V, No. 433 (p. 121); two of mint Samarqand,⁴¹ dates 397 and 39[8] H., (=1006 and 1007 A.D.), weight 35·5 and 42 grs., size 0·9375” and 1·03125”; one of mint Sarraqustāh, date 394 H. (=1003 A.D.) weight 38 grs., size 0·9375”, see Plate I, fig. 21. The latter as well as one of the Samarqand coins have on the reverse area *الله* above and *بهال* below the central legend, but nothing corresponding on the obverse, while the other Samarqand coin has *الله* and *نصر* on the reverse and *بلو* or *بلو* on the obverse. From M. 2.

Yilik *Khān*, a chief of the Uighurs, is also known as Satūq Bughrā *Khān*. He lived from 333–429 H. (=944–1037 A.D.), to the age of 96 years. He was the founder of a very extensive, but short-lived empire of the Uighurs, with a capital at Kāshghar. See Dr. Bellew in Sir T. D. Forsyth’s *Report of a Mission to Yarkand in 1873*, pp. 125,

⁴¹ On one of them apparently spelled *Samarkand*.

126 (also 121, 130), and Shaw's *Grammar of the Language of Eastern Turkistān*, in the *Journal of the Asiatic Society of Bengal* for 1877, p. 334.

(2) Muḥammad Arslān Khān; 14 coins; all copper; not in the *British Museum Catalogue*; date and perhaps mint were in the marginal legend, which is almost entirely clipped off in all specimens. They are from M. 2, M. 3, M. 9 and G. 10. There are three varieties, as follows:—

First Variety. (Plates I, 22 and III, 15).

Six coins. Weight 105·5–62·5; size 0·9".

Obverse.	Reverse.
Single-lined area.	Single-lined area.
لا اله الا الله وحده لا شريك له	بالله ⁴² المستنجد ارسلان خا محمد ن

Both margins cut away.

Second Variety.

Three coins. Weight 81–92·5 grs.; size 0·9".

Obverse.	Reverse.
Single-lined area.	Single-lined area.
لا اله الا الله محمد رسول الله	بالله المستنجد ارسلان خا محمد ن

Margins cut away; but in one case *سنة* still visible.

Third Variety. (Plate I, 24).

Five coins. Weight 116·5–71·5 grs., size 0·9".

Obverse.	Reverse.
Area within two single-lined circles, with dots between. Legend as in the first variety.	Area do. بالله المستنجد محمد ارسلان خان ن
No marginal legends.	

⁴² In most cases spelled بالله.

Muḥammad Arslān Khān was a son of 'Ālā Nūr Khānim, a daughter of Satūq Bughrā (or Yilik) Khān and wife of Toq Būbā Khān; he succeeded in or about 441 H. (=1049 A.D.) his uncles Ḥasan Bughrā, Ḥusain Bughrā, and Yūsuf Qādir who reigned, in the aggregate, twelve years. Both Ḥasan and Ḥusain, as well as Muḥammad Arslān's half-brother Sayyid 'Āli Arslān Khān were "martyred" in battle against the "infidel" Buddhists of Khotan. See Bellew, *ibidem*, pp. 126-129 and Shaw, *ibidem*, pp. 334, 335, 339. The term *Al-mustanjid-billah* means 'Seeker of help from God.'

(c) *Ghorī Sultāns.*

Muḥammad bin Sām; 2 coins; mixed silver; like *British Museum Catalogue* (Sultāns of Delhi), Plate I, No. 12, (p. 9), also No. 10 in Thomas' *Chronicles of the Pathan Kings of Delhi*; of the "Bull and Horseman" type; date *circa* 1195 A.D.; weight 45.5 and 53 grs., size 0.625". From G. 4.

(d) *Urtuqīs of Māridīn.*

'Alāu-d-dīn Kaiqobād; 1 coin, copper; like *British Museum Catalogue*, Vol. III, Plate IX, No. 474 (p. 169, under Nāṣiru-d-dīn's coins); mint lost, date 630 H. (=1232 A.D.) with سنه ثلاثين on the left of the central legend of reverse; weight 135.5 grs., size 1.16". Plate I, fig. 20. M. 2 (?).

This species of coin seems to have been imitated in making ornamental plaques, and guards for binding block-prints; see below General Remarks on Block-prints and Plate IV, figs. 2 and 3.

(e) *Khāns of the Golden Horde.*

(1) Jānī Beg Khān; 2 coins, silver; like Br. Mus. Cat., Vol. VI, Plate VII, No. 388 (p. 133); mint Khwārizm, date 743 H. (=1342 A.D.); weight 28.5 grs., size 0.6". From G. 4.

(2) Bardī Beg Khān; 1 coin, silver; like *ibidem*, No. 443 (p. 146) mint Khwārizm, date 760 H. (=1358 A.D.); weight 30.5 grs., size 0.6". Plate I, fig. 29.

(f) *House of Tīmūr.*

(1) Shāh Rukh; 1 coin, silver; similar to Br. Mus. Cat., Vol. VII, Plate II, No. 61 (p. 24), but adds تعلی at beginning of third line, as in No. 80 (p. 29); mint and date lost (reign 1404-1447 A.D.); weight 78 grs.; size 0.875". Plate II, fig. 27. From G. 4.

(2) Sultān Aḥmad (1467-1493 A.D.); 1 coin, silver; the same as *ibidem*, No. 61 (p. 24) of Shāh Rukh, but counter-struck with a

six-foil die of Sultān Aḥmad, as in *ibidem*, No. 117 (p. 42); mint obliterated by counter-struck die, date 828 H. (=1424 A.D.); weight 77·5 grs., size 0·875". Plate I, fig. 25. From G. 4.

(g) *Sultāns of Kashmir.*

(1) Zainu-l-'Abidīn, 1417–1467 A.D., one coin, copper. Like *Journal, As. Soc. Beng.*, Vol. XLVIII (1879), p. 284, pl. xiii, No. 2.

(2) Ḥaidar Shāh, 1467–1489 A.D., one coin, copper; date illegible. Like *ibidem*, pl. xiii, No. 5.

(3) Ḥasan Shāh, 1469–1481 A.D., one coin, copper; double-struck on a coin of Ḥaidar Shāh; date illegible.

(4) Muḥammad Shāh, 1481–1537 A.D.; two coins, copper; dates illegible. Like *ibid.*, pl. xiii, No. 7.

(5) Fath Shāh, 1483–1520 A.D., two coins, copper; dates illegible; one shows تسعين 90 (between 919 and 926 H. or 1513 and 1520 A.D.) Like *ibid.*, pl. xiii, No. 8.

(h) *Unidentified.*

(1) Seven coins, copper; not in *British Museum Catalogue*; mint Kāshghar, date 950 H. in words (=1543 A. D.); weight 80·5–123 grs.; size 0·9375–1·2". From M. 2. Plate II, fig. 26a–d.

Obverse.	Reverse.
Single-lined large circular area, within circle of dots.	Small central square, with semicircles upon the four sides.
فى التاريخ سنه خمسين تسعمائة	In square either كاشغر alone (26d) or with another unread word (26e). ضرب - عدل - (?) - ول - (?) - نس

Two of the coins show a square counter-struck die (fig. 26d), with كاشغر on it.

The two words after 'adl probably contain a name which I am unable to identify. At the time of the date of the coin several dynasties were contending for the possession of Kāshghar, e.g., the Bukhāra rulers, the Mongol Khāns and the Doughlat Amīrs.

(2) Sulaimān Khaqān (?); 52 coins, copper; not in the *British Museum Catalogue*; with neither mint nor date; weight 26–116 grs., average 60 grs.; size 1–1·4". From M. 2, M. 3, M. 4, M. 6, G. 5, G. 7, G. 10. Two varieties, as follows:

First Variety.

37 coins. Plate I, figs. 32–35.

Obverse.

Within two concentric circles
with dots between them.

لا اله الا
الله وحده
لا شريك له
محمد رسول
الله

Reverse.

Octagonal area within a
circle, with *fleur de lys*
in the segments.

الله (sic)
المستعصم
سليمان (?) قدر
كعباح (?)
خاقان

Second Variety.

15 coins. Plate I, fig. 31.

Obverse.

The same as
1st var.

Reverse.

Area as on obv.
Legend as on 1st variety.

(3) Masa'ūd (?); 17 coins, copper; not in *British Museum Catalogue*; mint and date lost with margin; weight 34–92 grs., average 70 grs.; size 0.0325–1.25". From M. 2, G. 7. Plate II, fig. 26 and 30.

Obverse.

Area in double-lined circle.

لا اله الا
الله محمد
رسول الله

Inscribed margin nearly
obliterated, only *امير... المظفر*
visible.

Reverse.

Area in double-lined circle.

صمصا فر (?)
مسعود
الحوا له (?)

Margin, inscribed with date,
nearly obliterated, apparent-
ly 977 in words.

(4) Six coins; copper; similar to No. 2. Not read.

(5) Ten coins; copper, of 8 different kinds; unread; five of them shown in Plates I, 7 and 23, II, 24, III, 13 and 14. Two from G. 4.

(6) Two coins; silver; in very indifferent condition; unread; apparently Mongol issues. Weight 30 and 21 grs., size 0.9" and 0.83". From M. 2.

(7) One coin; gold; mint and date lost with margin; weight 75 grs.; size 0.83". Plate III, 16.

Obverse.	Reverse.
Circular area.	Circular area.
لا اله الا الله وحده لا شريك له	لا اله الا الله محمد رسول الله
Inscribed margin, almost entirely obliterated and illegible.	Margin inscribed with date, almost entirely obliterated, only سنة visible.

(i) *Line of Shaibān.*

Iskandar; 1 coin, silver, with a loop for suspension; apparently similar to *British Museum Catalogue*, Vol. VII, Nos. 135 and 145; mint and date obliterated (reign 1560–1583 A.D.); weight 62 grs., size 1·25". Plate III, 12.

Obverse.	Reverse.
Square area.	Eight-foil area
لا اله الا الله محمد رسول الله	with two five-rayed stars. ☆ خان اصك بها... ...☆ ند
Margin nearly obliterated, only [المومنين] at bottom visible.	Margin entirely obliterated.

VIII. MODERN TURKĪ COINS.

(18th and 19th centuries).

There are altogether 18 of these coins which fall into the following three classes.

(a) *Khāns of Khoqand.*

Apparently Shāh Rukh II; 1 coin, copper; mint Khoqand; date lost, but should be 1184 H. (= 1770 A.D.); not in *British Museum Catalogue*; weight 58 grs.; size 0·66". Plate I, fig. 28.

Obverse.	Reverse.
Double-lined square area across another double-lined square, surrounded by arabesques.	Single-lined small circular area within broad ornamental margin.
ح	خو قند ضرب

(b) *Atāliq of Kāshghar.*

Yaqūb Beg; 3 coins, copper; not in *British Museum Catalogue*; mint Kāshghar; date 1293 H. (1876 A.D.); weight 51–58 grs., size 0·625". Plate I, fig. 27.

Obverse.		Reverse.
خان	خان	کا
۱۲۹۳	or ۱۲۹	شغر
عبد	عبد	ضرب
	۳	
العزیز	العزیز	

Both areas within a double-lined circle, surrounded by a circle of dots.

(c) *Coins of Yārqand.*

There are 14 of these coins. They are heart-shaped, and their legends are counter-sunk. There are three varieties, differing by the obverse legends; the reverse legend of all (see Pl. II, 28, first figure on the left) is ضرب یارقند or mint Yārqand (or possibly یارکند Yārkaṇd). There is no date. Weight 107–132 grs.; size 0·75 × 0·5625". The obverse legends have not been read; two of them are shown in Plate II, 28; the third in Plate III, 17. One of them (Pl. II, 28, on extreme right) is, by Munshī Aḥmad Dīn, doubtfully read ضونگدائی خان. This particular variety is the commonest. From M. 2, 3, 6, 9; G. 7, 10.

IX. MODERN INDIAN COINS.

The total of these coins is 59. They are of a very great variety, as follows.

(a) *British Coins.*

(1) East India Company; Sumātra; 1 coin, copper; obv. Cock; rev. native legend, with date 1247 H. (=1831 A.D.). See *Indian Museum Catalogue*, No. 12083, in Vol. II, p. 133.

(2) One $\frac{1}{2}$ Anna piece of 1889. Copper. Obverse: *Victoria Empress*.

(b) *Native States.*

(1) Bhūj; 1 coin, copper; weight 52 grs., size 0·6". Obv. in Nāgarī, round margin, *Çrī Khegār-jī Mirjā Mahārāo*, in centre trident, with 1938 (Samvat) below it (=1882 A.D.). Rev., in Persian, *zarb Bhūj, Victoria Quīṣar-i-Hind*, in centre *sanah* 1882 (A.D.), with Rājput dagger below it. Plate II, fig. 31.

(2) Bhopal; 1 coin, copper, $\frac{1}{4}$ anna; mint Bhopal; date 1277 H. (=1860 A.D.). See *Journal, Asiatic Society of Bengal*, Vol. LXVI, p. 270, Pl. XXXIII, fig. 57.

(3) Orchā; 1 coin; silver; 1 Rupee; mint Ūrchā; date 1211 H. (=1798 A.D.). See *Journal, Asiatic Society of Bengal*, Vol. LXVI, p. 267, Plate XXXII, fig. 29.

(4) Sikh State; 10 coins, of different varieties, all copper:

(a) 2 coins; obv., star; rev., legend, date 1894 *Samvat* (=1838 A.D.); mint-mark, leaf. Plate II, fig. 29. As in *Journal, Asiatic Society of Bengal*, Vol. L, Plate IX, 68 (p. 90).

(b) 2 coins; obv., mint Amritsar, with mark of leaf; rev., Gurmukhī legend, and mark of sword.

(c) 1 coin; with mint-mark of leaf on reverse; as in *ibidem*, Plate VIII, 53, but in very indifferent condition; weight 122 grs.; size 0·83''.

(d) 2 coins; legends in Persian characters; obv., mint-mark, leaf within *س* of *jalūs*; rev., *zarb*; but both mint and date lost; weight 188 and 86·5 grs.; size 0·916'' and 0·75''.

(e) 1 coin, with Gurmukhī legends, similar to *ibidem*, Plate VII, 52. Weight 159·5 grs.; size 0·916''.

(f) 2 coins; obv., mint-mark leaf, and mint on one *khīṭah Kashmīr*, on the other *Jammū*; rev., legend Nānak *Shāh* with a leaf-ornament; weight 209·5 and 121·5 grs.; size 0·9'' and 0·8''.

(5) Nepal; 1 coin; a modern paisā of the present reign; date illegible.

(6) Jammū; 1 coin; weight 90 grs., size 0·7''; obv., Nāgarī legend; rev., Persian legend with date 1937 Sam. (=1880 A.D.).

(7) Kashmīr; 6 coins of two sizes, all extensively clipped, with Nāgarī on obverse and Persian on reverse, and leaf and sword as mint-marks:

(a) large, 1 coin, size 0·75''; weight 84·5 grs.; date 194* Sam. (=188* A.D.).

(b) small, 5 coins; size 0·6–0·7''; weight 47–48 grs.; dates 1938, 1939, 1941 Sam. (=1882, 1883, 1885 A.D.).

(8) Afghān; 6 coins, of different varieties; all copper:

(a) 3 coins, of Timūr *Shāh Durrānī*, ordinary Persian legends on both sides; obv., name and regnal year 12; rev., mint Kashmīr, date 118* H. (=177* A.D.); weight 230–278 grs.; size 0·8–0·9375''.

(b) 2 coins; apparently also of Timūr *Shāh*, but name lost, date of one 1165 H; rev., of one *zarb Kashmīr*, of the other, *khīṭah Kashmīr*, date lost; weight 119 and 130 grs.; size 0·75'' and 0·625'', but much clipped.

(c) 1 coin, ascription uncertain; obv., curved sword in ornamental ellipse; rev., *zarb Kashmīr sanah 2* (?); weight 86 grs.; size 0·9''.

(9) Unidentified coins:

(a) large; 6 copper; 3 square, 3 round; with most fragmentary legends; weight 169·5–83 grs.; size 0·7–0·66''.

(b) small; 24 copper, all round, with most fragmentary legends; weight 46·5–4 grs.; size 0·333–0·5625''.

X. MODERN EUROPEAN.

A Russian copper coin; got from the house of a Khotan merchant; obv., Imperial arms, rev., Imperial monogram within laurel crown, and date **1758 A.D.**; weight 802 grs., size 1·66''. Plate II, fig. 32.

X. SEALS, INTAGLIOS, CAMEOS, ETC.

(Plate III.)

The total number of these objects in the collection is sixty-five. They are of a great variety, in point of material, size, shape, form, and engravement. There are also ten unfinished pieces (all of stone) which had clearly been cut to make seals, but which bear no engraving of any kind. Most of these objects come from the Takla Makan desert, and belong to M. 2, M. 3, M. 4, M. 6, M. 9, G. 7 and G. 10. A few, belonging to G. 4, come from Western Turkestan.

With regard to material, there are of

brass or copper, bronze	...	...	37 specimens,
stone or glass, or ivory	...	...	28 „
			65 „
		Total	...

In size, they vary very widely; from 1·25'' to 0·25'' (Pl. III, fig. 21) in length.

In shape, there are the following varieties:—

Square or nearly so	...	22 specimens	
Oblong	...	3	„ (Pl. III, 19, 23, 39)
Triangular	...	1	„ (Pl. III, 68)
Quaterfoil	...	2	„ (Pl. III, 71)
Round or nearly so	...	23	„
Elliptical	...	14	„
Fanciful	...	1	„ (Pl. III, 80)
		66	„
		Total	...

With regard to form, among the seals there are three made in the form of the ordinary signet-ring, to be worn on the finger. One of them is complete (Pl. III, 27 and Pl. XIX, 3); in the case of the other, two portions of the ring are missing. All three are of brass, and belong to M. 2. There are also five pieces, all of stone, which are cut in the form of a signet-ring, but their ring-portion is solid, with a hole drilled through it, in order to be worn on a string (Plate III, 62 and Plate XIX, 2). All these solid rings belong to G. 4, and probably came from Western Turkestan. The usual form of the seal, however, is a thin, flat plate, to the back of which is attached a small perforated peg for the passage of the string on which it is worn (Plate XIX, 4). All the seals of this kind are from the Takla Makan desert. They are also all of brass or copper, except one (Pl. III, fig. 29) which is made of steatite. One seal, of bronze, is furnished with two flaps (Pl. III, fig. 22 and Pl. XIX, 6).

Among the intaglios, there are two with a high, conical back (Plate III, 63 and Plate XIX, 7). They are both of glass, and came from the Takla Makan desert. All the rest are flat pieces of stone or glass, of the usual form, with a rounded or planed back.

Two of the objects (Pl. III, 65 and 73 and Pl. XIX, 8) appear to have merely served as ornaments, as they are provided with the remains of what seems to have been a nail. These are from the Takla Makan.

One object (Plate III, 23 and Plate XIX, 5) seems to be one of a set of dice used in divination. This, also, comes from the Takla Makan desert.

With reference to the matter engraved, it consists either of some writing, or some figure, mostly human or animal, or some ornamental design. Particulars, so far as definable, will be found in the following detailed description. The figures on the Plate are all full size.

Plate III, No. 18. Round intaglio of black glass †⁴³ engraved with Arabic characters, apparently *'afiyat Nādir* or "Success of Nādir." From G. 4.

No. 19. Oblong flat brass seal, with perforated peg; face engraved with what looks like writing in Persian characters (... *سید*). From M. 2.

No. 20. Obverse and reverse of a square amulet, of ivory; *⁴³ thickness $\frac{1}{7}$ th of an inch, through which runs a fine string-hole; both

⁴³ For the identifications marked * and † I am indebted to the kindness of Mr. C. L. Griesbach, C.I.E., and Dr. Fritz von Nötling respectively, of the Geological Survey of India. Mr. Griesbach informs me (19th January, 1899), that "the stones might all have come from Badakshān or Bokhara. Lapis lazuli comes certainly from Badakshan, and spinel is found in Shignan and other places on the upper Oxus, also at Tagdallak east of Kabul."

faces engraved with what looks like writing. From the Takla Makan; consignment unknown.

No. 21. Minute lozenge-shaped intaglio of bronze, engraved with minute writing, apparently Arabic, unread. From G. 10.

No. 22. Square bronze seal; back furnished with two flaps, apparently for fixing to a handle (Pl. XIX, 6); face engraved with what seems to be writing. From M. 3.

No. 23. (Pl. XIX, 5). An oblong piece of brass, with four equal sides measuring $\frac{9}{16} \times \frac{6}{16}$ inches, the ends accordingly being $\frac{3}{8}$ th of an inch square; perforated right along its long axis, and bearing engravements on all its four long sides. One side shows a dot; the side next to it has two strokes; these would seem to be intended for the numbers 1 and 2. On the other two sides one would expect the numeral signs for 3 and 4; and so they may be; but they are very indistinct, and, curiously enough, seem to suggest human standing figures: that on the third side being a long-robed woman with shield and spear; that on the fourth side, a man standing to the left before a fire altar, as on Kanishka's coins. But these resemblances may be deceptive, the engravements being excessively corroded. The piece is probably one of a set of dice, such as are still used in the present day for purposes of divination. See the remarks below.

No. 24. Elliptical intaglio; Grecian; engraved with nude figure of a man standing to front, with his wrists behind his back, bound to a pillar (Prometheus?).

No. 25. Elliptical intaglio; Indian; engraved with bust of a woman, showing ancient Indian fashion of hair-dress.

No. 26. Elliptical intaglio; Grecian; engraved with seated draped figure of woman to left; perhaps Tyche with cornucopiæ in left and sceptre in right hand.

No. 24 to 26 were found "near Khotan," and are those "three pieces of yellow crystal of an oval shape" mentioned on p. xxxii of the Introduction. Mr. Macartney only sent me impressions taken in sealing-wax. From these plaster-casts were made by me for the photographic plate. This accounts for the want of clearness in the figures.

No. 27. Elliptical signet-ring of brass. (Plate XIX, 3). Engraving too much worn to be clearly recognised; apparently a woman seated to left on a wicker-stool. From M. 2.

No. 28. Obverse and reverse of a square amulet, made of serpentine*; thickness $\frac{3}{8}$ th of an inch, perforated with a string-hole. Obv., centaur to right, holding some object in each uplifted hand; below a four-rayed star, like \times . Rev., lion to right, with open mouth threatening a man in attitude of supplication before him; above tail three dots. From M. 3.

No. 29. Round seal or button, of steatite*, with perforated prominence on back, engraved with rude radiate sun-face. From M. 3.

No. 30. Round intaglio of red cornelian, engraved with the head of a woman. From G. 10.

No. 31. Round intaglio of black glass†, engraved with the head of a man (Parthian?). From G. 4.

No. 32. Elliptical intaglio of red cornelian; Grecian; Pallas to right, in long robe and helmet with spear and shield. From G. 4.

No. 33. Similar to No. 32. Apparently draped female figure to left. Original gone astray.

No. 34. Square flat brass seal, with perforated peg, showing kneeling figure of a man to left, with uplifted right arm, before some small indistinct object (fire-worshiper?). From M. 2, found at Aq Sapil.

No. 35. Square brass flat seal, with broken, perforated peg at back, engraved with two men, standing to front, but facing one another, both in the same attitude, left arm uplifted, right arm suspended. From M. 2, found apparently in Kök Gumbaz.

No. 36. Elliptical intaglio of very thin brown glass, convex, about one-half broken off and missing. Engravement, nude figure, apparently a monkey, with feathered helmet, holding up a branch in left hand. From G. 4.

No. 37. Round intaglio, of blue glass*; showing draped (female?) figure, seated cross-legged to front, with uplifted arms, holding in left hand a wreath (or sun?), in right hand a crescent. Posture similar to that of king or deity on Indo-Scythian and Gupta coins; compare *Ariana Antiqua*, Plate, xviii, 4, 5; *British Museum Catalogue*, Pl. xxix, 4. From M. 3.

No. 38. Elliptical intaglio, of lapis lazuli*, showing head of a bird to right, wearing helmet or cap. From G. 10.

No. 39. Oblong intaglio of sardouix*, very deep red, with whitish surface on the engraved side; showing nude dancing girl, wearing very heavy girdle and anklets, standing to right, and presenting some lengthy object in both forth-stretched hands, in posture similar to soldier presenting arms. From G. 10.

No. 40. Round intaglio, of glass or obsidian,* showing a goat or long-horned gazelle, walking to right. From G. 10.

No. 41. Square flat bronze seal, with perforated peg, showing a hare sitting to right. From M. 2.

No. 42. Square flat brass seal, with perforated peg (broken), showing a crude calf, walking to left. Similar to No. 43. From M. 2, found at Aq Sapil.

No. 43. Round brass seal, with perforated peg, showing a sheep or goat walking to right. From M. 9.

No. 44. Square brass signet-ring (portion of ring missing), engraved with large-horned sheep (*ovis Poli?*) walking to left. From the Takla Makan desert; consignment unknown.

No. 45. Round intaglio of blackish agate with whitish surface on the engraved side (similar to No. 39), showing a deer running to right. From G. 10.

No. 46. Round solid perforated seal-ring, of whitish agate,† showing a crudely made hare (?), running to right. From G. 4.

No. 47. Round intaglio, of spinel*, showing a hare running to right. From G. 10.

No. 48. Square flat brass seal, with perforated peg (broken), showing head of a bull *en face*. From M. 2, found at Aq Sapil.

No. 49. Round intaglio, of sardonix*, very deep red, with whitish surface on the engraved side (similar to No. 39), showing a cow standing to right, with suckling calf. From G. 10.

No. 50. Round flat brass seal (much worn), with perforated peg (broken); showing a sheep, walking to left, very crude. From M. 6.

No. 51. Round intaglio of red cornelian; showing a horse, bridled and belted, jumping to left. From G. 4.

No. 52. Round flat brass seal, with perforated peg, showing an elephant standing to left. From M. 2, found at Aq Sapil.

No. 53. Square flat brass seal, with perforated peg (broken), showing an elephant, walking to left, harnessed with drapings and carrying a Buddhist relic casket. From M. 2, found at Aq Sapil.

No. 54. Elliptical solid perforated seal-ring, of whitish brown-veined agate †; showing Brahmani (humped) bull, standing to right, within chaplet of astragals. From G. 4.

No. 55. Round flat brass seal (much worn), with perforated peg (broken), showing a lion, walking to left. From M. 2.

No. 56. Round intaglio, of red cornelian, showing a lion walking to right. From G. 10.

No. 57. Elliptical intaglio, of lapis lazuli*, showing Pegasus walking to right; two unread letters (Pahlavi?) above hind-quarters. From M. 3.

No. 58. Round brass seal (broken), with perforated peg, showing a goose walking to left. From M. 2.

No. 59. Round solid perforated seal-ring, of whitish agate, † showing parrot walking to right. From G. 4.

No. 60. Square flat brass seal, with perforated peg (broken)

showing a roaring lion, seated to right, similar to No. 61, but without raised paw. From G. 7.

No. 61. Square flat brass seal, with perforated peg, showing a lion or cat sitting to right, with open mouth and uplifted left paw. From M. 2, found at Aq Sapil. Another, but smaller specimen, from G. 7, has the paw not uplifted.

No. 62. Round solid perforated seal-ring, made of whitish agate,† showing a scorpion, walking to right, with raised sting. From G. 4.

No. 63. (Pl. XIX, 7). Conical intaglio, of green glass (much corroded); engraving indistinct, apparently a locust, flying to right. From M. 4.

No. 64. Round flat brass seal (broken and much corroded), with perforated peg, showing two birds (bulbul?) facing each other and fighting. From M. 2, found at Aq Sapil.

No. 65. Round flat ornament of copper, with ring attached to rim, for wearing. In the centre, remains of a nail, showing that originally there was something attached to its back. From M. 9.

No. 66. (Plate XIX, 8). Brass nail with round ornamental head, formed like a mushroom.

No. 67. Round flat brass seal, with perforated peg (broken), showing radiate sun-face, or perhaps wheel.

No. 68. Triangular flat brass seal, with perforated peg, showing a scorpion, walking to right. From M. 6.

No. 69. Elliptical intaglio of red cornelian, engraved with an uncertain design (pair of cymbals?) From G. 4.

No. 70. Square flat brass seal, with perforated peg (broken), showing an ornamental design. From M. 6.

No. 71. Quarterfoil flat brass seal, with perforated peg, and original piece of thread on which it was worn. Engraved with an ornamental design. From G. 10. Another specimen was in M. 2. See No. 79.

No. 72. Square brass signet-ring (larger portion of ring missing), showing an ornamental design. From the Takla Makan; consignment unknown.

No. 73. Round intaglio of whitish glass,† engraved on one side with the figure of two crossed swords or arrows, on the other, with some kind of faintly incised writing. From G. 4.

No. 74. Obverse and reverse of a round amulet, of serpentine;* thickness, $\frac{1}{8}$ th of an inch, perforated with a fine string-hole. From the Takla Makan; consignment unknown.

No. 75. Elliptical solid perforated seal-ring, of Bowenite,† engraved with fire-altar, as on Sassanide coins. From G. 4.

No. 76. Square flat seal of brass, with perforated peg, engraved with an ornamental design. From M. 2, found at Aq Sapil.

No. 77. Square flat seal of copper, bearing four square ornamental designs, two of them being different forms of the Svastika. From M. 6.

No. 78. Square flat copper seal, with perforated peg, engraved with an ornamental design. From M. 6.

No. 79. Square flat seal of brass, with perforated peg, engraved with an ornamental quaterfoil design. From M. 2, found at Aq Sapil. Another specimen, of the same size, was in M. 9. See No. 71.

No. 80. Flat copper seal, consisting of a square surmounted with a tridental crown, and furnished with a perforated peg. Bearing ornamental designs, that on the square being the same as on No. 79. From M. 6.

No. 81. (Plate XIX, 11). Elliptical intaglio, perhaps of felsite* ; Grecian ; showing a draped and helmeted figure, sitting on a stool (?), holding a bird (?) on his outstretched right hand. From G. 4.

There is one cameo in the collection. See Plate XIX, 9. From G. 10. It shows the helmeted head of a young man, of Grecian design.

Among the gems, shown on p. 779 of Dr. Sven Hedin's *Through Asia*, and obtained by him in Khotan, there are several which are strikingly like some in the British collection. Thus the second in his first line of facsimiles resembles our No. 30. There are three other similar ones on that page, but they differ in having a ribbon round the neck of the figure shown on it. There is also there one gem strikingly like our No. 29. The deer, hare, and large-horned sheep are also found on several of them.

But what is more noteworthy is that exactly similar seals and intaglios have been discovered in the ancient stūpas of Afghanistan. Samples of these are shown in Wilson's *Ariana Antiqua*, Plates i, iii and iv. Thus figs. 7-10 on Pl. iv, show two square flat seals with perforated peg, made of iron or brass. Plate i, fig. 8, Pl. iii, fig. 7 and Pl. iv, figs. 10, 11 are similar cornelian intaglios. The signet-rings, shown on Pl. i, 5, and Pl. iii, 6, though similar in shape to our Nos. 27, 44, 72, differ in being more costly, being of gold with inlaid cornelians, while those in our collection are made entirely of brass or copper.

I may also note the evidences afforded by these objects to the prevalence of Grecian and Buddhist culture in ancient Khotan. Nos. 24, 26, 32, 33 on Pl. III and No. 11 on Pl. XIX are distinctly Grecian ; so are the centaur on Pl. III, No. 28, and the pegasus on No. 57. Distinctly Indian are the Brāhmanī bull on No. 54, and the elephant on Nos. 52, 53. Distinctly Buddhist are the Svastika on

No. 77, and the relic-carrying elephant on No. 53. Old Persian (Zoroastrian) are the fire-altar on No. 75, and the fire-worshipper (?) on No. 34.

With reference to No. 23, I may explain that there is a certain system of divination, well-known all over Northern India. It is practised, I believe, only by men of the extreme North-West, "Kashmiris" as they are commonly called, who are, as a rule, Muhammadans. They use a double set of four brass dice, strung on two short iron rods, round which they freely revolve; four dice on each rod. The eight dice are all made exactly alike; being rectangular parallelepipeds (Pl. XIX, 5), with only four equal sides (not cubes), and marked, on the long oblong sides, with the numbers 2, 3 and 4, denoted by dots, in such a manner that 2 stands on the side opposite to 4, and 3 opposite to 3, as shown in the subjoined woodcut.

No. 10.



The short square sides, of course, which are perforated for the iron rod, bear no numbers; nor is the number *one* used. The dice look as if they were made of brass, but they are said to be of a special alloy of seven metals, consisting of brass, pewter, iron, lead, silver, gold, and copper. The operator throws the two strings of dice so that they fall parallel to each other, and then counts the dots in parallel lines; thus, lines *a* and *b* give 6 each, arranged as $2 + 2 + 1 + 1$ and $2 + 1 + 1 + 2$, or a combination of 12. Each of the two lines might give any number from 4 to 8, and between them a great variety of arrangements and combinations. From these variations the diviner makes his forecasts.⁴⁴ The object, described under No. 23 looks very much like one of such a set of dice, only that its faces are marked differently from what is the custom at the present time.

⁴⁴ A description of the alloy as well as of the *modus operandi* in divining with such dice will also be found in the "Third Report of Operations in Search of Sanskrit Manuscripts in the Bombay Circle, April 1884 to March 1886," by Professor Peterson, pp. 44-46, printed as an Extra-Number of the Journal of the Bombay Branch of the Royal Asiatic Society. Both the description and the sketch of the dice are not quite accurate.

SECTION II.—BLOCK PRINTS.

GENERAL REMARKS.

The following is a summary of the Block-prints in the collection :

I.	First Set	comprising	8	books.
II.	Second Set	„	6	„
III.	Third Set	„	3	„
IV.	Fourth Set	„	8	„
V.	Fifth Set	„	8	„
VI.	Sixth Set	„	3	„
VII.	Seventh Set	„	6	„
VIII.	Eighth Set	„	1	„
IX.	Ninth Set	„	2	„
			<hr/>	
	Total	...	45	books.
			<hr/>	

With the exception of one, the block prints all alike resemble European books in their style of binding.¹ A sheet of paper is folded in the middle to form two leaves, with four pages. A number of such folded sheets or “forms” are then fastened together, along the line of the fold, to make up a book. For the purpose of fastening them, they are, as a rule, simply laid one upon the other; but there are three books, all belonging to the Third Set, in which they are not laid one upon the other and outside the other, but placed one within the other so that the entire book forms but one folded bundle. Occasionally also, as in No. I of the First Set, a double form is met with, made up of two folded sheets, placed one within the other and thus consisting of four leaves or eight pages. The fastening is done in three ways: either by thread (2), or by twists of paper (12), or by pegs of copper (30).² The last-mentioned method is the commonest: the relative frequency is indicated by

¹ See also my Note on some Block-prints in the *Proceedings, Asiatic Society of Bengal*, for April 1898, p. 124.

² I may add that Mr. C. Bendall informs me (in a letter dated the 1st October, 1897) that the British Museum possesses a book in which “the peg is of wood, not metal.”

the bracketed numbers. The pegs are applied like rivets, that is, their ends are bent over and beaten down fast; but before doing so, they are passed, through thin pieces of copper, as a protection to the leaves. Sometimes (as in No. VII of the First Set, No. III of the Fifth Set and No. V of the Seventh Set) these guards are round ornamental pieces, resembling coins, as shown in fig. 3 of Plate IV; or they are elliptical (as in No. VIII of the First Set) or oblong (as in No. VI of the Seventh Set); but many of them (as in Nos. I and VII of the First Set, Nos. I and III of the Fourth Set, No. III of the Fifth Set, and No. I of the Seventh Set) are evidently portions of a large ornamental circular plaque which had been cut into pieces; and in this case the pieces are very large, as shown in Plate IV, fig. 1. In two cases (in No. I of the Second Set, and in the book of the Eighth Set) the guards consist of two long slips of copper, extending the whole length of the book. The twists of paper are applied, like pieces of string, to form loops. The stitching with thread only occurs in two books, in No. II of the Third Set and in the book of the Ninth Set. As a rule the fastening is made in three separate places, by three nails, or three twists of paper, or three loops of thread. Twice, however, in No. III of the Fourth Set and in the book of the Ninth Set, four pegs and four threads respectively are used; and once, in No. II (Pōthī) of the First Set, only one peg. A fastening in two places is more frequent; four times (in No. VIII of the First Set, Nos. V and VI of the Fifth Set, and No. IV of the Seventh Set) only two pegs are used; and twice (in No. VII of the First and No. VIII of the Fifth Set) only two twists of paper. The three initial and the three final pages are as a rule left blank; and thus the first and the last leaves, being blank, serve as covers to the book. In one case (No. VIII of the Fifth Set) seven initial and seven final pages (*i.e.*, three leaves on each side) are left blank. The probable object of this arrangement is disclosed by No. II of the Second Set and No. I of the Fifth Set, in which four and two leaves respectively have been pasted together to form pasteboard covers at either end. The single exception above referred to is a *pōthī* (No. II of the First Set), that is, a book

The Pothi.

arranged in the Indian fashion. In this case, the whole collection of "forms" is placed between two pieces of wood, and held in position by riveting it with one copper peg, passed through the middle of one of the narrow sides, as shown in Plate VIII. The arrangement is exactly the same as in the case of a set of Indian copper-plates of a landgrant. The peg takes the place of the seal-ring of the grant, or of the string of a manuscript. The two ends of the peg are split in two, and the two splits are turned over right and left, after having been passed through the thin copper

guard; thus the whole *pōthī* is kept firmly fixed. The two wooden covers are thick rough pieces ($8\frac{1}{2} \times 4\frac{3}{4} \times 1''$) of a very light kind of wood, the outside surfaces of which are not planed.

In size and shape the block-prints vary greatly. Some are narrow oblongs, measuring from $9\frac{1}{2}$ to $14\frac{3}{4}$ by 4 to $4\frac{1}{4}$ inches; but mostly they are broad oblongs, the largest measuring $23\frac{1}{2} \times 13\frac{1}{2}''$, the smallest, $6\frac{3}{4} \times 4\frac{1}{4}''$. Their thickness, also, much varies, depending, of course, partly on the number of forms contained in them, partly on the thickness of their paper. The thickest is the *pōthī*, its wooden covers alone measuring together two inches. Further details of measurements will be given with the following description of the several xylographs. In a few cases the corners are slightly rounded off: in one case this is done so much as to render the shape of the book elliptical; see fig. VIII in Woodcut No. 12. The edges of the leaves are frayed, as if the sheets had been cut with a blunted or notched instrument. Very exceptionally I have found the edge of a pair of leaves uncut. In these cases, when fastening the book, a folded sheet had been put in wrongly with the fold outside instead of inside. On the other hand, in five cases (First Set, Nos. IV and V, Fourth Set, Nos. III and VII, Seventh Set, No. V) I have found all the folds cut through, so that practically the book consists of separate leaves, instead of forms. This is also the case in No. VII of the Fifth Set, where, however, the leaves appear to have become separated by the wear and tear of the folds.

The xylographs are all printed on paper. The paper appears to include, at least, three distinct classes. One class is a soft paper, thin, and of even texture, much like the white or whitish paper of the Weber and some of the Macartney Manuscripts, published by me in the Journal of the Asiatic Society of Bengal, Vols. LXII and LXVI, which is believed to be made of the bark of the laurel (*Daphne*). This class of paper is found only in the one book which constitutes the Eighth Set. It has a deep yellow colour, which is probably a tint artificially imparted. Another class of paper is only found in the book and the roll, comprised in the Ninth Set. This is an exceedingly thin, almost transparent, tough paper, of even texture, with a light yellowish tint, probably natural. In its present condition it has become somewhat brittle, from age. Except in colour, it reminds one of what, in the trade, is known as "parchment overland paper;" in fact, at first sight I thought it was very fine vellum, though on closer examination and washing, it at once revealed itself to be paper. The most common is a third class of paper, of a more or less uneven texture and thickness, the prevailing colour of which is a more or less dirty yellowish-brown

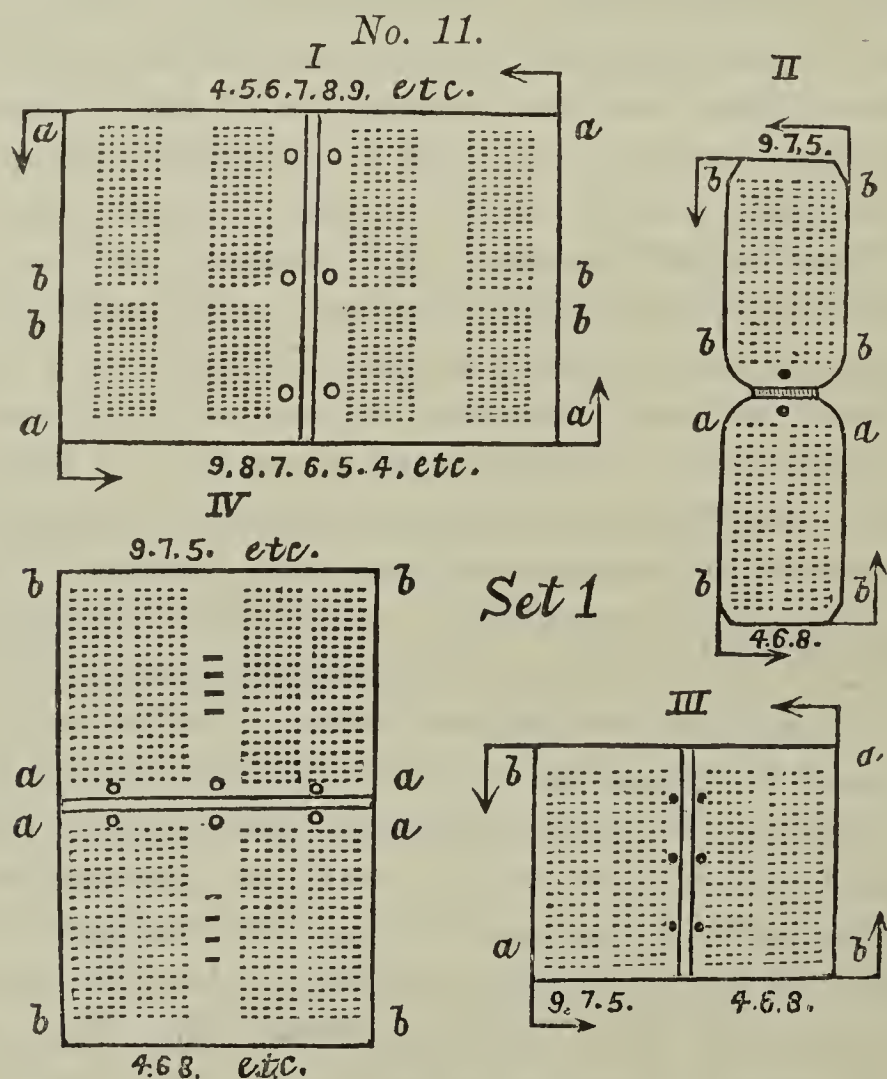
Four distinct varieties are observable. The first variety is a soft, thickish paper, to the touch resembling felt or cloth, of comparatively even texture and rather brighter yellowish-brown colour. It is found in nine books; *viz.*, Nos. I and II of the First Set, Nos. I, III, IV, V and VI of the Second Set, and Nos. II and III of the Third Set. The second and third varieties differ from the first variety only in being progressively thinner, of more uneven texture, and of darker colour. The third variety, indeed, is occasionally of an exceedingly flimsy make. The second variety is found in nineteen books; *viz.*, Nos. II, III, IV and V of the First Set, No. II of the Second Set, No. I of the Third Set, Nos. I, II, III, IV, VI and VII of the Fourth Set, Nos. I, II and VIII of the Fifth Set, and Nos. I, II, III and V of the Seventh Set. The third variety is found in five books; *viz.*, Nos. VII and VIII of the First Set, No. V of the Fourth Set, No. III of the Fifth Set, and No. VI of the Sixth Set. All these three varieties are comparatively soft papers, and in this respect differ from the fourth variety, which is a hard and stiffish paper, of middling thickness, and of very uneven make. This fourth variety much resembles, except in point of colour and age, the kind of paper which is still made in Khotan at the present day. It is found in nine books; *viz.*, No. VIII of the Fourth Set, Nos. IV, V, VI, VII of the Fifth Set, and Nos. I, II, III and IV of the Seventh Set. With the exception of one book, they all belong to M. 8; and the single exception belongs to M. 9. The three other varieties do not resemble the modern Khotanese paper, though it is probable that they all are of Khotanese manufacture, being probably made of the same material, and by the same or a similar system of preparation. I am disposed to believe that the four varieties of this class of paper represent four different periods and four successive degradations of Khotanese paper manufacture. The texture of the modern Khotanese paper is exceedingly coarse and uneven, its pulp having been prepared very roughly and spread very unevenly. When fresh, the paper has a creamy or greyish colour: the much darker colour of the corresponding paper of the block-prints is the effect of age. Regarding its material I have received two different statements. The Rev. Magnus Bäcklund, Swedish Missionary in Kashghar, who has visited Khotan, informs me in a letter, dated the 29th June, 1898, that "it is made of the bark of the willow, softened in lye, and then taken up and beaten between flat stones, which of course, cannot be made so well as to prevent small pieces of bark remaining here and there." According to Munshī Aḥmad Dīn, of the Kashghar Agency, in a note written for me on the 19th December, 1898, "the Khotan paper is a very coarse stuff, chiefly composed of silk waste." In the sequel these classes and varieties of

paper are referred to as I, II, IIIa, IIIb, IIIc, and IIId respectively. The paper of the Pōthī (No. II of the First Set) I am doubtful in classifying, but it probably belongs to Class IIIb.

That these books were printed from blocks of type is apparent from the fact that the text is repeated over and over again, from page to page, the repetitions being facsimiles, as shown by measurements made by me (see below under the First Set). The type, cut on the block, was enclosed in a square of raised straight lines, and occasionally these inclosing lines are printed off along with the inclosed type; but as a rule they do not seem to have been inked, and only a few traces of them, here and there, are seen (as, *e.g.*, on Plates IX and X). The printing was not always carefully done; occasionally the blocks were inked too much, and the impressions are smudgy: at other times they were inked too little, and the impression is almost illegible. When the print is repeated on the same page, the impressions, for the sake of economy, were sometimes placed so close together as to cause the margins of the prints to run into one another and obliterate the letters. From the fact that sometimes one has to remove the rivets, in order to be able to read the whole of the impression, it is evident, that, as a rule, the sheets or pages were printed first before they were stitched or riveted into books. In some books, especially of the Fifth, Sixth and Seventh Sets, the paper appears to have been more or less strongly greased, before printing, possibly with the object of sizing it; but the process has sometimes had the effect of rendering the impressions almost illegible.

A regular system appears to have been observed in printing the xylographs. As already explained, the first and the last leaves of a book were always left blank, for the purpose of serving as a cover. For the same reason, the exterior pages of the second and penultimate leaves were also left blank. The printing almost invariably commences on the interior of the second leaf (*i.e.*, the 4th page of the whole book), and stops on the interior of the penultimate leaf (*i.e.*, the ante-ante-penultimate page of the whole book). There are a few exceptions, which will be noted in the detailed description; see, *e.g.*, No. VI of the First Set. Thus supposing a book had six leaves or twelve pages, the imprints would commence on the fourth page and stop on the 9th page; pages 1, 2, 3 and 10, 11, 12 being blank. With regard to the arrangement of the imprints on the pages, the principle (to which there are only a very few exceptions) was that they were placed alternately in an upright and reversed position. Whence it follows that, in reading a book, one would at first, read consecutively, throughout the book, all the upright impressions;

next, turning the book right round, one would commence at the back of the book, and read consecutively, right through the book, all the reversed impressions, which, however, would now of course, stand upright towards the reader. The subjoined Woodcut No. 11 illustrates this system, and the various modifications in which it is applied.³ The dotted lines in the diagrams signify the lines of type, and the letters *a* and *b* indicate the beginnings and endings respectively of the impressions of the text. In No. I, there are two impressions in each column, standing foot to foot; those in the upper halves of the pages standing upright, while those in the lower halves are reversed. In this book one would read, first, consecutively all the impressions in the upper halves of the pages, in regular order (4, 5, 6, 7, 8, 9, etc.), up to the end of the book. Next turning the book right round, in the direction of the arrows, and thus bringing the reversed impressions into an upright position, one



would read consecutively all the impressions (of the formerly lower half-pages) from the back to the beginning of the book, in regular order (etc., 9, 8, 7, 6, 5, 4). The same system, in another, slightly modified form,

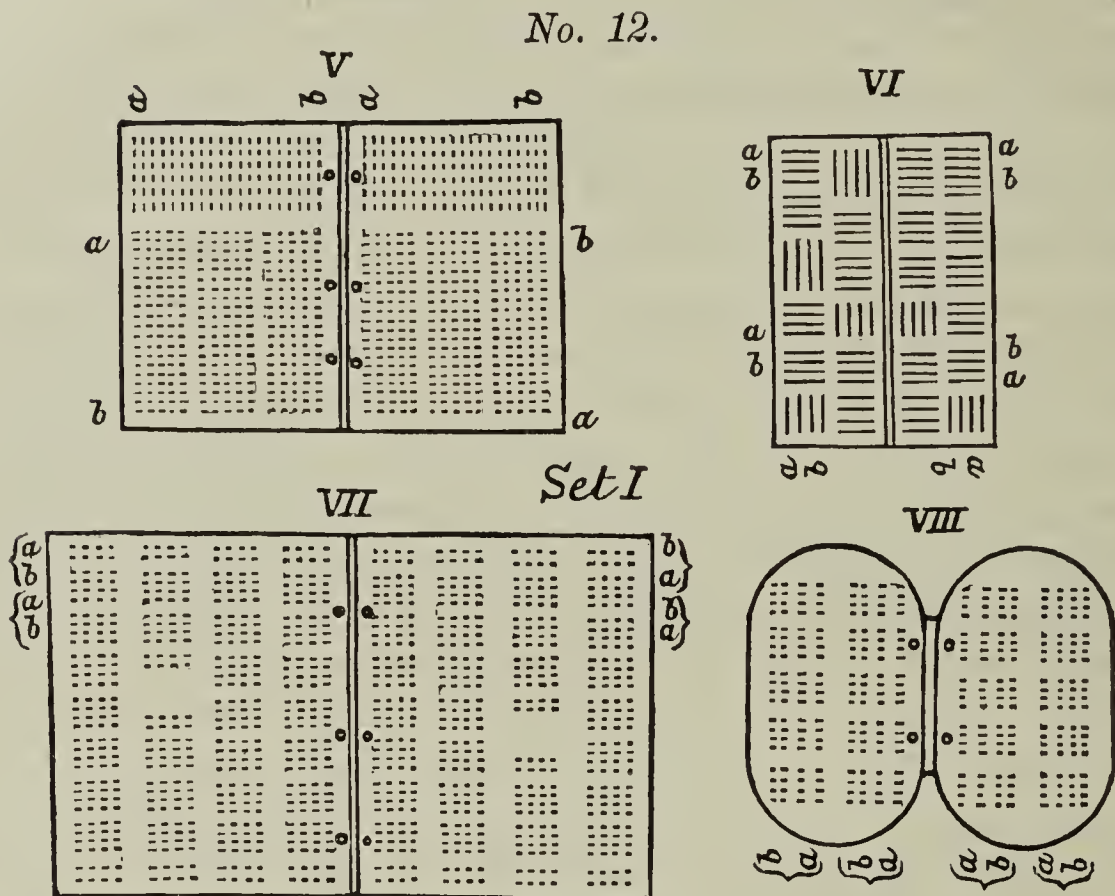
³ The Roman numbers in this and the following Woodcuts refer to the books of the First Set. The diagrams are drawn to the scale of 1 inch in the woodcut to 12 inches of the original.

is applied in Nos. II, III and IV. In these books the impressions stand upright on pages 4, 6, 8, etc., but reversed on pages 5, 7, 9, etc. In reading any of these three books, one would begin by reading consecutively all the even-numbered pages (4, 6, 8, etc.), throughout the book. Next, one would turn the book right round, as indicated by the arrows, and thus bring the imprints, which hitherto had stood reversed, into an upright position; and now, commencing at what was the end of the book, one would read consecutively all the odd-numbered pages (etc., 9, 7, 5) up to the original beginning of the book. The same system, again, in a third modified form, may best be seen in book No. II of the Seventh Set. Here the impressions do not stand upright and reversed on alternate pages, but in alternate columns, as shown in the diagram on page 55. Thus they stand upright in columns 1 and 3, but reversed in columns 2 and 4. In reading one would commence with all the left-hand columns consecutively throughout the book; then one would proceed to turn the book right round, and now read all the impressions (of the former right-hand columns) from the back to the beginning of the book. In this way the reading of the entire book would be completed. To this principle of arrangement there are only a few exceptions, in which all the impressions are placed upright (or in the same direction) throughout the book, so that the book can be read right through, from page to page, without turning it right round. This is the case in books No. IV of the Second Set, Nos. IV, V and VI of the Fourth Set, No. II of the Fifth Set, No. II of the Sixth Set, and No. IV of the Seventh Set.

There is, however, a certain number of books, in which the orderly arrangement of imprints, above explained, is not observed. In some of these books, indeed, no system of printing whatever can be discerned. The impressions appear to be placed promiscuously; the only apparent object being to crowd as many impressions into a page as it may, by any device, be made to hold. This may be seen from figs. V and VI of the subjoined woodcut No. 12. Two conspicuous examples of this kind of book are No. VI of the First Set, and No. III of the Sixth Set. With such an arrangement, obviously, no intelligent and orderly reading of the book is possible. Beside these there are some other books in which the absence of all orderly arrangement is not quite so conspicuous. In these the imprints are orderly placed on each page taken by itself; that is, on some pages they are all placed upright, on others, all are placed reversed; but these differing pages do not follow one another in any system. In any pair of pages one may meet with any of the four possible arrangements: upright-upright, upright-reversed, reversed-

Want of System.

reversed, and reversed-upright. All these four arrangements occur with



almost equal frequency. A good example of this kind is book No. V of the Seventh Set. In such books, too, any orderly reading is out of the question.

If it were certain what the object of these books was—whether they were, or were not, intended for reading,—the presence or absence of systematic arrangement of the imprints might afford a good test to determine the genuineness, or otherwise, of

the books. So long as their purport remains undeciphered, their object must be a matter of speculation; but the fact that they contain nothing but interminable repetitions of the same text seems clearly to indicate that in these books we are dealing with set formulas—creeds, prayers, or incantations, or whatever one may call them,—possibly or probably Buddhistic,—the virtue of which was supposed to be in proportion to the frequency of their repetitions. The mode of this repetition, however, need not necessarily have been an intelligent one: it might have been quite mechanical, like that of the prayer-wheel or the prayer-flag. Turning the leaves of a book would serve the purpose of the devotee quite as well as turning a wheel, or letting the flags be moved by the breeze. If this were the object of the books, it is evident that the order or want of order in the arrangement of the formulas would be altogether immaterial, provided the page is well covered with them. In any case, whether the leaves were intended to be read, or merely to be turned,

it is plain that there was no need of numbering them, seeing that, the contents being merely a repetition of a set formula, one might use the leaves in any order. As a matter of fact, none of these books have their leaves or pages numbered. The want of pagination is to be

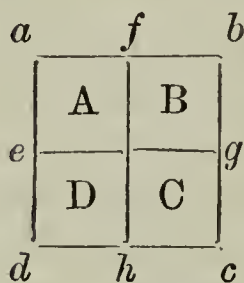
Want of Pagination. regretted, as the numbers might have served as a clue to distinguishing top and bottom of the page, and thus of determining the beginning and end of the formula imprinted on it. The large number of the block-prints and the multiplicity of the scripts contained in them open up another problem as to their object. It would seem that there existed somewhere in the Takla Makan a kind of library, or store of books, the locality of which seems to have been discovered by native treasure seekers, being perhaps an ancient monastery. Moreover the existence, among the block-prints, of collective books (such as comprised in the Sixth Set), which contain impressions of texts in several scripts, seems to show that in that place there must have been a collection of all the different kinds of blocks; and that the place, in fact, was a sort of printing establishment, for the production and distribution of books of (religious) formulas among communities or in localities, using different scripts, and perhaps speaking different languages or dialects.

Number and Identity of Scripts and Formulas. *Prima facie*, there are not less than nine different scripts employed in the block-prints. Accordingly I have distributed them into nine sets. It is not improbable that hereafter it may be shown that some of the scripts are allied to, if not identical with, one another; I mean in this way that one may be the kaligraphic counterpart of a current script. This may be the case, perhaps, with the two scripts shown on Plate V, for they agree in their number of lines. I believe also to have noticed, here and there, the same symbol, in slightly modified forms, in different scripts. In order to arrive at any definite and satisfactory conclusion on this head, a more detailed and minute examination is necessary, for which the time allowed me at present does not suffice, but for which I hope to have leisure after my retirement from India. With my present information, it appears to me likely that the scripts of the First and Second Sets, those of the Third and Fifth Sets, and those of the Fourth and Seventh Sets are pairs the members of which have some more intimate connection with each other. Further, it seems to me possible that the juxtaposition of several formulas in the collective books of the Sixth Set and elsewhere may lead to the recognition of some kind of identity obtaining among them with reference to their purport. As to the language, or perhaps the number of languages, hid in these scripts

and formulas, of course, it is impossible to venture to express any opinion, before some advance has been made in their decipherment.

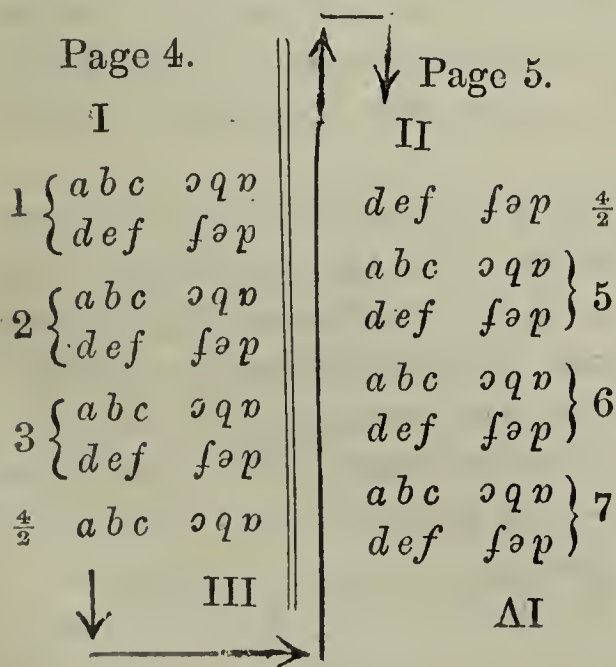
Some of the block-prints are furnished with guards which show in their ornaments a curious resemblance to a certain coin of one of the Urtuqīs of Māridīn. They may be seen on Plate IV, figs. 1–9; the coin also on Plate I, fig. 20. The coin is ascribed to 1232 A. D., see the Section on Coins, p. 31. If the resemblance is not deceptive, it will fix the upper date of the block-prints in question. They could not be older than the middle of the 13th century A. D. There is reason to believe, however, that some of the block-prints must be several centuries older. That there is nothing in the physical conditions of Eastern Turkistan to render such a long period of conservation impossible, I have already remarked in the Introduction, p. xxviii.

The question of what is top and bottom, right and left, of the text, or of the formulas composing the text, is a puzzling one. The determination of it would help to determine the further question of how the script of the texts is to be read, whether from the left to the right in the European fashion, or from the right to the left as in Semitic writing, or from top to bottom as in Chinese. I have not, as yet, come across any absolutely decisive evidence. In some books regularly recurring partial impressions of formulas are met with,—cases in which only a portion (one-half or one-third) of the formula, divided either horizontally or vertically or both ways, is met with. Want of sufficient space on the page is always seen to be the reason for such partial impressions. In such cases it may very plausibly be argued that, when the printer had not sufficient space to print the whole formula, he would preferably print the initial portion of it on the available space. On this assumption we should have an indication of what is the beginning or the end of a formula. Thus let $a b c d$ in the marginal diagram



represent such a complete formula, in which the lines of writing run parallel with $a b$ (as *e.g.* on Plate XII). If $a b g e$, that is, the formula horizontally divided, be the only portion printed, this may indicate that it is the initial portion of the formula. Similarly if $a f h d$, or the formula vertically divided, were only printed, this would show that portion to be the initial one. If further, both portions $a b g e$ and $a f h d$ were found regularly printed in certain delimited places, we should know for certain that the portion A contains the beginning of the formula, and that its reading must commence in the corner a , and proceed from a to b . It would still

remain uncertain whether the script run from the left (*a*) to the right (*b*) in European fashion, or from the top (*a*) to the bottom (*b*) in Chinese fashion. In other words, *a* might be either the upper left-hand or the upper right-hand corner of the formula. Similarly the beginning of a formula might happen to be found to lie in the portion B, in which case the script would run from the right to the left, in Semitic fashion. The two alternative possibilities, here explained, are those actually observed by me in the case of the formulas of the Fourth and Seventh and the formula of the Fifth Set respectively. The former seem to run from the left to the right, the latter from the right to the left. The weak point in this argument is not so much the fact that occasionally the opposite portions (*egcd* and *fbch*) of the formula are found printed; for this might be due to a careless misprint; and the detailed description of the various sets will show that misprints are by no means uncommon. A far more serious difficulty is the uncertainty as to whether the books were intended for reading at all. If they were not intended for reading, but for some kind of mechanical use, the circumstance of what particular portion of the formula was printed in order to represent the whole of it is obviously of no moment. But on the other hand, the regularity in printing a certain definite portion points to method and design, such as one would not expect in the case of printing for mere mechanical use. In the latter case one would expect the portions AB, AD, BC, CD to occur promiscuously. It seems, no doubt, certain that the disorderly books, above mentioned, such as No. VI of the First Set, cannot have been intended for intelligent reading, but, on the other hand, it is by no means certain that some other books may not have been prepared with that object. Book No. II of the Seventh Set is a case in point. The marginal diagram shows the arrangement of its imprints.



The formula is indicated by *abcdef*; it is repeated 7 times on the two pages 4 and 5; the fourth impression is divided between page 4 and page 5, about one-half of the formula standing on either of those two pages. The reader is supposed to read down the left-hand columns which stand upright. Having read down column I on page 4, to the middle of the 4th impression, he continues with the other half of that impression in column II on page 5. He then

turns the book, and similarly reads the remaining (formerly right-hand, but now also left-hand) columns III and IV. Such an orderly arrangement can hardly be explained on any other supposition than that of being made with a view to intelligent reading. Occasionally also anomalies are met with, the only satisfactory explanation of which seems to point to a similar conclusion. One such anomaly will be found discussed in the detailed description of book No. VI of the Fourth Set. It is on considerations such as these, that I have provisionally determined, and shown in the illustrative Plates, the top and bottom of the texts of most of the nine sets of block-prints, as well as the direction of the script of some of them, such as those of the Fourth and Seventh Sets. I do not claim for these determinations more than a provisional character. Very possibly a more minute and thorough examination of the block-prints, than the limited time at present at my command admits, may hereafter lead to more definite results.

The case, above discussed, of book No. II of the Seventh Set, is instructive on another point, namely, whether these block-print books are to be read from the left to the right, beginning with the first page, or from the right to the left, beginning with the last page or at the back of the book, to speak from the European point of view. From the diagram it will be seen that the reader first reads the pages (*i. e.*, columns I and II) from the left to the right (and so on, throughout the book), and then, turning the book right round, from the right to the left (*i. e.*, columns III and IV, and so on, throughout the book). It would, therefore, appear that there is really no right or left, beginning or end of the book, in the sense of the modern European practice. This conclusion seems to be confirmed by the books Nos. I and II of the Third Set, of which, to judge by the arrangement of the text (see the detailed description) No. I must be read from the left to the right, while No. II must be read from the right to the left. See also book No. V of the Second Set.

The question on which side of the page the process of printing commenced, whether on the right or left side, the top or bottom of it, is fairly easy to determine in many cases. When there is a broad, blank margin on one side of the page, while the print runs up to its very edge on the other side; or when a column of print begins with a complete impression of the formula on one side, and ends with a part-impression on the other side, it is fairly certain that the printer commenced his work on the former of the two sides. Books Nos. VI and VII of the Fourth Set afford a good illustration of this conclusion. The point is of

no great importance in itself; but it may in some cases prove auxiliary in determining the orientation of a script or text.

Considering the abundance of the block-prints and the mystery of their scripts, it is not surprising that the suspicion of forgery should suggest itself. It suggested itself to me at an early stage of my acquaintance with the Khotanese books; and I am informed that it has also suggested itself to some of the British Museum authorities and others. But it was not till the summer of 1898 that the suspicion took a more definite shape in a letter, dated the 29th June, 1898, which I received from Mr. Bäcklund, Swedish Missionary in Kashghar, in response to a request by me for information on the subject; for at one time, in the course of my examination of the block-prints my suspicion had been much strengthened by the observation of the extreme want of order in certain books. This result was subsequently neutralised by the observation of the striking consistency of order in other books. It became clear that, as I have already shown, both phenomena are quite compatible with a general genuineness of the block-print books; and in fact, all the evidence that gradually accumulated has tended to confirm that conclusion. Mr. Bäcklund's account is as follows:

“It is my duty to own that till quite recently I have scarcely taken any interest in that old Khotan literature. In April last [1898], however, Islām Akhūn brought to me three copies, which, according to what he told me, had been found in the neighbourhood of Aq Safil, buried under sand in a hollow tree, together with other books of the same kind. Some days before, he had sold two or three copies to Mr. Macartney also,⁴ but nevertheless he urged me not to say a word to Mr. Macartney about my acquisition. Upon my having a look at the books to discover whether they were print or hand-written, he felt somewhat uneasy and whispered, ““it is astonishing how attentively he is looking at the books.”” I offered him less than the half of what he asked, and he not only handed over to me the books without haggling, but also gave me into the bargain some old coins he had with him. When he had gone out, one of our servants, entering my room said, ““Sāhib, I want to tell you that these books are not so old as they are pretended to be. As I know how they are prepared, I wish to inform you of it. When I lived in Khotan, I wished very much to enter into the business, but was always shut out and could even get no information about the books. At last I consulted my mother

⁴ These are probably included among the eight books which were sent to me with a letter dated the 13th April, 1898. They were acquired from Islām Akhūn, but were stated by him to have been found in Kiang Tūz on the road to Cherchen.

about it; and she advised me to try and find it out of a boy with whom I was on very intimate terms, and who was the son of the headman of this business. So, one day I asked him, how they got these books, and he plainly told me that his father had the blocks prepared by a cotton-printer,"" etc. Now it is evident that the servant might have said all this from jealousy only, but I now determined to examine the books with more critical eyes than before. Then the following facts became clear to me immediately:

(1) The rich supply of books, which may be purchased at any price we are pleased to put on them, although every European traveller who has been in Khotan has taken a great interest in them, not mentioning the Russian Consul and Mr. Macartney who have bought what they have come across.

(2) The apparent freshness of them, as for instance—

- (a) the sharp corners of the copper plates and nails which are covered only with a very thin layer of rust;
- (b) no rust from the plates sticking to the paper under the plates;
- (c) the corners of the books quite square (not round, as they usually are in old books), and the edges recently out though in such a manner as to make them look old;
- (d) although without proper covers, the outside leaves as well as the leaves in general were well preserved, but one here and there destroyed *betwixt two fresh ones*;⁵
- (e) no yellow spots or marks of handling by readers, as usually occur in old books;
- (f) the paper, though very ill-treated (burnt and smoky), still strong almost as if it were new;
- (g) the paper exactly of the same kind, as prepared in Khotan in the present day.

Now if these books are forgeries, must not there have been some genuine ones, after which these are made? Certainly, I think so, especially in order to account for the characters. But I do not think they took the pains to copy any text—they may have or they may have not—of the original, but very likely put the letters in a preposterous way to make it look like writing. As for the hand-written ones, I have no particular opinion, as I have had no opportunity to examine them. But I do not think that it is at all impossible that they should be forgeries. You see I purchased the volumes I have spoken of—three of the longest that have been sold—for a total of Rs. 7, and certainly I paid too much. If they can get twice as much, very likely they would not hesitate to prepare actual manuscript."

⁵ The italics are Mr. Bäcklund's.

In a letter written by Mr. Bäcklund to Mr. Macartney, on the 8th April, 1898, the day after he had purchased the above-mentioned three block-print books, I find the following additional information:—"It has been communicated to me by a person, who is well acquainted with these things [apparently the servant above referred to], that these books are not old, but are continually made now-a-days also; and he pretends to know the printer also. The books are said to be prepared like this: after being printed, the sheets are hung up in the chimney in order to make them look old. They are now burnt in parts and covered with soot. When they have assumed as dark a colour as seems to be suitable, the soot is wiped off and the papers are nailed together into a book and taken out into the desert, where they are buried in the sand. Having remained there for some time they are "discovered" and brought out into the market in order to—make fools of the Europeans. Examine the paper in the books and you will find it quite of the same kind, as is produced in Khotan now-a-days; and the white spots in it here and there point it out not to be of an ancient date."

With regard to the three books, purchased by Mr. Bäcklund as related above, he informed me in a subsequent letter, dated the 10th October, 1898, that "as he considered them useless, he handed them over to an English traveller, Mr. R. P. Cobbold;" and that "soon after having got rid of them, a man offered him some very fresh prints, which he refused to take." The books thus obtained by Mr Cobbold afterwards passed into the possession of the British Museum, and I shall have occasion to refer to them again.

I quote these letters so fully, in order that the case of the forgery-theory may be stated quite fairly. To Islam Akhūn's behaviour and the servant's denunciation too much force should not be attached. They are nothing more but what may be expected under the circumstances. The points enumerated by Mr. Bäcklund are those deserving consideration. And here it should be noted, in the first place, that they only refer to Khotanese block-prints, not to manuscripts, and secondly, that they are based on a very limited number of specimens. Mr. Bäcklund admits—what indeed is obvious—that forgery presupposes the existence of a genuine original which was imitated. The suggestion is that a distorted imitation of this original was made purposely, and that that fact accounts for the mystery of the scripts. This does not seem a plausible hypothesis. No intelligible original, such as the suggestion assumes to have existed, has been produced; if it existed, the finder, surely, would have disposed of it first, and when his genuine stock was exhausted, he might then have had recourse to forgery to replenish his stock in trade. Something of this kind, indeed, as I imagine and as I shall presently

show, has probably actually happened ; but not in the way required by the hypothesis referred to. Moreover, as my detailed description of the block-prints shows the varieties of the (*ex hypothesi*) forged script are so numerous and so intricate as to require the allowance of a much longer time for their elaboration, than has actually passed since forgeries can have commenced, at most about ten years ago. The trade in forged prints could only have arisen with the advent of modern European travellers. The earliest of these is General Prjevalski who visited Khotan in 1885, and at that time these books were unknown and unthought of. The first objection, mentioned by Mr. Bäcklund refers to the cheap price of the books. This is a point which may be argued either way, and is usually considered to speak rather in favour of genuineness. Mr. Bäcklund obtained his three books for Rs. 7 ; but for some block-prints in the British Collection a rather good price has been paid. For the book G. 9 (Eighth Set) Rs. 40 were paid ; for the book G. 8 (No. VI in the Seventh Set) Rs. 45 ; for the two books in M. 5, Rs. 40 ; for the two books in M. 6, purchased from Badruddin, Rs. 40 ; for the four books in M. 6, purchased from Mr. Högberg together with a lot of antiques, Rs. 200. On the other hand, for the two sets of nine books in M. 7 and eight books in M. 8, only Rs. 40, each set, were paid ; and for the two books in M. 4 (*plus* sundry antiques) and the two books in M. 9 (also *plus* sundry antiques) even only Rs. 11-3 and Rs. 20 respectively. The fact is that latterly (early in 1898) when suspicion had once been aroused regarding the genuineness of these books, which tended to interfere with their saleableness, the dealers found it advisable to lower their prices. This is a question of demand and supply, and has little direct bearing on that of genuineness. It is quite possible that a large store of genuine books may have been discovered somewhere in the desert.

The second objection refers to the supposed freshness of the books. I have examined 44 books and my observations do not altogether agree with those of Mr. Bäcklund. There are distinct marks of old rust on the guards and beneath them in the case of some books ; in others the corners are by no means "quite square," but irregular and even round ; the leaves of some books (outside as well as inside) are in a very damaged condition and rotten, and show the dirty signs of having been handled ; some books are printed on a kind of paper which is quite unknown in Khotan.

The probability seems to be that latterly when the store of genuine old books gave out, an attempt was made to produce new ones by imitating some of the old genuine ones. The commencement of this attempt would seem to fall in 1897 ; and the books offered to Mr.

Bäcklund may have been part of the result of this attempt. Mr. Bendall wrote to me on the 15th July, 1898, "I have been comparing your pamphlet about the xylographs from Central Asia⁶ with a block-print recently acquired by the British Museum from Lieut. Cobbold. What is curious is that it is a duplicate of the book figured on your first Plate, but does not contain the writing between the two columns of print to which you call attention." This observation of Mr. Bendall very possibly gives the key to the situation. If there exist any forgeries, they are, in all probability, duplicates of genuine books that have been discovered. The preparation of a duplicate is probably well within the capability of a modern Khotanese forger, but the hypothesis that he is capable of inventing not only one but several scripts, and of intricate, but self-consistent systems of their arrangement in books, and finally of binding them after a method, quite unknown in Khotan at the present day, contains more elements of improbability than the hypothesis of the genuinenesses of the books.

The manufacture of duplicate block-prints postulates the existence of old blocks from which new ones may have been prepared, and from which (or from their new facsimiles) the modern reprints (if there are any) must have been made. I have shown in the description of the First and Second Sets, how utterly improbable it is that the blocks of type can have been invented by the forger. The overwhelming probability is that sets of old blocks of type have been discovered in the Takla Makan, and from these reprints may have been made. But moreover, actual old books printed from those blocks and representing each of the nine Sets must have been found. For the systems of printing and binding which are used in the books are unknown in Khotan in the present day, and imitations could not have been made, unless models had been found.⁷ Add to this not only that most of the books, though printed (as I believe) on Khotanese paper, are printed on varieties of it (*viz.*, IIIa b c) which are not known in Khotan at the present day; but also that there are others (as those in the Eighth and Ninth Sets) which are printed on paper of a kind which is not Khotanese at all. That some of the block-print books are printed on paper of the variety III d is quite true; but this fact, by itself, does not prove forgery; for it cannot be doubted (considering Oriental conservative habits)

⁶ Published in the *Proceedings* of the Asiatic Society of Bengal, for 1898.

⁷ An alternative hypothesis would be that no blocks have been found, but only books; and that from these books new blocks have been prepared, and then employed to print new books. The prints, however, as shown by measurements, are so accurate facsimiles, that considering the inveterate inaccuracy of Orientals this hypothesis of the imitation of new blocks from old prints seems excluded.

that the particular process of paper manufacture which is still followed in Khotan may have been in vogue there for centuries before. At all events, it cannot well be supposed that those books, which are printed on old paper of a kind never known, or no more known in Khotan, are modern Khotanese forgeries. If they are modern forgeries, they must have been forged somewhere else than Khotan; and this complicates the theory of forgery with additional improbabilities. Further, some of the books, admittedly or probably written on paper of Khotanese manufacture, exhibit peculiarities which it may safely be said, would not have occurred to a forger to introduce. I refer, for example, to the sketches of heads, which are found in books No. I of the Fourth Set and No. V of the Seventh Set,⁸ to the occurrence of the recensious *Ig* and *Ih* in book No. VIII of the Fifth Set, and to the Pōthī with its entirely Indian arrangement. Such books cannot well be forgeries.

Further, forgeries may be admitted to be quite possible in the case of block-prints, in the reprinting of which from genuine old blocks there is no serious difficulty. But it is different with manuscripts; and let it be noted, that there are not only fragments of manuscripts, but whole books—some of them fairly large books—of manuscript. The difficulties of forging these would be enormous. In this case there are no duplicates. There are, indeed, a fair number of them in the collection; but they are all different from one another. It would mean that they had all been forged, within a comparatively short time, from no models whatsoever. Some are written on paper which is not Khotanese at all; others are on paper, similar to that of some of the block-prints, but of a variety now obsolete (*viz.* IIIa). Some are bound in the Indian fashion of a Pōthī; others in the Khotanese fashion with copper pegs or twists of paper. These manuscripts cannot be forgeries; and *pro tanto* they make against the hypothesis of forgery in the case of the block-prints.

The mystery of the scripts—so many, and so intricately arranged—is, no doubt a difficulty. But to solve it by the hypothesis of forgery is only to substitute one riddle, and a harder one, for another. How can Islām Akhūn and his comparatively illiterate confederates be credited with the no mean ingenuity necessary for excogitating them? Moreover the riddle of one of the scripts, which occurs in two of the manu-

⁸ These sketches are not easily observable. The books were some months in my hands, before I discovered them, and I did so only on carefully examining them page by page. Their existence does not appear to have been known either to Mr. Macartney or to Islām Akhūn who sold them to him. It does not seem probable that a forger would have omitted to draw the buyer's attention to the existence of such a valuable peculiarity in his own handiwork.

script books written on Khotanese paper (variety IIIa), has been solved. In January 1898 I showed these books to Sir Charles J. Lyall, and he agreed with me that the script seemed to resemble Pahlavi and to be in verse. In December last, when I had an opportunity of showing them to Dr. Aurel Stein, who has made Iranian scripts and languages a special study, he at once recognized the Pahlavi script in verse. He even read some portions of it, though, of course, as will be readily understood by those who know the difficulties of reading unknown texts in Pahlavi, it was not possible for him, at such short notice, to determine what the purport of the text might be.

Finally to add a minor point, book No. VI of the Second Set, is a mere fragment. One cannot easily conceive why a forger should sell a portion of a forged book of a kind, of which he could with comparative ease fabricate a large number of complete copies; while it is perfectly natural that he should dispose of a genuine old book, even if he had found or secured only a portion of it.

To sum up, the conclusion to which, with the present information, I have come, is that the scripts are genuine; and that most, if not all, of the block-prints in the Collection also are genuine antiquities; and that if any are forgeries, they can only be duplicates of others which are genuine, and must be found among the books of M. 8 and M. 9 which are written on the III*d* variety of Khotanese paper. By duplicates, I do not mean such in point of size or variety of paper, but with reference to the arrangement of the impressions of the block, or blocks, on the pages. The determination of whether or not there are any such duplicates in the British Collection, must remain over for a future opportunity of examination of the block-prints.

In addition to the block-printed text, two books (No. IV of the First Set and No. III of the Second Set) contain additional small legends, inserted in blank intervals between the repetitions of the text. Their letters are larger than, and their direction sometimes different from, that of the surrounding text. They have every appearance of not being printed but written by hand. Their shape is irregular, and their ink is darker and does not look as if imprinted from type.

On the whole the block-print books are in a fairly good state of preservation. Some of them are much torn or otherwise damaged. Many of them bear stains of oil or other fatty substance; some also seem to have been exposed to the action of fire or water, as their leaves are found more or less strongly singed or rotten.

State of Preservation.

FIRST SET. (Plates V–VIII, XI and XIII.)

This set comprises eight copies, namely, one pōthī and seven books. Its text is also found on three pages of book No. II of the Second Set; and some portions of the text of it are also found on one page of book No. VIII of the Fifth Set and in book No. III of the Sixth Set.

The text consists of five portions, which comprise 5, 2, 7, 2 and 4 lines respectively, and which I shall distinguish as the formulas A, B, C, D and E. The total text, therefore, comprises 20 lines of type. Each line appears to contain from 10 to 13 letters.

The entire text of 20 lines, with the five formulas, arranged in the order above given, is found in four books (Nos. I, III, IV, V). One book (No. VI) and the pōthī (No. II) contain only the formulas A, C and E; with this difference, however, that in book No. VI the three formulas are arranged connectedly in the same order as in Nos. I, III, IV, V, only leaving blank intervals in the place of B and D; while the pōthī gives the three formulas A, C and E independently of one another, in no connected series and on different pages. Of the remaining two books, one (No. VII) gives only a portion of formula A, *viz.*, lines 1, 2, 4 and 5, omitting line 3; while the other (No. VIII) gives only a portion of formula C, *viz.*, lines 9, 11, 13 and 14, omitting lines 8, 10 and 12. In book No. III of the Sixth Set the same three formulas are found, but not in any connected series; *viz.*, (1) the formula A, mutilated as in No. VII, (2) the formula C, as in No. VIII, (3) a portion of formula E, *viz.*, lines 17, 18, 19, omitting line 20. The two formulas B (lines 6 and 7) and D (lines 15 and 16) have never been found by me separately from the entire text. These formulas, therefore, are found only in the books Nos. I, III, IV, V.

Accordingly the text of the First Set exists in the following eight forms or recensions, denoted by *Ia*, *Ib*, *Ic*, *Id*, *Ie*, *If*, *Ig* and *Ih*.

(1) The full text (*Ia*) of 20 lines, consisting of the formulas A, B, C, D and E, in a connected series. This is found in books Nos. I, III, IV, V; also in book No. II of the Second Set.

(2) The shorter text of 16 lines (*Ib*), consisting of the formulas A, C and E, with proportionate blank spaces for B and D; the whole in a connected series (as in *Ia*). This is found in book No. VI.

(3) The three formulas A (*Ic*), C (*Id*), and E (*Ie*), given separately, and forming no connected whole. In pōthī, No. II, also in book No. VI.

(4) The formula A (*If*), in a mutilated form, *viz.*, lines 1, 2, 4, 5. In book VII; also in book No. III of the Sixth Set.

(5) The formula C (*Ig*), in a mutilated form, *viz.*, lines 9, 11, 13, 14. In book No. VIII; also in book No. VIII of the Fifth Set and in book No. III of the Sixth Set.

(6) The formula E (*Ih*), in a mutilated form, *viz.*, lines 17, 18, 19. In book No. III of the Sixth Set.

I have carefully measured these various recensions of the text. The measurements were made vertically, horizontally and diagonally across the prints. I measured, in this manner, the whole text in all its forms, as well as groups of lines, single lines, half-lines, groups of letters and single letters. The result was invariably the same; the corresponding measures in the several books exactly agree, in whatever variation they may be taken. Thus measuring the recension *Ia*, from the top of the last letter of the first line to the bottom of the last letter in the last line (both on the left-hand side of the column, see Plate V), the distance is exactly 6 inches. Measuring similarly, the distances in the formulas A, C, and E are $1\frac{2}{5}$, $1\frac{9}{10}$ and $1\frac{1}{6}$ inches respectively; and again measuring similarly, the width of each of the intervals between A and C, and between C and E (within which the two formulas B and D are placed) is $\frac{3}{4}$ of an inch. Measuring the recension *Ib*, exactly the same result is obtained. This recension, as has been already explained, consists of the formulae A, C and E, with blank spaces for B and D. The distance from the top of A to the bottom of E, including the blank spaces, is exactly 6 inches; the width of each blank space is $\frac{3}{4}$ of an inch; and the widths of A, C and E are $1\frac{2}{5}$, $1\frac{9}{10}$ and $1\frac{1}{6}$ inches respectively. The widths of the latter three formulas or the three recensions *Ic*, *Id*, *Ie* (see Plates VI and VII), when they occur separately in the Pōthī (No. II), are precisely the same; and the same is the case with them in their mutilated forms *If*, *Ig*, *Ih* (see Plates XI and XIII). Thus in the recension *If*, a blank space is left, for the omitted line 3, between the lines 2 and 4; and measuring from the top of line 1 to the bottom of line 5, the distance is, as before, exactly $1\frac{2}{5}$ inches. It is evident, therefore, from these comparative measurements that the xylographs of the first set were all printed either from the very same block, or from a number of blocks with facsimile type.

It can easily be shown that the latter alternative is the true one, and that in all probability eight blocks have been employed in printing the xylographs of the first set. A block was prepared in this wise. From the smoothed surface of a rectangular (oblong) piece of wood the type was cut out in relief by counter-sinking the background. Along the edge of the piece of wood a thin ridge was also left in relief, enclosing the type and the counter-sunk background on all four sides. In order to take an impression the surface of the type was inked. Of course, the ridge was also inked, but this appears to have been done very imperfectly, for in no case did it give more than a very intermittent

impression, and in most cases it gave no distinct impression at all. Traces of the enclosing lines, made by the ridge, may be seen on Plates V, VII, XI and XIII. It is obvious that these enclosing lines afford a ready means for identifying a block. Sufficient of their traces remain to render it nearly certain that there was a separate block for each of the eight recensions of the text.

The blocks used for recensions Ia and Ib had the same dimensions. They were long, narrow slabs of woods, measuring $6\frac{1}{2}$ by $1\frac{1}{16}$ inches. There were no blocks of twice that width bearing two columns of type. This is proved by the fact, that when two impressions are seen side by side, their edges frequently touch or even overlap one another, showing that the impressions were taken separately one after the other, and not very carefully. Moreover occasionally when the impressions were taken wider apart, two parallel enclosing lines may be seen between the inner margins of the two prints. On the other hand, it is not probable that both recensions Ia and Ib can have been printed off the same block. For the blank spaces (for lines 6, 7, 15, 16) in Ib are quite clean: smudges would have been unavoidable from the old inked surface, even if the omitted lines had afterwards been left uninked. Moreover, though the surface of the blank spaces is clean, the enclosing lines can occasionally be seen continuing on both sides, and thus showing that the entire surface of the block had been inked. It follows that for recension Ib a separate block must have been used, in which the surfaces of the two blank spaces had been counter-sunk in order to prevent their being inked. Further it is not probable that the recension Ib can have been printed by using in combination three smaller blocks of type, containing the formulas A, C and E respectively. For (1) the width of the blank interval is always exactly the same ($\frac{3}{4}$ of an inch), (2) the enclosing lines right and left run perfectly straight, (3) there is never any trace of any top and bottom enclosing lines of the three blocks between the lines of type. These three facts (especially in combination) seem quite incompatible with the use of three blocks to print one text.

There were three blocks, one for each of the recensions Ic, Id and Ie. They must have measured about $1\frac{2}{3} \times 1\frac{1}{16}$, $2\frac{1}{3} \times 1\frac{1}{16}$, and $1\frac{2}{3} \times 1\frac{1}{16}$ respectively, as may be calculated from the slight traces of the enclosing lines discernible in a few places (see Plates VII, XI, XIII). The blocks for Ic and Ie must have been of the same or very nearly the same size. The recension Id, (*i.e.*, formula C) is printed six times on a page of the pōthī (see Plate VI), being arranged in two columns of three impressions each. That the page was not printed off two blocks, each containing a whole column of type, or off one block containing a double column of type, is evident from the fact that the six impressions do not keep in

straight line, but approach or overlap one another, both horizontally and vertically. The same remarks apply to recensions *Ic* (A) and *Ie* (E), each of which is printed eight times on a page of the Pōthī (see Plates VI and VII).

The two recensions *If* and *Ig* must have been printed from blocks of the same size as those for the recensions *Ic* and *Id*. The two pairs of recensions (*If* and *Ic*, *Ig* and *Id*) cannot have been printed from identical blocks; for the same reasons which (as explained above) show that the two texts *Ia* and *Ib* cannot have been printed off an identical block. The case is not quite so clear with regard to the recension *Ih* (formula E); for I have noticed occasionally smudges on the blank space corresponding to the omitted line 20. They look like very indistinct traces of the letters of that line, suggesting that its type existed on the block but had not been inked. In the blocks for *If* and *Ig*, the type of the omitted lines does not seem to have existed, the whole space corresponding to those lines being counter-sunk, excepting the ridge along the edges, traces of which ridge are still occasionally discernible (see Plate XI).

For the formulas B and D (that is, the lines 6 and 7, 15 and 16) there do not seem to have existed any separate blocks. So far as the evidence, at present available, goes, those two formulas were never printed separately, but only existed on the block for recension *Ia*.

The Pōthī is undoubtedly a genuine ancient relic. It possesses every mark of antiquity in point of general appearance and condition. It is unique in its form of an Indian *pōthī*. Its paper, which is hard, rigid, brittle and discolored, and its print which is faded, suggest considerable antiquity. In point of material and texture its paper is very similar to, if not identical with, the paper of the variety IIIb, on which many of the books are written, but it differs distinctly in colour, being more of a dirty greyish-brown, than of the dirty yellowish-brown of the books. With reference to this Pōthī Sir A. C. Talbot, in his demi-official letter, No. 5972, dated the 23rd October 1897, writes that "it might be of interest to note that the book enclosed between the rough wooden covers bears a strong resemblance to the religious manuscripts still used in the Hemis and other large monasteries of Ladakh; and that among the metal objects sent⁹ is what seems to be an old iron arrow-head, very like those with which the arrows in the treasure-rooms at Hemis are tipped. Possibly the excavation was made from the site of some former Buddhist monastery of which, according to Remusat, many must have existed in, and around, the Takla Makan." The evident antiquity of the Pōthī is

⁹ This arrow-head as well as the Pōthī were in the consignment M. 4.

a point of great importance ; for it is a guarantee of the genuineness of the text. Whatever degree of suspicion may attach to some of the books, they can only be forgeries in a modified sense. Their paper and the actual print may be modern, but their impressions must have been taken from ancient blocks. For, as I have shown, the blocks from which the books and the pōthī are printed, show identical sizes and facsimile types. It is almost demonstrable, therefore, that a set of ancient blocks of type must have been found, from which the books, if any are really modern fabrications, have been printed. The three blocks (for recensions *Ic*, *Id*, *Ie*, or the formulas A, C, E) from which the Pōthī was printed, must certainly have been found. It may be suggested that, with the help of these three blocks, the blocks for the other recensions might have been fabricated. But this would not account for the existence of the formulas B and D (lines 6, 7 and 15, 16) in recension *Ia*. It is very improbable that a forger, though he might have omitted portions of an existing text, would have gone beyond his pattern and invented new lines of type. The probabilities, therefore, decidedly are for the genuineness of the block of recension *Ia*. The preparation of facsimile blocks, from existing patterns, is not at all beyond the capabilities of a clever imitator ; and the genuineness of the blocks for the recensions *Ib*, *If*, *Ig* and *Ih*, which are only differentiated from those for *Ia*, *Ic*, *Id* and *Ie* by the omission of certain lines of type, might, therefore, be questioned ; but the occurrence of the recensions *Ig* and *Ih* on one page of book No. VIII of the Fifth Set (see Plate XI) renders the hypothesis extremely improbable. Such a solitary and casual insertion of an alien text in a book entirely devoted to a different text would hardly have occurred to a forger. Moreover the state of preservation of that book seems to stamp it as genuinely antique. On this point, however, further evidence is required. If once the writing is deciphered, and its purport understood, that knowledge may very possibly decide the question of genuineness. If it should be found that by the omission of a portion of it, the text is rendered unintelligible, that result might seem to prove that the blocks for the mutilated texts *Ib*, *If*, *Ig*, *Ih* are the work of an ignorant forger ; for, at the present day, neither the writing nor the language of these block-prints is understood in Khotan. On the other hand, it must be remembered that there is good reason to suppose that some of the books were not intended for intelligent reading, but merely for mechanical use.

As regards the determination of the question of what is the beginning and the end of the text, there is some indication given by the arrangement of the text in Book No. I. This book shows two columns on each page (see Woodcut No. 11), each column consisting

of two impressions of the full text (or recension Ia). These impressions are invariably¹⁰ placed so as to turn the same side towards the upper and lower edges of the book. It follows that that side of the impression (as shown in Plate V) must be its top or the beginning of the text; and that the feet, or ends, of the two impressions meet in the middle of each column and of the page. For it is natural to assume, that the reader was intended to commence reading at the top of the page, and not in its middle. Of course, on the supposition of a forgery, this conclusion would lose much of its force, as an ignorant forger might by chance have misplaced the impressions; but the peculiar placement of the imprints is so regular as to render such an hypothesis very improbable. Moreover there are other indications, such as the texture of the paper (see the General Remarks on paper), which make against Book No. I being a forgery.

No. I. Book. (Plate V.)

Belongs to M. 6. Acquired from the Rev. Mr. Högberg. Size, 12×9". Number of forms, 18; but first form is incomplete, the first blank leaf is missing: print accordingly commences on second page (properly fourth page). Moreover second and penultimate forms are double, consisting each of two folded sheets, one placed within the other, and, therefore, having each four leaves or eight pages. Accordingly number of leaves, 39. Paper, variety IIIa; fairly clean. Riveted with three copper pegs.

Contains recension Ia, printed in two columns on each page; each column consisting of two impressions, placed foot to foot, the upper one being complete (20 lines), the lower, more or less incomplete (as a rule 15 or 16 lines) owing to want of space. (See Woodcut No. 11). The foot-to-foot arrangement of the text is almost invariable. There are only four exceptional pages, on which it stands head to foot. The two varieties of arrangement may be represented thus:—

Ordinary, on 62 pages. Exceptional, on pp. 2, 46, 65, 75.

(1) $\begin{cases} abc & abc \\ def & def \\ ghi & ghi \end{cases}$

(2) $\begin{cases} \text{y}\beta & \text{y}\beta \\ f\text{p} & f\text{p} \end{cases}$

(1) $\begin{cases} def & def \\ ghi & ghi \end{cases}$

(2) $\begin{cases} abc & abc \\ def & def \\ ghi & ghi \end{cases}$

The second variety is obviously due to mere carelessness on the part of the printer. The first variety, which occurs 62 times, is clearly

¹⁰ There are only a very few, apparently accidental, exceptions, which are noted in the detailed description.

intentional. Its object evidently is to make it possible to read the book in the way previously explained in the General Remarks. The regularity of the arrangement seems to indicate that this book was really intended to be properly read. If it had been merely intended for mechanical use by turning the leaves, there would have been no necessity for observing any such strict regularity. It may be further noted that discounting the four exceptional and erroneous pages, one end of the text (indicated by *ghi* in the above diagrams) is always placed in the middle of the page, while the other end is invariably found at the top of the page, in whichever way the book is held. This circumstance seems to prove clearly, which line of the text must be considered its beginning.

The text is repeated four times on every page. There are only two exceptions, *viz.*, pages 48 and 63. On page 48 there are only two impressions, while page 63 has only one. The remainder of the space is occupied with legends in an apparently different alphabet, but which may also be only a written or "current" form of the printed one. They are shown on Plate V, and are evidently not printed from a block, but written by hand.

No. II. Pōthī.

Belongs to M. 4. Brought from Khotan, together with No. VI and other objects; the whole purchased for Rs. 11-3-2. Size, $8\frac{1}{2} \times 4\frac{7}{8}$ inches.¹¹ Number of forms 45. Leaves of a curious, bottle-shaped form, see Plates VI-VIII; reminding one of the manuscript book found under the skull (see Introduction, pp. xxi). Bound, in the Indian fashion, between two rectangular (not bottle-shaped) blocks of wood, measuring $8\frac{1}{2} \times 4\frac{3}{4} \times 1$ inches, and rough and uneven on the outer, but planed on the inner surfaces; and exceedingly dry and light of weight. Riveted like an Indian copper-plate grant, on the left-hand, narrow side of the oblong, by means of one copper peg, which passes through the "neck" of the bottle-shaped leaves. Paper, of a dirty greyish-brown color, and hard, stiff, and brittle and in many leaves badly fractured; also with many fatty stains and occasional burns. The whole appearance very suggestive of genuine antiquity.

Contains recensions *Ic*, *Id* and *Ie*, printed separately on different pages, and arranged in two columns, so that there are six impressions of recension *Id* (formula C), and eight impressions each of recensions *Ic* and *Ie* (formulas A and E) on a page. Recension *Id* (C) occurs most frequently; *viz.*, on forms 1, 2, 6, 7, 9-12, 13 (pp. 2, 3, 4), 14-18, 20-24, 25 (pp. 1-3),

¹¹ The middle of the pages of the pōthī slightly projects beyond the edges of the blocks.

27, 28, 29 (pp. 2, 3), 30, 35, 36, 38–42, 44 and 45. Recension Ic (A) comes next, on forms 3, 4, 8, 19, 25 (p. 4), 26, 29 (pp. 1, 4), 31–34 and 43. Recension Ie (E) only occurs on the forms 5, 13 (p. 1), and 37.

As a rule, the lines of print run parallel with the narrow side, and accordingly the columns run parallel with the longer side of the page (see Plate VI). There is only one exception in which the lines of print run parallel with the longer side, and accordingly the columns (which in this case are four in number) with the narrow side of the page (see Plate VII); this is the first page of the 33rd leaf. On two pages there is an altogether exceptional arrangement, which may be shown thus:¹²—

Leaf 13, page 1.	Leaf 33, page 3.
o o e e e	o o
o o	ccc ccc o o
o o e e e	o o
e e e e e e	o o
e e e e e e	ccc ccc o o
e e e e e e	o o

These three exceptional pages would seem to have been trial pages, to find out the best way of disposing the impressions on the page.

As a rule the columns of the text are arranged so that they stand turned towards the inside (*i.e.*, the neck-like, peg-hole side of the page), either head to head or foot to foot. There are altogether 86 pairs of printed pages, 43 pairs inside and 43 pairs outside the “forms.” Out of these 86 pairs, 78 have the columns of text thus arranged, *i.e.*, head to head or foot to foot. In the remaining eight pairs, the foot of the column on one page adjoins the head of the column on the other page; and the arrangement on these exceptional pairs is clearly due to carelessness on the part of the printer. Again among the 78 pairs which have the normal arrangement, 37 have the heads of their columns turned inside, *i.e.*, towards the peg-hole side, while 41 have the feet of their columns turned inside.¹³ The pairs are nearly equally

¹² *ccc* denotes recension Ic, and *eee* denotes recension Ie.

¹³ In terms of “forms” the distribution stands thus. There are 45 forms. In 2 forms (first and last) only one page is printed. Of the remaining 43 forms, 14 have the head of the text turned inside; 17 have it outside; of 6 others, 2 have the head inside on their interior side, but outside on their exterior side, and 4 have the head outside on the interior, but inside on the exterior; of the remaining 4 forms, 2 have the head inside on the interior and no order on the exterior, while 1 has the head outside on the exterior, but no order on the interior side, and 1 is exactly the reverse of the last-mentioned; (14+17+6+4=41). Obviously the last-mentioned 10 forms (6+4) might be folded the other way, and then would show the exact reverse of their present condition. The remaining two forms have no order, either on the interior or exterior side (41+2=43).

divided between the two systems. But what is puzzling is that the pairs of these two systems, in their present succession, do not follow in any intelligible order (*e.g.*, first the 37, and afterwards the 41, or *vice versa*), but they succeed one another pell-mell. If either system had been followed throughout, or if the whole of the pairs of one system had followed the whole of the pairs of the other system, an intelligible order of reading would have resulted; one might have read first one set of alternate pages, and then turning the book right round, one would have been able to read the other set of alternate pages. As it is, the condition of the book suggests that it was not really intended to be read intelligently, but to have its leaves turned mechanically. As the leaves, however, are not numbered, and their serial succession is not fixed, it is possible that the leaves do not now stand in their original order. The latter might have been (say) first 41, then 37, and the break of uniformity might have been due to a *lapsus* on the part of the printer.

No. III. Book.

Belongs to M. 6. Acquired from the Rev. Mr. Högberg. Size, $8 \times 5\frac{1}{2}$ inches. Number of forms 22. Paper, variety IIIb. One leaf (23rd) damaged by two holes. Extensive fatty stains on many pages. Riveted with three copper pegs.

Contains recension Ia, printed in two columns on each page and standing upright and reversed on alternate pages; thus upright on pages 4 and 6, but reversed on pages 5 and 7, and so forth.

No. IV. Book.

Belongs to M. 5. Size, $11\frac{1}{2} \times 8''$. Number of forms, 30, all cut into separate leaves. Paper, variety III b. Twenty leaves, more or less damaged by holes, evidently due to singeing. Many pages soiled with extensive fatty stains. Riveted with three copper pegs.

Contains recension Ia, printed in two columns on each page, with a wide interval; each column consisting of two impressions; accordingly the full text, four times on each page; but reversed on alternate pages; see Woodcut No. 11. The arrangement of the columns is similar to that in No. II, Pōthi. As a rule, they stand either head to head, or foot to foot, on any pair of juxtaposed pages. There are altogether 57 such pairs. Taking their present order of succession, on 19 of them the columns stand head to head, and on 29, foot to foot; while on the remaining 9 this arrangement is not observed, the position being head to foot. Seeing, however, that the forms are all cut into separate leaves, those leaves on which the exceptional nine pairs stand, may be easily arranged so as to preserve the

regular arrangement. If this is done, we obtain 22 pairs head to head, and 35 pairs foot to foot (total 57). Each of these two sets may easily be read by observing the principle, previously explained, of reading by alternate pages; and the break of uniformity between the two sets may be due to inadvertence on the part of the printer.

Within the intervals, in the centre of the page, additional small legends are inserted, consisting of 4 to 7 letters, double the size of the text, and running at right angles to the latter. They are not seen on every page, but as a rule only on the two outside pages of each form; thus on pages 5 and 8, 9 and 12, and so forth. On eight forms (*viz.*, 5, 8, 14, 16, 21, 24, 26) they occur on the two inside pages; thus on pages 18 and 19, 30 and 31, and so forth. In one form, the 22nd, they are omitted altogether. In the initial and final forms (on which three pages are blank), of course, they occur only once; *viz.*, on pages 4 and 117.

No. V. Book.

Belongs to M. 3. Purchased in July 1897 from Badruddin, an Afghan merchant in Khotan. Size, $11\frac{1}{4}$ by 8 inches. Forms all cut through at the back with a blunt instrument; hence all leaves separate, numbering 39; initial leaf missing. Paper, variety IIIb. Extensive fatty stains on most pages; many damaged by burns. Bound with three twists of paper.

Contains recension Ia, printed on each page in one horizontal column above and three vertical columns below, making four impressions on each page (see Woodcut No. 12). The three vertical columns always stand in the same position towards one another, but vary in their position towards the horizontal column, having sometimes their head, sometimes their foot towards it. The position of the horizontal column varies in having sometimes its head, sometimes its foot turned to the outer margin of the book. The whole yields a great variety of arrangements, in the choice of which no order is discernible. It is impossible, therefore, to read the book in any intelligent order, and it would seem to be intended for mere mechanical use.

No. VI. Book.

Belongs to M. 4. Brought from Khotan, together with No. II, *q. v.* Size, $11\frac{1}{2} \times 4\frac{1}{4}$ ". Number of forms, 31. One blank leaf is torn off, and missing; hence only 63 leaves. Total of printed pages 126 instead of 124; because, contrary to the usual order of these books, the print commences on the 3rd page instead of the 4th page; similarly printing continues to the ante-penultimate page, instead of stopping, as usual, on the ante-ante-penultimate page. Paper, variety

IIIa. Extensively soiled with fatty stains, and damaged by burns. Bound with three twists of paper.

Contains recension *Ib*; also recensions *Ic*, *Id*, *Ie*, printed in two columns on every page. The arrangement of the text of these recensions on the pages is of the wildest kind; there is no discernible order whatsoever. The following diagrams of 19 different arrangements, which I have noticed, will give a good idea of the disorder. Recension *Ic* (formula A) is indicated by *aaa*, *Id* (C) by *ccc*; *Ie* (E) by *eee*; and *Ib* by the corresponding (bracketed) combinations of these three notations. The latter are represented in the same direction in which the recensions are printed in the book.

I. (pp. 1, 2.) ¹⁴	II. (pp. 3, 6.)	III. (p. 4.)	IV. (pp. 5, 8, 9, 15, 18, 19, 22, 24, 25, 27, 35, etc.)
$\left\{ \begin{array}{ll} \text{\textit{a\textbar{a}a}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{c\textbar{c}c}} & \text{\textit{c\textbar{c}c}} \\ \text{\textit{v\textbar{v}v}} & \text{\textit{e\textbar{e}e}} \end{array} \right.$	$\left\{ \begin{array}{ll} \text{\textit{c\textbar{c}c}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{c\textbar{c}c}} \\ \text{\textit{c\textbar{c}c}} & \text{\textit{e\textbar{e}e}} \end{array} \right.$	$\left\{ \begin{array}{ll} \text{\textit{e\textbar{e}e}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{c\textbar{c}c}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{v\textbar{v}v}} \\ \text{\textit{c\textbar{c}c}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{v\textbar{v}v}} & \text{\textit{c\textbar{c}c}} \end{array} \right.$	$\left\{ \begin{array}{ll} \text{\textit{v\textbar{v}v}} & \text{\textit{v\textbar{v}v}} \\ \text{\textit{v\textbar{v}v}} & \text{\textit{v\textbar{v}v}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{c\textbar{c}c}} & \text{\textit{c\textbar{c}c}} \\ \text{\textit{v\textbar{v}v}} & \text{\textit{v\textbar{v}v}} \end{array} \right.$
V. (pp. 7, 10, 16, 17, 20, 21, 23, 26, 36, etc.)	VI. (p. 11.)	VII. (p. 12.)	VIII. (p. 13.)
$\left\{ \begin{array}{ll} \text{\textit{a\textbar{a}a}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{c\textbar{c}c}} & \text{\textit{c\textbar{c}c}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \end{array} \right.$ $\left\{ \begin{array}{ll} \text{\textit{a\textbar{a}a}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{c\textbar{c}c}} & \text{\textit{c\textbar{c}c}} \end{array} \right.$	$\begin{array}{ll} \text{\textit{a\textbar{a}a}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{e\textbar{e}e}} \end{array}$	$\begin{array}{ll} \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \end{array}$	$\begin{array}{ll} \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{e\textbar{e}e}} \end{array}$
IX. (p. 14.)	X. (p. 28.)	XI. (p. 29.)	XII. (p. 30.)
$\begin{array}{lll} \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} & \text{\textit{e\textbar{e}e}} \end{array}$	$\left\{ \begin{array}{ll} \text{\textit{a\textbar{a}a}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{c\textbar{c}c}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{v\textbar{v}v}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{e\textbar{e}e}} \\ \text{\textit{c\textbar{c}c}} & \text{\textit{e\textbar{e}e}} \end{array} \right.$	$\left\{ \begin{array}{ll} \text{\textit{a\textbar{a}a}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{c\textbar{c}c}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{v\textbar{v}v}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{a\textbar{a}a}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{c\textbar{c}c}} & \text{\textit{a\textbar{a}a}} \end{array} \right.$	$\left\{ \begin{array}{ll} \text{\textit{v\textbar{v}v}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{v\textbar{v}v}} & \text{\textit{c\textbar{c}c}} \\ \text{\textit{v\textbar{v}v}} & \text{\textit{v\textbar{v}v}} \\ \text{\textit{v\textbar{v}v}} & \text{\textit{a\textbar{a}a}} \\ \text{\textit{v\textbar{v}v}} & \text{\textit{c\textbar{c}c}} \end{array} \right.$

¹⁴ The numbers refer to printed pages. Thus printed page 1 = page 3 of the book.

XIII. (pp. 31, 34.) XIV. (pp. 32, 33.) XV. (p. 83.) XVI. (p. 113.)

$\left\{ \begin{array}{ll} aaa & \textcircled{a} \textcircled{a} \\ ccc & \textcircled{c} \textcircled{c} \\ eee & vvv \end{array} \right.$	$\left\{ \begin{array}{ll} \textcircled{a} \textcircled{a} & aaa \\ \textcircled{c} \textcircled{c} & ccc \\ vvv & eee \end{array} \right.$	$\left. \begin{array}{ll} ccc & ccc \\ ccccc & eee \\ ccccc & aaa \end{array} \right\}$	$\left. \begin{array}{ll} aaa & eeeee \\ aaa & eeeee \\ aaa & eeeee \\ aaa & eee \end{array} \right\}$
$\left\{ \begin{array}{ll} aaa & aaa \\ ccc & ccc \end{array} \right.$	$\left\{ \begin{array}{ll} aaa & aaa \\ ccc & ccc \end{array} \right.$	$\left. \begin{array}{ll} ccc & ccc \\ eee & eee \end{array} \right\}$	

XVII. (p. 114.) XVIII. (p. 115.) XIX. (p. 116.)

$\left. \begin{array}{ll} eee & ccc \\ eee & eee \\ eeeee & \textcircled{a} \textcircled{a} \\ eeeee & \textcircled{c} \textcircled{c} \\ eeeee & vvv \end{array} \right\}$	$\left. \begin{array}{ll} eeeee & ccc \\ eeeee & eee \\ eeeee & \textcircled{a} \textcircled{a} \\ eee & \textcircled{c} \textcircled{c} \\ eee & vvv \end{array} \right\}$	$\left. \begin{array}{ll} vvv & eee \\ vvv & eee \\ vvv & vvv \\ vvv & vvv \\ vvv & \textcircled{a} \textcircled{a} \\ vvv & \textcircled{a} \textcircled{a} \end{array} \right\}$
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Fourteen of these variations occur within the first 36 printed pages alone. It is obvious that with such a planless arrangement of the texts no proper reading of the book is possible. It can have been intended only for mechanical use.

No. VII. Book.

Belongs to M. 7. Acquired by Mr. Macartney, together with eight other books, from Islām Akhūn for Rs. 40. Said to have been found in a half-buried house in Aq Talā Tūz, see Introduction, p. xvii. Size, $13 \times 11\frac{1}{2}$ ". Number of forms, 39. Paper, variety IIIc. Many leaves bear fatty stains, and a few are damaged by burns. Riveted with three copper pegs; the guards consisting on one side of irregular quadrangular pieces, about $2\frac{1}{2}$ " square, cut from an ornamented plaque, similar to those shown in Plate IV, fig. 1, on the other side of circular pieces, about $1\frac{1}{4}$ " diameter, resembling a coin (see Plate IV, figs. 2-9). Printing very carelessly done. The block was not properly inked, the impressions are very faint; moreover they are not properly adjusted; not unfrequently one or two lines of two successive impressions are printed over one another; often the columns are not kept straight.

Contains recension If, i.e., lines 1, 2, 4, 5 of A, printed in four columns on each page, each column (except the second) consisting of seven or eight impressions; but in the second column on each page

(counting from the outer margin of the page) one impression, being the fifth of the series of eight, is omitted, leaving a square blank. To this rule there are only very few exceptions: on one page (form 23, page 1) I have observed only three columns; and on four pages (f. 21, p. 4; f. 30, p. 4; f. 33, p. 3; f. 37, p. 4) there is no blank space; and on one page (f. 13, p. 4) the blank space takes the place of the third impression of the series of eight. On each page the four columns stand in the same position towards one another, either all four upright, or all four reversed; but there is no order whatever with regard to different pages; on one page, all four columns may be upright, on the next page they may again be all upright or they may be all reversed. No. VII in Woodcut No. 12 will give some idea of the arrangement of the text on the pages of this book. In five places an altogether different text is printed in the blank space, and the print of this text, with one exception (on form 22, p. 1), always runs at right angles with the proper text of the book. These five places are: form 4, pp. 2, 3; f. 22, pp. 1, 4; f. 23, p. 4; f. 27, pp. 2, 3; f. 29, pp. 2, 3. The text, thus introduced, is formula A of the Second Set.

No. VIII. Book.

Belongs to M. 7. Found and acquired in the same way as No. VII, *q.v.* Size, $10\frac{1}{2} \times 6\frac{3}{4}$ ", but elliptical in form, as shown in Woodcut No. 12. Number of forms, 44. The usual three blank pages are wanting at one end of the book; on the other hand there is in the middle of the book one form with three blank pages, from which it would seem that in binding the book the final form has been misplaced. Paper, variety IIIc. Numerous fatty stains, and a few burns. Riveted with two copper pegs only, the guards being small elliptical (about $1 \times \frac{5}{8}$ ") pieces, cut from a plaque, similar to the round pieces shown in Plate IV, figs. 4-9.

Contains recension I_g, *i.e.*, lines 9, 11, 13, 14 of formula C, printed in five columns on each page, each column consisting as a rule of two impressions; therefore ten impressions of the text on each page. Exceptionally $2\frac{1}{2}$ impressions are found on a few pages. As a rule the columns are turned head to head on two adjoining pages; out of a total of 84 pairs of such pages, that arrangement is found in 58 pairs. In 6 other pairs the columns are turned foot to foot. In the remaining 20 pairs, the foot of the columns on one page is turned towards the head of the columns on the adjoining page.

SECOND SET. (Plates IX, X, XIII and XIV.)

This set comprises six books. Some portions of the text are also found in the three books of the Sixth Set, and in book VII of the First Set. A detailed description of this second set, illustrated by two Plates (Nos. I and II), was published by me in the *Proceedings* of the Asiatic Society of Bengal, for April, 1898 (pp. 124–131). I shall, therefore, here content myself with a briefer account, but correcting some errors and adding such information as I have been able to glean in the meantime.

The text, occurs in two different recensions, a shorter one of 12 lines and a longer of 13 lines, which I shall denote respectively by *IIa* and *IIb*. The shorter recension *IIa* (see Plates IX, fig. 2 and X, fig. 1) has its text arranged in two columns, with a wide interval, running vertically, while another wide interval intersects the two columns horizontally between the 7th and 9th lines. The two intervals thus present the shape of a cross. The longer recension *IIb* (Plate X, fig. 2) fills up these cross-shaped intervals with additional texts. It consists, therefore, of three columns, the additional column being placed in the vertical interval, and of thirteen lines, the additional line occupying the horizontal interval. It will be noticed that there are a few differences in the type of the two recensions, *e.g.*, in the first letter of lines 6 and 7; but this may be, merely due to imperfect inking. Recension *IIa* is found in books I–III and recension *IIb* in books IV–VI.

The shorter text *IIa* which is common to both recensions, consists of six portions or formulas, which I shall distinguish as A, B, C, D, E and F. The formulas A, B, C comprise lines 1, 2, 3–5, 6, 7–9, 10, 11, 12, 13 of column I respectively, while formulas D, E, F are made up of the corresponding lines of column II. The 4th line appears to be an additional one, inserted into what must have been originally an interval, similar to the additional line inserted, in the longer recension *IIb*, into the still existing horizontal interval. It would seem that a third recension must have existed, which possessed two horizontal intervals, between lines 3, 5 and 7, 9 respectively. I have not, however, met with this third recension in any book. Of the six formulas, C (*i.e.*, lines 9–13 of column I) is found in books Nos. I and II of the Sixth Set (see Plate XIV), while formulas A, B, D, E (each consisting of three lines) are found in book No. III of the Sixth Set, and formula A is also found in book VII of the First Set (see Plate XIII). As yet the formula F has not been found by me separately in any book.

For printing these several texts seven different blocks must have been in use: one for recension *IIa*, another for recension *IIb*, and five more for the five formulas A, B, C, D, E. This is clearly shown by the enclos-

ing lines which still exist. These lines, *e.g.*, are seen running right round the two columns of recensions IIa and IIb, see Plates IX and X. They are also seen enclosing each of the five formulas A, B, C, D, E, see Plates XIII and XIV. As shown by these lines, the dimensions of the blocks must have been about $1\frac{3}{4} \times 1\frac{5}{8}$ " for A, $2\frac{3}{8} \times 1\frac{3}{8}$ " for C, $2\frac{1}{8} \times 1\frac{1}{4}$ " for D, and $1\frac{5}{8} \times 1\frac{1}{4}$ " for E. The additional portions, *viz.*, the middle column III of recension IIb, line 4 of recensions IIa and IIb, and line 8 of recension IIb, do not appear to have been printed separately; nor is there any evidence to show that separate blocks existed for printing them.

It is probable that once there existed three blocks: (1) a block holding a text of 11 lines, omitting line 4 of recension IIa, and therefore showing two blank intervals and presenting the shape of a double cross; I may call this recension IIc; (2) a block holding a text of 12 lines, with one blank interval, in the shape of a single cross, being recension IIa; (3) a block holding a text of 13 lines, with no blank interval, being recension IIb. No book, exhibiting recension IIc, has come to light. The block for it, therefore, cannot have been found by the treasure-seekers. If it had been found, it is morally certain (on the assumption of forgery) that books would have been printed with it and brought into the market. But, the block for recension IIc not having been found, it is difficult to understand, on the one hand, how the existence of recension IIa, should have suggested to a forger to omit line 4 and manufacture blocks for A, B, D, E; or, on the other hand, how the separate existence of A, B, C, D and E should have suggested to a forger to combine them into one text IIa, and manufacture a block for it, containing the intermediate line 4 and a blank interval between lines 7 and 9; or again, to combine them into an alternative text IIb and manufacture for it another block containing the two intermediate lines 4 and 8. One can imagine a forger omitting extant lines, but not inventing new lines for which he has no pattern. Add to this that the formula F has never been found printed separately; so that the forger would have had to invent, for the recensions IIa and IIb, not only the intermediate lines, but also the whole formula F. The improbabilities of such a theory are overwhelming. It follows, therefore, in the alternative, that either the books are genuine—or that at least the original blocks must have been found for the recensions IIa and IIb as well as for the formulas A, B, C, D and E. From these original blocks, of course, books might have been printed; but the forgery could have extended no further.

With regard to the question of the beginning and end of the text, book No. III affords a similar test to that in book No. I of the First Set. In that book one end of the text is always turned towards its upper and lower edges, whence it may be concluded that that end

holds the beginning or the top-line of the text. On the Plates the text is represented in the position thus indicated.

One book, No. III, of this Set, as will be shown below, is provided with additional small legends, similar to those in Book IV of the First Set.

No. I. Book.

Same as "Block-print β " in *Proceedings*. Belongs to M. 3. Size, $6\frac{3}{4} \times 4$ ". Number of forms, 38. Riveted with three copper pegs, which are held in position by two copper slips, running in front and at the back of the book, along its longer side, and measuring $6\frac{3}{4} \times \frac{3}{8}$ inches. Paper, variety IIIa. Fatty stains on many leaves; no marks of burning or singeing.

Contains recension IIa, printed once on every page, and standing upright and reversed on every second or third form; thus upright on forms 1, 2, 5, 6, 7, 9, 11, 14, 17, 19, 21, 23, 25, 27, 28, 31, 32, 35, 36, 38; reversed on forms 3, 4, 8, 10, 12, 13, 15, 16, 18, 20, 22, 24, 26, 29, 30, 33, 34, 37.

No. II. Book. (Plate IX, fig. 2.)

Same as "Block-print α " in *Proceedings*. Belongs to G. 7. Size, $11\frac{1}{4} \times 7\frac{3}{4}$ ". Number of forms, 32. Peculiar in having covers of paste-board, made of four ordinary leaves pasted together. Paper, variety IIIb. Most pages stained, and singed or burned. Bound with three copper nails.

Contains recension IIa, printed in three columns on each page; each column consisting of one impression; accordingly the text three times on each page, but reversed on alternate pages, *i.e.*, turned foot to foot, similar to the arrangement of book No. IV of the First Set (Woodcut No. 11). With the exception of one form, the columns of the text are printed parallel to the narrower side of the book, so as to turn their foot towards the inner margin of the book, and so close together that their edges touch, and sometimes overlap one another. The exceptional form is the 22nd. It bears on page 1-3 also impressions of recension Ia of the First Set; and the impressions of the two different texts, indicated in the subjoined diagrams by the letters *dc ba* and the numerals 321 respectively, are arranged as follows; the inner margin of the page being indicated by parallel lines.

1st page. (Plate IX).

321	<i>dc</i>	<i>ba</i>
654	<i>hg</i>	<i>fe</i>
987	<i>ml</i>	<i>ki</i>
<i>ml ki</i>	<i>hg fe</i>	<i>dc ab</i>

2nd page.

286	<i>dc</i>	<i>ba</i>
759	<i>hg</i>	<i>fe</i>
128	<i>ml</i>	<i>ki</i>
<i>286</i>	<i>dc</i>	<i>ba</i>
<i>759</i>	<i>hg</i>	<i>fe</i>
<i>128</i>	<i>ml</i>	<i>ki</i>

3rd page.

321	<i>dc</i>	<i>ba</i>
654	<i>hg</i>	<i>fe</i>
987	<i>ml</i>	<i>ki</i>
<i>321</i>	<i>dc</i>	<i>ba</i>
<i>654</i>	<i>hg</i>	<i>fe</i>
<i>987</i>	<i>ml</i>	<i>ki</i>

4th page.

<i>321</i>	<i>dc</i>	<i>ba</i>
<i>654</i>	<i>hg</i>	<i>fe</i>
<i>987</i>	<i>ml</i>	<i>ki</i>
<i>321</i>	<i>dc</i>	<i>ba</i>
<i>654</i>	<i>hg</i>	<i>fe</i>
<i>987</i>	<i>ml</i>	<i>ki</i>

Contains recension IIb, printed once on each page, but, exceptionally, standing upright on every page, so that the book can be read right through, from page to page, without turning it right round. To this arrangement there are only a few exceptions; on 14 pages (out of a total of 74 printed ones) the imprint is reversed, and these are clearly accidental errors. There are 12 forms, which at first seem not to agree with the arrangement, all the imprints on them being reversed. But they only require to be folded the other way, and to be turned, when they all come right. With respect to these forms, therefore, the book has only been carelessly bound.

No. V. Book. (Plate X, fig. 2.)

Same as "Block-print ϵ " in *Proceedings*. Belongs to M. 3. Size, $9\frac{1}{2} \times 4\frac{1}{4}$ inches. Number of forms, 34. Riveted exactly like No. IV. Paper, variety IIIa. Many stains, but no burns. Printing similar to that in No. IV.

Contains recension IIb, printed twice on each page, so that the two impressions stand head to foot, the lower one being complete (13 lines), the upper, more or less incomplete (as a rule 6 or 8 lines, *i.e.*, ll. 13-8, or ll. 13-6) owing to want of space. There are only four exceptional pages on which they stand foot to foot, *viz.* form 7, p. 4; f. 17, p. 3; f. 23, p. 1, and f. 26, p. 1; and these, of course are careless misprints. There are also two pages on which there is only one impression; *viz.* form 17, p. 4 and f. 26, p. 2.

In the ordinary, head-to-foot, arrangement, the pairs of impressions stand upright and reversed on alternate pages.¹⁵ The two varieties of arrangement may be represented thus, the parallel lines representing the inner edge of the pages or the fold of a form.

Ordinary.	Exceptional.
$\left\{ \begin{array}{l} efgh \\ iklm \\ abcd \\ efgh \\ iklm \end{array} \right\} \parallel \left\{ \begin{array}{l} wxyz \\ yzfa \\ pqrs \\ wxyz \\ yzfa \end{array} \right\}$	$\left\{ \begin{array}{l} efgh \\ iklm \\ wxyz \\ yzfa \\ pqrs \end{array} \right.$

The ordinary arrangement is very curious for two reasons: (1) because the page commences with the incomplete member of the pair of texts, which must have been awkward in reading the book, if it was meant for reading; (2) because it compels the reader to begin with the left hand pages, that is, at the wrong end of the book, assuming

¹⁵ There are some three or four exceptional pages which do not keep the alternate order. These evidently are misprints.

that the proper way of reading these books is from the right to the left in the Semitic fashion. It is, however, by no means certain that the direction of the scripts is from the right to the left. See also the General Remarks on the Orientation of the Books.

No. VI. Book.

Not mentioned in the *Proceedings*. Belongs to M. 6. Acquired from the Rev. Mr. Högberg. Size, $9\frac{1}{2} \times 4$ inches. Number of forms, 8; but the book is a mere fragment; a large portion, including beginning and end and the rivets, is wanting. Paper, variety IIIa; some stains, but no burns. Printing similar to that in Nos. IV and V, but even worse; ink has run so badly through the paper that many pages could not be printed at all, the print on one side showing through on the other.

Contains recension IIb, printed exactly as in No. V, two impressions on each page, standing head to foot, the lower being complete, the upper, incomplete.

THIRD SET.

This set comprises three books. The peculiarity of them is that their forms are not placed one upon the other, as in the bound books of all the other sets, but are inserted one within the other. Moreover the printing does not commence upon the fourth, but on the second page, and does not stop on the ante-ante-penultimate, but on the penultimate page.

The text of this set consists of two short formulas A and B. Formula A is made up of five short lines, of about 5 or 6 letters each. It is found in all three books. Formula B consists of four longer lines of about 7 or 8 letters each, and is only found in two books, Nos. II and III.

For printing these two formulas, two separate blocks must have been used. This is evident from the lines, enclosing the formulas, as well as from the different size of the two blocks. Measured between those lines, the dimensions are $1\frac{5}{8} \times 1\frac{2}{5}$ " and $2\frac{1}{4} \times 1\frac{7}{16}$ " respectively.

There is nothing to indicate what is top and bottom of the formulas.

No. I. BOOK. (Plate XI.)

Belongs to M. 3. Size, $14\frac{3}{4} \times 4\frac{1}{4}$ ". Number of forms, 16. It was originally bound with three twists of paper. These having broken, the book has been re-stitched with fresh thread, apparently by the finder, or in Mr. Macartney's office. It is, therefore, not certain whether the number of the forms is complete. Paper, variety IIIb. Leaves much burned and torn.

Contains both formulas A and B, printed in two rows on each page, but without any particular order. This is illustrated by the subjoined diagrams, which also indicate the relative position of the two formulas and occasional irregularities in printing them. The straight lines indicate the fold of the sheet. As a rule, the formulas occur 5–8 times in a row, and occupy alternate rows. There are only three exceptions; on the 15th sheet the formula B occurs alone; on the outside of the 13th sheet, each formula occupies both rows of a page; and on the outside of the 2nd, and the inside of the 9th sheet, there is only one row on one page, and that row is filled with prints of formula B alone; probably the A row has been simply forgotten by the printer, as its proper space is left blank.

Second Sheet.

Outside.		Inside.	
A	B	B	A
B	B	A	A
A	B	B	A
B	B	B	A
A	B	B	A
B	B	B	A
A	B	B	A
B	B	B	A
A	B	B	A

Third Sheet.

Outside.		Inside.	
A	A	A	B
B	B	B	A
A	A	A	A
B	B	B	A
A	A	A	A
B	B	B	A
A	A	A	A
B	B	B	A
A	A	A	A

Fourth Sheet.

Outside.		Inside.	
A	A	A	B
B	B	B	B
A	A	A	B
B	B	B	B
A	A	A	B
B	B	B	B
A	A	A	B
B	B	B	B
A	A	A	B

Thirteenth Sheet.

Outside.	
A	B
A	B
A	B
A	B
A	B
A	B
A	B
A	B
A	B

Ninth Sheet.

Inside.	
A	B
A	B
A	B
A	B
A	B
A	B
A	B
A	B
A	B

No. II. Book.

Belongs to M. 6. Acquired from the Rev. Mr. Högberg. Size $8\frac{1}{2} \times 6\frac{3}{4}$ ". Number of forms 13. Paper, variety IIIa. A few fatty stains, and marks of singeing. Stitched in three places with loops of loosely twisted thread.

Contains both formulas A and B, printed in three and four columns, each column containing as a rule five impressions. As may be seen from the subjoined diagrams, there is no order whatever in the arrange-

ment of the impressions. Occasionally formula A occupies the whole page, in which case there are four columns, with five (or six) impressions in each; total 20 (or 24) impressions. At other times formula B occupies the whole page, when there are only three columns, with five impressions in each; total 15 impressions. But in many cases both formulas occur promiscuously on the page, in which case also there are only three columns, with a total of 15 or 16 impressions. Clearly this book cannot have been intended for intelligent reading.

First Sheet.

Inside.	
Ϡ B A	|| B B B
B B A	|| B B B
B B A	|| B B B
B B A	|| B B B
A B B	|| A B B
A B B	|| A B B

Second Sheet.

Outside.	Inside.
B B B	|| B B B
B B B	|| B B B
B B B	|| B B B
B B B	|| B B B
B B B	|| B B B
B B B	|| B B B

Third Sheet.

Outside.	Inside.
A A ∇ A	|| ∇ A ∇ A
∇ A ∇ A	|| ∇ A ∇ A
∇ A ∇ A	|| ∇ A ∇ A
A ∇ A ∇	|| ∇ A ∇ A
A ∇ A ∇	|| ∇ A ∇ A

No. III. BOOK.

Belongs to G. 7. Size, 9 × 7". Number of forms 18. Paper, variety IIIa. A few burns and fatty stains. Riveted with three copper pegs.

p. 46	p. 47
∇ ∇ A	|| A A ∇
∇ A A	|| A A ∇
A ∇ ∇	|| ∇ A ∇
∇ A A	|| ∇ A ∇
∇ ∇ ∇	|| A A ∇
A A ∇	|| A A ∇
∇ A A	|| A A ∇

Contains only formula A, printed in three columns on each page, the two inner columns consisting of seven, and the outer, of six impressions, which latter stand at right-angles to the former; otherwise there is no sort of order in the relative position of the inprints, as the marginal example may show.

FOURTH SET. (Plate XII).

This set comprises eight books. Two of the books contain also other texts in addition to their own, *viz.*, No. VII contains also the text of the Fifth Set, and No. VIII, of the Seventh Set.

The text of the Fourth Set consists of a formula, containing five lines of writing. There appear to have been two blocks, from which this formula has been printed off; for I have noticed a very slight difference in the dimensions of the print: in Books I, III, V, the lines differ by $\frac{1}{8}$ to $\frac{1}{12}$ of an inch in length from those in Books II, IV. The enclosing lines of the block of the longer print alone are preserved in book No. VII, and this block measures, within the enclosing lines, $3\frac{1}{2} \times 2\frac{1}{2}$ inches.

Two of the books seem to afford indications whereby to determine what is top or bottom, right or left, and beginning or end of the text. These are Nos. II and VI. No. II is printed with three columns on each page, and a column consists, as a rule, of six impressions of the formula; but there are two pages on which the columns contain $6\frac{1}{2}$ impressions, and one page on which they contain only $5\frac{1}{2}$ impressions; as illustrated by diagram I on the margin. On the other hand book No. VI is printed

<p>I</p> <p>• • •</p> <p><i>a b c</i> } <i>d e f</i> } 6 <i>g h i</i> } <i>a b c</i> } $\frac{1}{2}$ <i>d e f</i> }</p> <p>II</p> <p>• <i>a b c</i> <i>a b</i> • <i>a b c</i> <i>a b</i> <u> </u> <u> </u> 2 $\frac{1}{2}$</p>	<p>with $2\frac{1}{2}$ columns on each page; that is, two columns contain, each, two complete impressions of the formula, while the third column contains only two half-impressions of it; as illustrated in diagram II. It would seem right to conclude from diagram I, that <i>a b c</i> must be the top-line; for if <i>g h i</i> were taken to be the top-line, the printing would have commenced with a mutilated formula. Similarly diagram II would show that <i>a</i> is right and <i>c</i> left of the formula, and that the reading of the latter must commence, not with <i>c</i>, but with <i>a</i>; or in other words that the formula must be read from the left to the right. It would follow, therefore, that</p>
--	--

if the formula is to be read in the European fashion, it commences in the left-hand upper corner, as shown in the photographic facsimile on Plate XII; or, if it is to be read in the Chinese fashion, its commencement lies in the right-hand upper corner. Unfortunately, as the case of the Fifth Set shows, the argument is not so conclusive as would be desirable.

No. I. BOOK.

Belongs to M. 7. Said to have been found at Aq Talā Tūz. Size, $23\frac{1}{4} \times 13\frac{1}{2}$." Number of forms, 36. Riveted with three copper pegs,

the guards being large pieces of a broken-up plaque (see Plate IV, fig. 1). In almost perfect preservation. Paper, varieties IIIb and IIIc mixed.

Text printed in the three columns on each page; each column consisting of nine impressions of the formula, which accordingly is repeated 27 times on every page, or 3,726 times in the whole book (*i.e.*, 27×138 printed pages). The columns run parallel with the longer side of the book, and stand regularly upright and reversed on alternate pages; that is, upright on pages 4, 6, 8, etc., and reversed on pages 5, 7, 9, etc. The pages 4, 6, 8, etc., of course, are left-hand pages; and when the book is turned right round, in order to bring the reversed formulas into the upright position to read them, the pages 5, 7, 9, etc. now become left-hand pages. It follows, therefore, that on reading this book, all the left-hand pages must be read first, and afterwards all the right-hand pages,—which latter pages, of course, on turning the book round to read them, also become left-hand pages. Accordingly whichever way the book is placed for the purpose of reading, it is always the left-hand pages that must be read.

This book is distinguished from all others, in having a finely executed sketch of a head on the fourth page of the 15th form; see Plate XVII. The sketch is placed horizontally across the page, so that the bottom of it is turned towards the inner margin of the page. From the fact that the columns of the print curve round the sketch, it is clear that, it was drawn on the page, before the latter was printed on. The head seems to me to show Arian features, and is sketched with much artistic skill.

No. II. Book.

Belongs to M. 7. Found at Aq Talā Tūz. Size, $15\frac{3}{4} \times 11\frac{3}{4}$ ". Number of forms, 17. Bound with three twists of paper. Well preserved; a few slight burns and stains. Paper, variety IIIb. Printing not quite distinct. It commences, as usual on the 4th page, but ends on the penultimate page (*i.e.*, on the 3rd page of the last form).

Text printed in three columns on each page; each column consisting, as a rule, of six impressions of the formula, which accordingly is repeated 18 times on every page. On two pages there are $6\frac{1}{2}$ impressions, and on one page only $5\frac{1}{2}$. The columns stand regularly upright and reversed on alternate pages; that is, upright on the right-hand pages 5, 7, 9, etc., and reversed on the left-hand pages 4, 6, 8, etc. Accordingly this book must be read differently from book No. I; that is, in whichever way it is placed for reading, its right-hand pages must be read. There are only five pages which do not conform to the regular order; these are p. 4 of form 3; pp. 1 and 4 of form 10, and p. 2 of form 15; and these, clearly, are mere lapses of the printer.

No. III. BOOK.

Belongs to M. 6. Purchased from Badruddin. Size, $22\frac{3}{4} \times 13''$. Number of forms, 19; all (with the exception of forms 7 and 8) cut through at the back, into separate leaves. Very well preserved; only very few and very slight burns and stains. Paper, variety IIIb. Riveted with four copper pegs.

Text printed in three columns on each page; each column consisting of eight impressions of the formula, which, accordingly, is repeated 24 times on every page, or 1,680 times in the whole book (*i.e.*, 24×70 printed pages). The columns run parallel with the longer side of the book, and stand regularly upright and reversed on alternate pages; exactly as in No. II; that is to say, whichever way the book is placed, the right-hand pages must be read. There are only four exceptional pages, due to blundering of the printer; *viz.*, pp. 2 and 3 of form 6; p. 4 of form 9, and p. 1 of form 19.

No. IV. BOOK.

Belongs to M. 7. Found at Aq Talā Tūz. Size, $10\frac{3}{4} \times 7\frac{1}{2}''$. Number of forms, 30. Bound with three twists of paper. Paper, variety IIIb. Extensively marked with water and fat stains; no burns. Print rather difficult to read, owing to the stains and defective inking. Final blank leaf lost.

Text printed, as a rule, in three columns on each page; each column consisting of two impressions of the formula, which, accordingly is printed six times on every page. The columns run parallel to the narrower side of the book, but do not stand upright and reversed on alternate pages, but keep the same direction on every page, that is, on the left-hand pages the head of the columns is turned outside, and on the right-hand pages, inside, as shown in the diagram on the margin. Hence in reading the book, it does not require turning round. There are a few exceptional pages, on which the imprints take reversed positions, but these are clearly blunders of the printer or binder. There are, however, seven pages, on which the arrangement is altogether different; *viz.*, p. 4 of form 1; and pp. 1 and 4 of forms 6, 10, 18. On these pages the text is printed in two columns, running parallel to the longer side of the book, and each column contains four impressions of the formula, which, accordingly, is repeated eight times on each of these pages.

left	right	<table style="border-collapse: collapse; margin: 0 auto;"> <tr><td style="padding: 2px 5px;">bc</td><td style="padding: 2px 5px;">bc</td></tr> <tr><td style="padding: 2px 5px;">a</td><td style="padding: 2px 5px;">a</td></tr> <tr><td style="padding: 2px 5px;">bc</td><td style="padding: 2px 5px;">bc</td></tr> <tr><td style="padding: 2px 5px;">a</td><td style="padding: 2px 5px;">a</td></tr> <tr><td style="padding: 2px 5px;">bc</td><td style="padding: 2px 5px;">bc</td></tr> <tr><td style="padding: 2px 5px;">a</td><td style="padding: 2px 5px;">a</td></tr> <tr><td style="padding: 2px 5px;">bc</td><td style="padding: 2px 5px;">bc</td></tr> <tr><td style="padding: 2px 5px;">a</td><td style="padding: 2px 5px;">a</td></tr> </table>	bc	bc	a	a	bc	bc	a	a	bc	bc	a	a	bc	bc	a	a
bc	bc																	
a	a																	
bc	bc																	
a	a																	
bc	bc																	
a	a																	
bc	bc																	
a	a																	
p. 6	p. 7																	

No. V. BOOK.

Belongs to M. 3. Purchased from Badruddin. Size, $11 \times 6\frac{1}{2}''$. Number of forms, 45. Riveted with three copper pegs. Paper, variety

IIIc. Fairly clean; a few fatty stains and small burns; the two outside leaves torn to shreds. Print almost illegible, owing to defective printing.

Text printed exactly as in book No. IV, save that the exceptional arrangement of the text in two columns never occurs.

No. VI. BOOK.

Belongs to M. 7. Found at Aq Talā Tūz. Size, $8 \times 5\frac{3}{4}$ ". Number of forms, 26; but the first form is in shreds, and the last form is misplaced through a blunder of the binder, standing fifth in the present series. Riveted with three copper pegs. Many large fatty stains and a few burns. Paper, variety IIIb. Print almost illegible, owing to defective inking.

Text printed in $2\frac{1}{2}$ columns on each page; each column consisting of two impressions of the formula, of which, accordingly, four complete and two half-impressions stand on every page. The columns run parallel to the narrower side of the book, and are arranged exactly as in Book No. IV. Here, too, as in No. IV, there are a few exceptional

pages on which the imprints take reversed positions. An example, which shows also another misprinted anomaly, is given on the margin from form 11.

Form 11.	pages on which the imprints take reversed positions.
(margin).	example, which shows also another misprinted anomaly,
p. 2.	p. 3.
abv	abc
cbv	cbv
abv	abc
cbv	cbv
abv	abc
cbv	cbv
abv	abc
cbv	cbv
(no margin.)	is given on the margin from form 11.

It may be noted that there is a slight blank margin at the top of the pages (as indicated in the diagram), while at the bottom the print runs to the very edge. This shows the *modus operandi* of the printer, who commenced printing at the top of the page, though (as shown by the inner column on page 3 of the diagram) not always with the initial edge of the block. But when he came to printing the half-impression on that inner column, he turned the block round, apparently with the object of getting the initial portion of the formula on to the page. It seems that, as long as the whole of the formula could be accommodated on the page, the printer did not care, in what position he placed the impression of it; but when he could only accommodate a portion of it, he was careful in printing its initial portion. This seems to be a reasonable explanation of the anomaly, and it points to what apparently must be taken to be the beginning of the formula.

No. VII. BOOK. (Plate XII.)

Belongs to M. 6. Purchased from Badruddin. Size, $11\frac{1}{2} \times 8\frac{1}{2}$ ". Number of forms, 12; all cut through at the back into separate leaves. Exceptional in being bound with only two twists of paper, and in commencing its printing on the second, and stopping it on the ante-

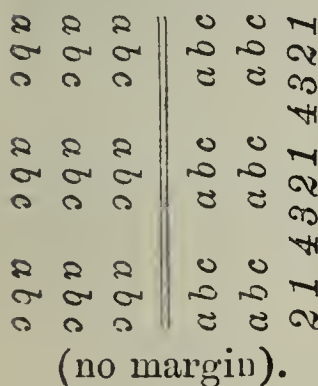
penultimate page. Paper, apparently variety IIIb. Rather rotten; several leaves mutilated; very much damaged by extensive fatty stains and burns. Printing rather illegible on many pages; two of them (pp. 10 and 11) being altogether blank, owing to the print on the reverses (pp. 9 and 12) showing through.

Contains its own proper formula, as well as that of the Fifth Set. The latter, however, is only found on pages 2, 3, 5, 8, 9, 12, 14, 15, 21, 29, 32, 37, 40 and 45; and on these pages it is found in addition to the proper formula of the Fourth Set. When so found, it always occupies the outer side of the page, except on p. 14, where it stands on the inner side; see, below, marginal diagram II. On page 13, it should also have been found, but (apparently by an oversight) the space has been left blank.

Text printed in three columns on each page; each column consisting

I.

p. 2. p. 3.
(broad margin).

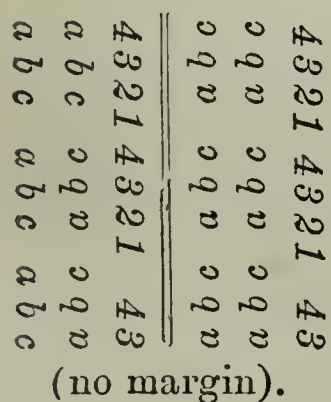


of three impressions of the formula; that is, either thrice the proper formula of the Fourth Set; or twice that formula and once the formula of the Fifth Set. As the latter formula is longer than that of the Fourth Set, and hence occupies more space, it is only found $2\frac{1}{2}$ times on a page; and on these pages, the lower portions of the columns overlap one another. This will be understood from the diagram I shown in the margin, in which *abc*, and *1234* denote the formulas of the Fourth and Fifth Sets respectively. Here, also, the same *modus operandi* of the printer may be noticed,

as in No. VI. He commenced at the top of the page (as shown in the marginal diagrams) where there is a broad blank margin, while at the bottom the print runs right up to the edge of the pages with the half-impression of the formula of the Fifth Set. This circumstance would seem to serve as an indication of the beginning of the latter formula; though this conclusion is not quite borne out by diagram II, which shows the exceptional page 14, above referred to. This diagram would rather seem to show that the beginning of the formula of the Fifth Set lies at its other extremity; but then both pages, especially page 15, show an anomaly in the relative position of the two formulas.

II.

p. 14. p. 15.
(broad margin).



position of the two formulas.

It will further be seen from the above two diagrams that the columns run parallel to the narrower side of the book, and are arranged in a

different position from that in books Nos. IV to VI. There the heads of the columns are turned in the same direction on consecutive pages (see diagram in No. IV), while here the heads are always turned in opposite directions, against one another, that is, they are always turned reversely on alternate pages.

No. VIII. BOOK.

Belongs to M. 8. Found at Kiang Tūz. Size, $14 \times 8\frac{3}{4}$. Number of forms, 20. Paper, variety III*d*. Surface greased, and a few burns. Printing rather indistinct. Riveted with two copper pegs.

Contains besides its own proper text that of the Seventh Set. The latter is found only on one form, the 3rd, where it is printed, on all its four pages, exactly in the same way as the proper formula of the Sixth

1st form, p. 14. Set. This formula is printed in two columns on each page, running, as a rule, parallel to the longer side of the book and consisting each of five or six impressions. The columns stand in no particular order, sometimes upright and reversed on the same page, sometimes so on alternate pages, sometimes in the same position on consecutive pages. On four pages (*viz.*, on the first and last printed pages, as well as on the 13th and 28th) the columns stand at right-angles to one another, the outer column consisting of only four impressions, as shown in the marginal diagram.

abc
abc
abc
abc
abc
abc

abc
abc
abc
abc
abc
abc

FIFTH SET. (Plates XI and XII.)

This Set comprises eight books. Its text is found in two different recensions, a shorter one of three, and a longer of four lines. These I shall denote by *Va* and *Vb* respectively. Besides its own proper text, there is also found on one page of book No. VIII the text of the First Set.

The shorter recension *Va* is found in all the books of this set; also in No. VII of the Fourth Set. The longer recension *Vb* is only found in No. VIII of this set, where it occurs together with recension *Va*. The two recensions only differ from each other by *Vb* adding a fourth line to the three lines of *Va*.

Two distinct blocks have been used for printing the two recensions. This is shown by their enclosing lines which may be seen on the facsimiles. The block of *Va* measured $4\frac{1}{8} \times 1\frac{1}{3}$ inches; that of *Vb* measured $4\frac{1}{8} \times 1\frac{7}{8}$ inches.

There is nothing to show which is top and bottom, or right and left, or beginning and end of the two formulas. From the way in which

the formula is printed in No. VII of the Fourth Set (Pl. XII), it would seem probable that the top of it is the line which adjoins the formula of the Fourth Set; for on this supposition it would lie on the page in the same direction as that formula. It would also seem probable that it commences on the right-hand side, and must therefore be read from the right to the left; for that half of the formula, which appears on the page of No. VII of the Fourth Set, is, on the above supposition, its right-hand half, and it seems reasonable to assume that, when only one-half could be printed, it was the initial half that was printed. Moreover in certain pages of book No. IV (see below the detailed description) it is always what on the above theory is the left-hand side of the formula which appears in the middle of the page; and this circumstance points to the same conclusion, as it seems also reasonable to assume that, as usual, the reader was intended to commence reading from the margin of the page. But unfortunately this argument is weakened by the fact that in books Nos. I and III, where occasionally only a portion of the formula is printed, it is indifferently either one or the other of its two outer lines that is omitted. The fact is that the force of all such arguments depends on the assumption that these block-print books were intended for reading. If they were not meant for reading, but intended for the mechanical use of merely turning the pages, it was obviously quite immaterial which portion of the formula was printed whenever the space did not suffice to print the whole.

No. I. Book.

Belongs to M. 3. Purchased from Badruddin. Size, $8\frac{1}{4} \times 5\frac{1}{2}$ ". Number of forms, 37; the first and last forms, however, consist of two sheets each, placed within one another, and pasted together¹⁶ to form thick covers, as in No. II of the Second Set. Paper, variety IIIb. Fairly clean. Printing, indifferent. Riveted with three copper pegs.

Contains recension Va, printed six times on each page, in a column which runs parallel to the longer side of the book, and stands regularly upright and reversed on alternate pages. The latter rule is not observed on 10 pages out of a total of 142 pages, and these pages, therefore, represent clearly mere accidental lapses of the printer. On a few pages, the formula is only found five-times repeated; but on many pages the sixth repetition, standing too close to the top or bottom of the page, is incomplete, one of the three lines of the formula being omitted. This omitted line is sometimes one, sometimes the other of the two outer lines, so that no conclusion can be drawn as to what is the initial and what the final line of the formula.

¹⁶ In the initial cover the paste has given way, and the leaves are now separate.

No. II. BOOK.

Belongs to M. 9. Size $7\frac{3}{4} \times 5\frac{3}{4}$ ". Number of forms, $22\frac{1}{2}$, the seventh form consisting of only one leaf. Paper, variety IIIb. A few leaves damaged by burns and fatty stains. Riveted with three copper pegs, the guards on one side consisting of large fragments of the plaque, shown on Plate IV, fig. 1.

Contains recension Va, printed, as a rule, in two columns on each page; the columns consisting, as a rule, each of four repetitions of the formula, and running parallel to the narrower side of the book. On a few pages there are only three repetitions in the column; the formula accordingly occurs, as a rule, eight times, and exceptionally six times, on every page. The columns are placed in the same direction on every page, that is to say, line 1 of the formula always stands alternately near the outer and inner edges of the page, so that in reading the book, it does not require to be turned round. There is only one exceptional page (evidently a misprint) in which the columns are reversed. Thus

Regular Pages.				Exceptional Pages.			
4th		5th		Regular		Reversed.	
<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>

As the space is barely sufficient to accommodate the whole breadth of the columns, it happens that occasionally the terminal letters on one side (*a, a, a, a*) of the formula, at other times those on the other side (*d, d, d, d*) are omitted. It is thus impossible to use these omissions as a test for determining the initial and final sides of the formula. The eleventh form is a total exception: on it the text is printed in one column, which consists of six imprints of the formula, and runs parallel to the longer side of the book.

No. III. BOOK.

Belongs to M. 7. Found at Aq Talā Tūz. Size, $11\frac{1}{4} \times 6\frac{3}{4}$ ". Number of forms, 52. Paper, variety IIIc. Initial and final leaves damaged; otherwise well preserved. Riveted with three nails; guards round pieces, as shown on Plate IV, fig. 3.

Contains recension Va, printed in one column on each page, running parallel to the longer side of the book, and consisting of (as a rule) seven, or (sometimes) eight impressions of the formula. When

there are eight repetitions on the page, the space barely suffices for them; and accordingly sometimes one, sometimes the other of the outer lines of the formula is omitted, the same as in No. I. The columns stand upright and reversed on alternate pages; though there are many misprinted pages, about 12 per cent. of the total.

No. IV. BOOK.

Belongs to M. S. Found at Kiang Tūz Size, $12\frac{1}{2} \times 8''$. Number of forms, 20. Paper, variety III*d*. One outer form damaged by burns; entire surface of all leaves greased with fat. Riveted with three copper pegs. Printing commences, contrary to the usual rule, on the second page of the first form, but stops, as usual, on the ante-ante-penultimate page. Print throughout almost illegible, owing apparently to the greasy surface of the paper.

Contains recension *Va*, printed in two columns on each page, running parallel to the longer side of the book, and containing each nine impressions of the formula; there being accordingly 18 impressions on every page. On some pages the columns are printed both upright; on others one column stands upright, the other reversed. Thus

Page 16.		Page 17.	
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v</i> (1)
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v</i> (2)
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v</i> (3)
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v</i> (4)
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v</i> (5)
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v</i> (6)
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v</i> (7)
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v</i> (8)
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v</i> (9)

These two arrangements seem to have been observed quite promiscuously; thus: on 1st form upright and reversed throughout,
on 2nd „ upright throughout,
on 3rd „ upright on 3rd page only,
on 4th „ upright on outer pages only,
on 5th „ upright on two first pages only,
on 6th „ upright on outer pages only,
on 7th „ upright on inner pages only,
on 8th „ do. do. do.,
on 9th „ do. throughout, etc., etc.

On those pages where the impressions are placed in opposite directions, it is always the left-hand sides of the formula (as seen on Plate

XII) which stand in the middle of the page, adjoining each other. The right-hand sides are near the outer and inner edges of the page; and as the space is rather limited, occasionally the terminal letters on those sides are omitted.

No. V. BOOK.

Belongs to M. 8. Found at Kiang Tüz. Size, $13 \times 8''$. Number of forms, 20. Paper, variety III*d*. Entire surface of all leaves greasy; no burns; the two outside leaves slightly damaged. Print throughout rather difficult to read. Riveted with two copper pegs only. The first (or covering) form is wrongly folded.

Contains recension Va, printed in two columns on each page, which run in right angles to each other, the inner parallel to the longer, the outer parallel to the shorter side of the book. The former consists of ten (exceptionally nine) impressions of the formula, the latter of six, arranged in two lines; the total number of repetitions on every page being 16 (exceptionally 15). The inner columns stand regularly upright and reversed on alternate pages. The outer columns, as a rule, have the third line of the formula (as shown in Plate XII) turned towards the inner column; but on 21 pages (out of a total of 76) the formula is turned the other way, being probably misprints. The two positions are shown in the subjoined diagrams.

Regular.				Exceptional.			
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>	<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>	<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>	<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>	<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>	<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>	<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>	<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>	<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>	<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>
<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>	<i>a b c d</i>	<i>a b c d</i>	<i>a b c d</i>	<i>p q v v</i>

No. VI. BOOK.

Belongs to M. 8. Found at Kiang Tüz. Size, $13 \times 8\frac{1}{2}''$. Number of forms, 20. Paper, variety III*d*. All surfaces more or less greasy; a few burns; large piece torn out of the fourth leaf. Print indifferent, and rather difficult to read. Riveted with two copper pegs only.

Contains recension Va, the arrangement of which is exactly the same as in No. V, except that the inner column consists, as a rule, of nine, and only exceptionally of ten impressions of the formula.

No. VII. BOOK.

Belongs to M. 8. Found at Kiang Tūz. Size, $16\frac{1}{2} \times 7''$. Number of forms, 20; some of them worn through at the back into separate leaves. Paper, variety III*d*. Fairly clean and well preserved. Riveted with three copper pegs.

Text printed in one column on each page, running parallel to the longer side of the book, and consisting of twelve impressions of the formula. As a rule the columns stand upright and reversed on alternate pages, there being only 13 exceptions (in a total of 74 printed pages), probably misprints.

No. VIII. BOOK. (Plate XI.)

Belongs to G. 7. Size, $8\frac{1}{4} \times 5\frac{1}{2}''$. Number of forms, 32. Has exceptionally seven blank pages both at the beginning and end of the book; that is, printing commences on the 8th page from the beginning, and stops on the 8th page from the end. Paper, variety III*b*. Book in rather bad preservation, and print so faint as to be illegible in many pages. Bound with two twists of paper.

Contains both recensions, *Va* and *Vb*, but the latter only on the outside pages of forms 5, 6, 7, 15, 16, 19, 21, 22, 30, and on the inside pages of forms 14, 23, 29,¹⁷ also on the first (outside) page of form 24; altogether on 25 only out of a total of 114 pages. Curiously enough on the fourth (outside) page of the 24th form there are printed two formulas of the First Set.

Both recensions are printed in two columns on each page, running parallel to the narrower side of the book, and consisting each of three (very exceptionally four) impressions in the case of recension *Va*, and of two (exceptionally three) impressions in the case of recension *Vb*. The

$\begin{array}{ccc} a b c d & a b c d & a b c d \\ a b c d & a b c d & a b c d \\ a b c d & a b c d & a b c d \end{array}$	$\begin{array}{ccc} p q r v & p q r v & p q r v \\ p q r v & p q r v & p q r v \\ p q r v & p q r v & p q r v \end{array}$	<p>space is not sufficient for the exceptional number of impressions; accordingly in those exceptional cases one or two lines, from either extremity, are omitted. As a rule the columns stand turned in opposite directions on alternate pages, as shown in the margin.</p>
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Page 4 of form 24 is a curiosity. It is shown on Plate XI. The leaf is badly damaged by burns. On one side (page 3) it shows the formula of the Fifth Set in the usual arrangement of two columns, with two impressions in each, running parallel to the narrower side of the book. On the reverse side (page 4) formulas C and E, in the recensions *Ig*

¹⁷ These too become outside pages, if the fold of the forms is turned the other way.

and *Ih* respectively, of the text of the First Set are imprinted, arranged in two columns, at right angles to one another, one running parallel to the longer, the other with the shorter side of the book. The former stands near the outer, the latter near the inner edge of the page. The outer column consists of two impressions each of the recensions *Ig* (ll. 9, 11, 13, 14) and *Ih* (ll. 17, 18, 19); while the inner column consists of four impressions of the recension *Ig*. The two pages are shown in the marginal diagram, the formula of the Fifth Set

Page 3.		Page 4.
<i>abcd</i>		<i>ccc</i>
<i>abcd</i>		<i>eee</i>
<i>abcd</i>		<i>eee</i>
<i>abcd</i>		<i>ccc</i>
<i>abcd</i>		<i>ccc</i>

being indicated by *abcd*, and those of the First Set, by *ccc* (=C=*Ig*) and *eee* (=E=*Ih*) respectively. The circumstance of the two mutilated formulas of the First Set appearing here in this unexpected and purposeless way seems to render the hypothesis of a forgery almost impossible, both with regard to the whole book No. VIII, and to the blocks for the recensions *Ig* and *Ih*.

SIXTH SET. (Plate XIII and Pl. XIV, fig. 1.)

This Set comprises three books. Its peculiarity is that it is not appropriated to one particular text only, but presents a collection of several texts. What was found occasionally as a rare exception in the other sets—the introduction of a few impressions of an alien text into the midst of its own proper one—forms in the Sixth Set its main feature.

Of the three books comprised in it, No. I gives the texts of the Second and Fifth Sets. No. II gives the texts of the Second, Fourth and Fifth Sets, and No. III those of the First, Second, Fourth and Fifth Sets.

No. I. BOOK. (Plate XIV, fig. 1.)

Belongs to M. 7. Found at Aq Talā Tūz. Size, $11 \times 8\frac{1}{2}$ ". Number of forms 30. Paper, variety IIIb. Greatly damaged by exposure to wet; also some large fatty stains and burns. Print almost illegible. Bound with three nails; guards being large rhomboid pieces of flat, thin, ornamental copper, as shown in fig. 1 of Plate IV.

As a rule, the pages of this book present the texts of the Second and Fifth Sets. There are only 6 exceptional pages (out of a total of 114 printed ones), *viz.*, 6, 43, 94, 95, 116, 117, which give the text of the Fifth Set alone.

The text of the two sets are printed in three columns on each page, running parallel to one another and to the longer side of the

book, and standing upright and reversed on alternate pages. It may be also noted that what has been indicated in the facsimiles (Plates X and XII) as the first line of the formulas of the two texts, stand, as a rule (though not always), alongside of one another, pointing to the conclusion that these two lines occupy the same position in the respective formulas, that is, that both are the head-lines (as assumed in the facsimiles) or both the foot-lines. Of the three columns one gives the text of the Fifth Set, and two give that of the Second Set.

The column containing the text of the Fifth Set always occupies the inner side of a page, and consists of seven, or more usually eight, impressions of the formula of that set. But as the space is barely sufficient to accommodate all eight, one line of the 8th repetition is often omitted; this seems to be invariably line 3, as indicated in the facsimile (Pl. XII); which fact also points to line 1 being really the head-line.

The two columns containing the text of the Second Set, always occupy the outer side of a page, and consist each of four impressions of the formula, so that there are altogether eight impressions of it on each page. The formula here printed is only a portion of the text of the Second Set, *viz.*, formula C, or lines 9–13 of column I of that text (Pl. X).

There is one exception to the arrangement above explained. On p. 7 there are only two columns, standing at right angles to each other, the outer one of which consists of four impressions of the text of the Second Set. The two arrangements are shown in the subjoined diagram; *a b c d e f* denoting the text of the Fifth Set, and *1 2 3 4 5 6* that of the Second Set.

Regular.		Exceptional.
(1) <i>a b c d e f</i> 123 123	} (1, 2)	(1) <i>a b c d e f</i> 4 5 6 1 2 3
(2) <i>a b c d e f</i> 456 456		(2) <i>a b c d e f</i> 4 5 6 3 2 1
(3) <i>a b c d e f</i> 123 123	} (3, 4)	(3) <i>a b c d e f</i> 4 5 6 1 2 3
(4) <i>a b c d e f</i> 456 456		(4) <i>a b c d e f</i> 4 5 6 3 2 1
(5) <i>a b c d e f</i> 123 123	} (5, 6)	(5) <i>a b c d e f</i> 4 5 6 1 2 3
(6) <i>a b c d e f</i> 456 456		(6) <i>a b c d e f</i> 4 5 6 3 2 1
(7) <i>a b c d e f</i> 123 123	} (7, 8)	(7) <i>a b c d e f</i> 4 5 6 1 2 3
(8) <i>a b c d e f</i> 456 456		(8) <i>a b c d e f</i> 4 5 6 3 2 1

The correspondence in the arrangement of the texts of the two sets suggests that they may also correspond in their scripts and their meaning. We should have here a bi-script, and perhaps a bi-lingual, book.

No. II. BOOK.

Belongs to M. 7. Found at Aq Talā Tūz. Size, 11 × 8". Number of existing forms 28; but originally it must have been 30, as the two outside forms, forming the covers, are missing. Paper, variety IIIb. Corners rounded off, somewhat similar to those of book No. VIII of the First Set. Condition similar to that of No. I. Bound with three twists of paper.

Contains the text of the Second, and Fifth, as well as that of the Fourth Sets; on alternate forms; commencing with the latter. That is, the text of the Fourth Set is found on forms 1, 3, 5, etc.; that of the Second and Fifth Sets on forms 2, 4, 6, etc.

The latter texts, on their own forms, are arranged exactly as in book No. 1; only as the space is insufficient, a portion of those impressions of the formula (C) of the Second Set, which are nearest the outer edge of the page, is omitted; on two pages (93 and 96) they are omitted altogether.

The text of the Fourth Set is printed in three columns on each page, running parallel to the narrower side of the book, and consisting each of two impressions of the formula which accordingly is repeated six times on every page. The columns keep throughout the same direction. In fact the arrangement of the text is exactly the same as in No. IV of the Fourth Set; see the diagram on p. 87. There are, however, four exceptional pages. On page 107 there are two columns, each consisting of four impressions of the formula (altogether eight repetitions), and

Page 106. abc ३ q v abc ३ q v abc ३ q v abc ३ q v abc ३ q v	 	running parallel to the longer side of the book. On pages 81 and 84, the arrangement is the same, except that there is only one column in the middle of the page. On page 106, as shown in the marginal diagram, the two arrangements are combined, there being two columns standing at right angles to each other, the outer consisting of three, the inner of four impressions of the formula, and running parallel to the shorter and longer sides of the book respectively.
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No. III. BOOK. (Plate XIII.)

Belongs to M. 8. Found at Kiang Tūz. Size, 13 × 11". Number of forms uncertain, as the outside leaves are missing, the book, in its present condition, beginning and ending with a printed page; but the existing number of leaves is 81. Paper, variety IIIc. Many of the leaves torn, and otherwise damaged by fatty stains and burns. Print often barely legible. Bound with three twists of paper.

Contains the texts of the First, Second, Fourth, and Fifth Sets. Those of the First and Second Sets never occur complete. Portions of them only are found, and always standing separately. Of the First Set the formulas *I**f*, *I**g*, and *I**h* (*i.e.*, A, C, E mutilated) only are found; of the Second Set only the formulas A, B, D and E. In the distribution of these texts, no particular order is observable. Sometimes the text of a set occupies a whole page by itself; at other times, two or three (never all four) texts are combined on one page. This will be best seen from the Table of analysis of the pages, given below.

If a single text occupies a page by itself, it is always printed in 3 to 5 columns, generally running parallel to the longer side of the book, and consisting of 4 to 6 impressions of the formula, according to the size of the latter. See below the diagrams of pages 8, 9, 11, 12, 59, 60. If a single text occupies several consecutive (from 4 to 12) pages, the columns always stand upright and reversed on alternate pages.

If several texts together occupy the same page, they are arranged in the most varying order. No principle that may have guided the printer is observable. The subjoined diagrams illustrate this; the arrangements shown are only a few out of a much larger number. The formulas of the Fourth and Fifth Sets are indicated by *a b c* and *1 2 3* respectively; those of the First and Second Sets by *I**f*, *I**g*, *I**h*, and A, B, D, E respectively.

Page 4.	Page 5. (Pl. XIII.)	Page 6.	Page 7.
∇ <i>q I</i> ∇ <i>f f I</i>	\parallel <i>I g</i> <i>I f I f I h</i>	<i>I h</i> <i>I f</i> <i>I f</i> <i>I f</i>	\parallel <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i>
∇ <i>q I</i> ∇ <i>f f I</i>	\parallel <i>I g</i> <i>I f I f I h</i>	<i>I h</i> <i>I f</i> <i>I f</i> <i>I f</i>	\parallel <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i>
∇ <i>q I</i> ∇ <i>f f I</i>	\parallel <i>I g</i> <i>I h</i>	<i>I h</i> <i>I f</i> <i>I f</i> <i>I f</i>	\parallel <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i>
∇ <i>q I</i> ∇ <i>f f I</i>	\parallel <i>I g</i> D <i>I h</i>	<i>I h</i> <i>I f</i> E <i>I f</i>	\parallel <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i>
∇ <i>q I</i> ∇ <i>f f I</i>	\parallel <i>I g</i> <i>I g</i> <i>I h</i>	<i>I h</i> <i>I f</i> <i>I f</i>	\parallel <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i>
∇ <i>q I</i> ∇ <i>f f I</i>	\parallel <i>I g</i> <i>I g</i> <i>I h</i>	<i>I h</i> <i>I f</i> <i>I f</i> <i>I f</i>	\parallel <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i>
∇ <i>q I</i> ∇ <i>f f I</i>	\parallel <i>I g</i> D <i>I f I h</i>	<i>I h</i> <i>I f</i> <i>I f</i> <i>I f</i>	\parallel <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i>
∇ <i>q I</i> ∇ <i>f f I</i>	\parallel <i>I g</i> <i>I f I h</i>	<i>I h</i> <i>I f</i> <i>I f</i> <i>I f</i>	\parallel <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i>
∇ <i>q I</i> ∇ <i>f f I</i>	\parallel <i>I g</i> <i>I f I h</i>	<i>I h</i> <i>I f</i> <i>I f</i> <i>I f</i>	\parallel <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i> <i>I g</i>

Page 8.	Page 9.	Page 11.	Page 12.
<i>f I f I f I f I</i>	\parallel <i>I f I f I f I f</i>	<i>a b c a b c a b c</i>	\parallel <i>o q v o q v o q v</i>
<i>f I f I f I f I</i>	\parallel <i>I f I f I f I f</i>	<i>a b c a b c a b c</i>	\parallel <i>o q v o q v o q v</i>
<i>f I f I f I f I</i>	\parallel <i>I f I f I f I f</i>	<i>a b c a b c a b c</i>	\parallel <i>o q v o q v o q v</i>
<i>f I f I f I f I</i>	\parallel <i>I f I f I f I f</i>	<i>a b c a b c a b c</i>	\parallel <i>o q v o q v o q v</i>
<i>f I f I f I f I</i>	\parallel <i>I f I f I f I f</i>		
<i>f I f I f I f I</i>	\parallel <i>I f I f I f I f</i>		

Page 48.	Page 49.	Page 59.	Page 60.
$abc \delta I \varrho q v$	$abc I g abc$	$I f I f$	$f I f I$
$abc \delta I \varrho q v$	$abc \delta I abc$	$I f I f$	$f I f I$
$abc \delta I \varrho q v$	$abc \delta I abc$	$I f I f$	$f I f I$
$abc \delta I \varrho q v$	$abc \delta I abc$	$I f I f$	$f I f I$
$abc \delta I \varrho q v$	$abc \delta I abc$	$I f I f$	$f I f I$

Page 47.	Page 91.	Page 139.
$abc \delta I abc$	$abc I h abc$	$abc abc 123$
$abc \delta I abc$	$abc I abc$	$abc 123 123$
$abc B abc$	$abc \eta I abc$	$abc abc 123$
$abc \delta I abc$	$abc I h abc$	$abc abc 123$
$abc \delta I abc$		

Page 140.	Page 163.	Page 164.
$123 123$	$\delta I I h A I f$	$I g \delta I \delta I$
$123 123$	$I h A I f$	$I g \delta I \delta I$
$123 123$	$\delta I I h A I f$	$I g A A A A \delta I \delta I$
$123 123$	$\delta I I h A I f$	$I g \Xi \delta I \delta I$
$123 123$	$\delta I I h I f$	$I g A \delta I \delta I$
$123 123$	$\delta I I h I f$	$I g A A A \delta I \delta I$
$123 123$	$\delta I I h A I f$	$I g A A A \delta I \delta I$
$123 123$	$\delta I I h A I f$	
$123 123$	$\delta I I h A I f$	

I have taken the trouble to analyse the whole of the pages with reference to the frequency of occurrence of the several formulas and their combinations. The result is shown in the subjoined Table. The formulas of the Second Set (A, B, C, D), except where stated otherwise, occur only once on the page.

Formulas.	Pages of Occurrence.	Frequency.
Sets IV.	... 11-18, 23-27, 30, 39-42, 51-58, 67-70, 75-82, 87-90, 92, 94, 99-102, 107-118, 131-134, 140-150, 155-162	Total 80
Set V	... 28, 29, 140, 141	... 4
Sets IV and V	... 139, 142	... 2
Set IV and Set I _g	... 48, 49	... 2
Set IV and Set I _h	... 91	... 1

Formulas.	Pages of Occurrence.	Frequency.
Sets IV, IIA and <i>If</i> ...	93 ...	1
Sets IV, IIB and <i>Ig</i> ...	47, 50 ...	2
Sets IIA and <i>Ifh</i> ...	3 ...	1
Sets IIA and <i>Ifgh</i> ...	97, 163 (a row of A on 163) ...	2
Sets IID and <i>Ifh</i> ...	95, 98, 151 ...	3
Sets IID and <i>Ifgh</i> ...	5 (D twice), 153 (D thrice) ...	2
Sets IIE and <i>Ifh</i> ...	2 ...	1
Sets IIE and <i>Ifh</i> ...	6, 152, 154 ...	3
Sets IIE and <i>Ifgh</i> ...	96 ...	1
Sets IIAE and <i>Ifh</i> ...	4 (E once, two rows of A) ...	1
Sets IIAE and <i>Ig</i> ...	164 (E once, row of A) ...	1
Set <i>If</i> ...	8, 9, 43-46, 59-62. ...	10
Set <i>Ig</i> ...	7, 10, 19-22, 35-38, 63-66, 83-86, 103-106, 119-130, 135-138 ...	38
Set <i>Ifh</i> ...	31, 33, 71-74 ...	6
Set <i>Ifgh</i> ...	1, 32, 34 ...	3
Total pages ...		164

The combination of formulas in different scripts on the same page seems to suggest some sort of correspondence or identity. It is difficult, however, to fit the varieties of the combinations into a consistent theory. Possibly this may be due to misprints. Provisionally I would suggest the following theory. Books Nos. I and II seem to show that the formulas of Set IIC, Set IV, and Set V correspond to one another. Now pages 47-50 show formulas IV and *Ig* in combination; and it may be also noted that these two particular formulas occur most frequently by themselves in book No. III; *viz.*, formula IV, 80 times, and formula *Ig*, 38 times. Assuming that formula *Ig* is equal to formula IV, the combination on page 2 (*viz.*, IIE and *Ifg*) would tend to identify formula *If* with formula IIE. Consequently the combination of formulas IIA and IIE with formulas *If* and *Ih* on page 4, would identify formula *Ih* with formula IIA; and in corroboration of this equivalence it may be noted that on pages 4 and 163, there are whole columns of IIA and *Ih* corresponding with each other. At the same time this theory does not seem quite consistent with the combination of the formulas *If*, IIA, and IV, on page 93. As formula IV is assumed to be equal to formula *Ig*, it seems to follow that *If*=IIA; and with this conclusion agree the two facts that on page 4 the formulas *If* and *Ih* are combined with the formulas IIA and IIE, and that on pages 4 and 163 columns of IIA correspond to columns

of *I**f*. In fact, these two facts fit in equally well with both theories. The result accordingly would be

$$\begin{aligned} \text{formulas IV} &= \text{V} = \text{II C} = \text{I}g; \\ \text{I}f &= \text{II E} \text{ or } = \text{II A}; \\ \text{I}h &= \text{II A} \text{ or } = \text{II E}. \end{aligned}$$

SEVENTH SET.

This Set comprises six books. The text contained in it consists of seven lines. The dimensions of its block cannot be given, as no traces of any enclosing lines are seen in any of the books. The dimensions of the text itself are about $3\frac{1}{2} \times 3\frac{3}{4}$ ".

With regard to the question what is top and bottom, right and left, beginning and end of the formula, the following circumstances may be noted. In book No. 1, about one-half of the formula, divided horizontally, is occasionally found; similarly in book No. IV, also about one-half of it, but divided vertically, is occasionally met with. The two halves that are thus found are invariably the same. On the assumption that, if only a portion of the formula could be accommodated, the printer would naturally choose to print its initial portion, it follows that the two halves, between them, accurately define the corner which contains the beginning of the formula. This is the upper left corner or the upper right corner, according as one has to read the lines of the formula in the European or the Chinese fashion. In the facsimile on Plate XIV, the formula is represented in the position conforming with the view here explained. The argument, however, is by no means, conclusive, as it pre-supposes that the books were intended for intelligent reading, not merely for the mechanical turning of pages.

Another point that may be worth noticing is that some of the letters of the formula of this Set and of that of the Fourth Set show considerable similarity.

No. I. BOOK. (Plate XIV, fig. 2.)

Belongs to M. 9. Size, $17\frac{1}{4} \times 6\frac{1}{2}$ ". Number of forms, 20. Paper, variety III*d*. Well preserved; no burns; but paper greasy, and print rather indistinct. Bound with three twists of paper.

Text printed in one column on each page, running parallel to the longer side of the book, and containing, as a rule, four impressions of the formula. This arrangement allows a wide margin at the top and bottom of each page; accordingly on a few exceptional pages (about half a dozen) a half-impression is added to fill up the blank space. As this is always the same half-impression (*viz.*, lines 1-3 or 1-4), it may possibly indicate the beginning of the formula; and I have so used it

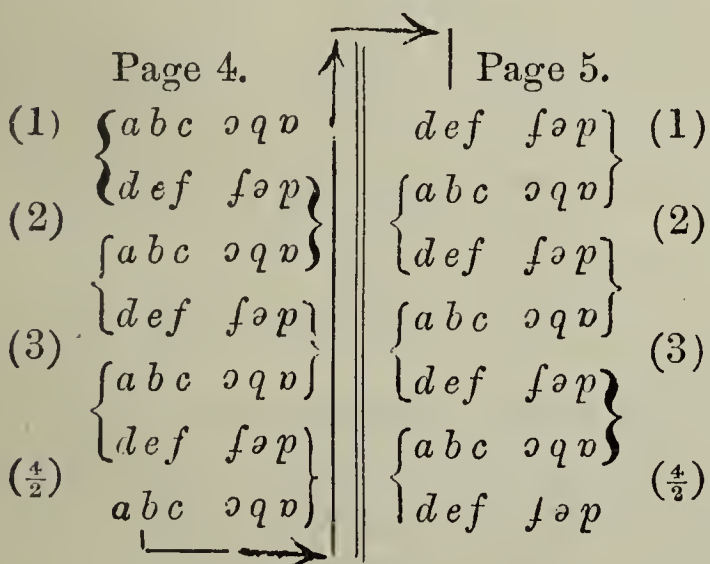
for the arrangement of the formula on Plate XIV; but the argument only holds good, if the book was intended for reading, which is doubtful. As a curiosity I may note the arrangement on page 1 of form 8; I have not noticed it elsewhere. Between the 3rd and 4th impression of the formula, there is inserted an impression of the first line by itself. This is probably a mere misprint; though it is not quite easy to understand how it happened. For as the uniformity of the intervals of the lines shows, these lines were not printed each by itself; on the other hand, if the block was twice applied to the paper, in different places, the paper should show smudges of ink, which it does not do.

The columns stand regularly, without any exception, upright and reversed on alternate pages.

No. II. BOOK.

Belongs to M. 8. Found at Kiang Tūz. Size, $14 \times 9''$. Number of forms, 12. Paper, variety III*d*. Surfaces greased, and print rather indistinct; otherwise well preserved. Riveted with three nails.

Text, printed in two columns on each page, running parallel to the longer side of the book, and standing alternately upright and reversed on the same page, but keeping the same position on alternate pages, as shown in the diagram on the margin. Each column



consists of four impressions (*abc def fop*) of the formula, but as the space is barely sufficient to accommodate them, not unfrequently one or two lines of the formula are omitted at the top or the bottom of the page; and, whenever this occurs, the mutilated portions are arranged so as to make up, between them, a complete

formula. The intention, evidently, seems to be that the left hand columns and the right hand columns respectively should be read consecutively throughout the book, as indicated by the arrows in the marginal diagram. The four impressions are placed so as to keep the corresponding lines as much as possible on a level with one another.

No. III. BOOK.

Belongs to M. 8. Found at Kiang Tūz. Size, $12\frac{3}{4} \times 8\frac{1}{4}''$. Number of forms, 20. Paper, variety III*d*. Surfaces greased, and print rather

indistinct; otherwise well preserved. Bound with three twists of paper. Printing stops on the penultimate, but begins, as usual, on the fourth page.

The arrangement of the text is exactly the same as in No. II, except that the columns only consist of three impressions of the formula, whence a wide margin is left at the top and bottom of every page. There are, however, four exceptional pages, probably misprints, on which the columns run in the same direction.

No. IV. BOOK.

Belongs to M. 8. Found at Kiang Tüz. Size, $13 \times 8\frac{3}{4}$ ". Number of forms, 20. Paper, variety III*d*. Surfaces greasy, and print rather indistinct; otherwise well preserved. Bound with two nails.

Text printed in three columns on each page, running parallel to the narrower side of the book, and consisting each of two impressions (*a b c d e f*) of the formula. The columns, as a rule, run in the same direction (*e.g.*, pp. 4, 5); but there are many exceptions (*e.g.*, pp. 8, 9), as shown in the subjoined diagram.

Ordinary.				Exceptional.			
Page 4.		Page 5.		Page 8.		Page 9.	
<i>abc</i>	<i>def</i>	<i>abc</i>	<i>def</i>	<i>abc</i>	<i>def</i>	<i>abc</i>	<i>def</i>
<i>abc</i>	<i>def</i>	<i>abc</i>	<i>def</i>	<i>def</i>	<i>abc</i>	<i>def</i>	<i>abc</i>
<i>abc</i>	<i>def</i>	<i>abc</i>	<i>def</i>	<i>def</i>	<i>abc</i>	<i>def</i>	<i>abc</i>
<i>def</i>	<i>abc</i>	<i>def</i>	<i>abc</i>	<i>abc</i>	<i>def</i>	<i>abc</i>	<i>def</i>
<i>def</i>	<i>abc</i>	<i>def</i>	<i>abc</i>	<i>abc</i>	<i>def</i>	<i>abc</i>	<i>def</i>
<i>def</i>	<i>abc</i>	<i>def</i>	<i>abc</i>	<i>def</i>	<i>abc</i>	<i>def</i>	<i>abc</i>

The three columns do not fill up the whole available space; there is a wide margin on both sides. Accordingly on 14 pages (out of a total of 74 printed ones) a half-column is added, consisting of two half-

Page 16.	
(1) <i>abc</i>	<i>abc</i>
<i>def</i>	<i>def</i>
(2) <i>abc</i>	<i>abc</i>
<i>def</i>	<i>def</i>
(3) <i>abc</i>	<i>abc</i>
<i>def</i>	<i>def</i>
($\frac{1}{2}$) <i>ab</i>	<i>abc</i>
<i>de</i>	<i>def</i>

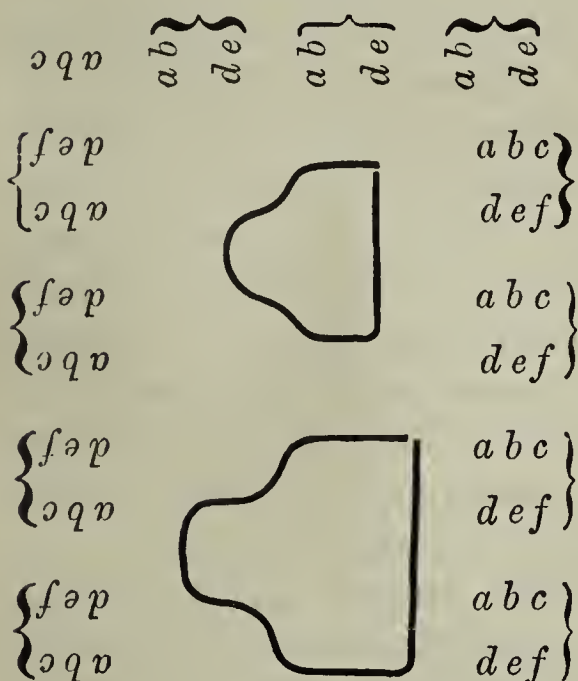
impressions of the formula divided vertically. As a rule, this half-impression stands on the margin of the same side, but on page 16, shown on the margin, it stands once on the left, and once on the right margin. As it is invariably the same half of the formula, this circumstance might be considered to indicate the side with which the formula commences; and I have used it for that purpose in arranging the facsimile on Plate XIV. But, as already observed, the argument is not altogether conclusive.

No. V. BOOK.

Belongs to G. 10. Size, $17\frac{1}{2} \times 14''$. Number of forms, uncertain, as they are all cut through, along the folds, into separate leaves; the latter number 41; but possibly one leaf is torn off. One of the existing outside leaves is torn in shreads. Paper, variety IIIb. Surfaces greasy, and print indistinct; otherwise fairly well preserved; no burns. Printing commences on the second, and ends on the penultimate page of the now existing leaves. Riveted with three nails, the guards being round pieces of copper resembling coins, like fig. 4-9 on Plate IV.

Text printed in three columns on each page, running parallel to the longer side of the book, and consisting each of four impressions of the formula, which, accordingly, is repeated 12 times on every page. The columns stand upright or reversed on different pages; but there is no perceptible order in this respect.

Page 44.



On one of the pages of the 22nd leaf, there is seen the sketch of a man's bust, twice repeated side by side, one somewhat smaller than the other. See Plate XVIII. They were evidently sketched on the page, before the formula was printed around them, as the arrangement of its impressions is adjusted to the sketches, running regularly round them. The sketches are placed horizontally across the page, as indicated by the two figures in the marginal diagram.

No. VI. BOOK.

Belongs to G. 8. Purchased for Rs. 45. Size, $22 \times 13''$. Number of forms, 43. Paper, variety IIIc. Rather clean, but many leaves torn, on account of large size and flimsiness of paper. Print not very distinct. Riveted with three nails, the guards being regular oblong pieces ($1\frac{1}{2} \times 1\frac{3}{4}''$) with rounded corners, showing embossed head and symbols, as seen in fig. 1 of Plate IV.

Text printed in three columns on each page, running parallel to the longer side of the book and consisting each of six impressions of the formula. They stand, as a rule, upright and reversed on alternate pages.

EIGHTH SET. (Plates XIV, fig. 3 and XV, fig. 1.)

This set comprises only one book. It belongs to G. 9. It was purchased by Sayyid Gul Muhammad, a well-known Kashghar merchant, for forty rupees and was sent, as a present, to Captain Godfrey. The book, of course, could not be accepted as a present, but it was purchased on behalf of the British Government. It measures $11 \times 6\frac{1}{8}$ ". The exact number of its forms is unknown, for the beginning and end are missing, and a large number of leaves exist only in fragments. The number of still complete forms is 29; most of these even are more or less damaged along the edges. The book is bound with three copper nails, and the guards are formed of two thin copper slips, measuring $8 \times \frac{3}{4}$ ", and covered with ornaments like those on figs. 4–9, Plate IV.

Irrespective of its script, this book strikingly differs in several points from the books comprised in all the previously described seven sets. In the first place, it is clean; there is no trace of any burn or fatty stain. In the second place, the paper, to all appearance, is of an entirely different quality. It is thin and soft and more nearly resembles the paper of the Weber and Macartney Manuscripts procured from Kuchar. It differs, however, from their paper in colour; for while their paper is white or whitish, the paper of this book is of a bright yellowish-brown. It looks as if it were artificially tinted; but the colouring, if any, is fast, for it is tolerant of washing. It is a pity that its find-place is not known; but that it comes from some spot in the Takla Makan is shown by the fact of all its leaves being, like those of all the other blockprints, very thickly covered with the fine yellow sand of the desert. Another curiosity is that a small special formula, which occasionally occurs in it, is printed with an apparently faded, red-coloured fluid, which almost resembles blood. Its ordinary formula is, as usual, printed with black ink. Minor peculiarities are the following: (1) most of the existing leaves show a clean cut on one of the narrow sides, (2) two of the pages have the text printed diagonally across them, and (3) a few leaves are only printed on one side. The last mentioned peculiarity is due to the extreme thinness of the paper, owing to which the print on one side shows through on the other. The leaves have, as in the case of all other block-printed books, frayed edges, but in the present case one of the narrower sides of most leaves has been clipped with a sharp knife or scissors, for it shows a clean cut, which occasionally passes right through a line of print, showing that the clipping was not done with little care.

The text of the book consists of two formulas which I shall call VIII *a* and VIII *b*. The formula VIII *a* consists of three long lines, containing apparently about 16 letters each. It is the proper formula

of the book, as it covers every printed page but one. Formula VIII *b* is evidently a special one; it is very small, consisting of four lines, of 2, 3, 3 and 6 letters; and it is only found on a very few pages. On one page it is found twice, printed in the middle and at the top of it, the rest of the page being filled with the ordinary long formula VIII *a*. On two other pages it is found similarly at their top; and lastly there is one leaf, on which it occupies the entire surface of both pages. Curiously enough this is an isolated leaf, which is stuck in between the two leaves of a folded form. But from the page which exhibits the double imprint of formula VIII *b* (see Plate XV, fig. 1) it is evident, that both formulas were printed at the same time; for the needful space (though only just barely sufficient) is purposely left for formula VIII *b* between the impressions of formula VIII *a*.

The latter formula is printed ten times in a column on each page; the column running parallel to the longer side of the book. Within the column the impressions of the formula stand, as a rule, upright and reversed alternately; though occasionally two upright or two reversed impressions follow consecutively, as may be seen on the facsimile page in Plate XV, fig. 1.

Formula VIII *b* is also printed in a column consisting of ten lines of impressions; but each line itself is made up of four impressions, standing alternately upright and reversed; so that the formula is repeated 40 times on each of the two pages of the leaf the surface of which it entirely occupies. On all other occasions (as on the facsimile page) where formula VIII *b* occurs, it only occupies one line consisting of four impressions.

Among the fragments, found by me with the book there are two, which have a peculiar interest in bearing, in addition to the ordinary formula VIII *a*, a second small text, which I shall call formula VIII *c*. One of the fragments consists of a very narrow oblong sheet, folded in the middle into two leaves. Each of these leaves (see fig. 3 on Plate XIV) measures $6\frac{1}{8} \times 3$ " ; and shows a clean cut along either of its long sides. As these sides measure exactly the same as the breadth (or narrow side) of the book; it seems probable that the whole oblong sheet is simply a slip cut out of one of the forms of the book. And seeing that the slip is nearly blank on one side, it is further probable that the form, from which it was cut, was one of the outside, or covering, forms of the book which are now missing. The other piece is of a very irregular rhomboid shape, being apparently a piece torn off one of the leaves of one the outside forms of the book; for it shows on one side three full and one fragmentary imprints of the ordinary formula VIII *a* in the usual column arrangement, while the

other side must have originally been blank, but is now covered with imprints of formulas VIII *b* and VIII *c* in a promiscuous and disorderly way.

NINTH SET. (Plate XV, figs. 2 and 3, and Pl. XVI.)

This set comprises two items, a roll and a book. The latter, when received, was enclosed in a carved wooden box; and the former probably was also originally within it. The whole belongs to G. 10. It was received by Captain Godfrey from Leh, and is said to have been dug out in the Takla Makan, which, seeing that it is more or less thickly encrusted with the fine yellow sand of the desert, is probably correct. But it is a pity that the exact find-spot is not known.

No. I. THE BOX.

The box (Pl. XV, fig. 2) has a height of $4\frac{1}{8}$ " ; its diameter externally is $4\frac{1}{4}$ " , and internally, $3\frac{1}{2}$ " ; inclusive of the projecting carved figures, its breadth is $4\frac{3}{4}$ " . It is drilled out of one piece of wood, and is ornamented with six carved projections, which run, like pillars, round it parallel with the length of its wall, and at equal distances (about 1") from one another, and consist alternately of standing human figures and inscribed boards. Close to one of the figures, there is a crack right through the wall of box, gaping asunder about $\frac{1}{4}$ of an inch. Above the head of the next figure to the right, there is a large semi-circular notch cut into the rim (shown on Pl. XV), and there is also a smaller triangular one over the inscribed board which stands between those two figures. These notches seem to have been made intentionally. There are also two small, irregular holes in the wall (one shown on Pl. XV), nearly opposite to each other, but these appear to be due to injury. There is no lid to close the box; nor do appearances point to its ever having had any. The projections go down to the bottom of the box, but do not reach quite to the edge of the rim, being short of it by $\frac{3}{8}$ of an inch.

Of the three human figures, one is represented with his arms a-kimbo, his hands resting on his abdomen (shown on Pl. XV), while the other two figures have their arms hanging down straight by their sides. There are some similar crude figures of copper in the collection, which will be described in the section on Miscellaneous Objects. All three figures on the box appear to be represented nude. Two of them (including the one with the arms a-kimbo) bear curious lines marked regularly across both sides of the chest and upper arms. They might be intended to denote a short jacket; but similar lines are used to mark the hair on the heads of all three figures. This hair is marked very regularly, long hair with a parting in the middle. One of the figures—

he with the arms a-kimbo—has also a beard, marked by similar lines all round the lower part of the head. The other two are represented beard-less. The heads are made disproportionately large; and altogether the figures are very crude.

The three bands (Pl. XV, fig. 3) of writing are oblongs, measuring about $3\frac{3}{4} \times 1''$. One of them is divided, by indented lines, into three nearly equal compartments. Their top and bottom seem to be clearly indicated by their correspondence to the heads and feet of the figures. They are shown on the Plate in the position thus indicated. Accordingly the legend of No. II which consists of two lines containing each six symbols must be read either from top to bottom, or from right to left. The legend of No. I appears to consist of a narrow column of nine short lines, each containing three or four symbols. The three compartments of No. III seem to contain 3, 2, 3 short lines respectively. The probability seems to be that all the legends run from the right to the left.

On Plate XV, fig. 4 I show an inscription which exhibits a curious *primâ facie* resemblance to the writing on the bands. This inscription stands on a hone of slate, measuring $5 \times 1''$. It was found at Mazyhund, close to Tiran, at the foot of Mahaban in the Swat country, and brought to Major Deane, who very kindly gave it to me to be added to the British Collection of Central Asian Antiquities.

No. II. THE ROLL. (Plate XVI).

The roll measures $16\frac{3}{4}$ by $4\frac{3}{8}$ inches. The paper is very different in texture from that of the block-prints books comprised in Sets I to VIII. It is exceedingly thin, tough and hard; it is also oiled or greased, apparently as a kind of sizing, to tolerate being printed on. When washed, it shows a very light yellowish or creamy tint. In general appearance it resembles thin parchment. It is only printed on one side, the paper being so thin that the print of one side shows through on the reverse, wherever there is an excess of ink, as in lines 8–11, 30–33, 38, 39. For that reason, clearly, the ink was, as a rule, put on very sparingly, so that in many lines the print is so fine as to be almost illegible.

The roll is covered with 45 lines of print, which run parallel to its narrow sides, and which contain each from 13 to 15 symbols. A closer inspection reveals the fact that this text of 45 lines consists of five formulas, which are repeated at irregular intervals, and each of which comprises two lines of the text. I shall distinguish these five formulas as IX¹, IX², IX³, etc. The two lines of the several formulas are made up of a number of symbols varying from seven to fourteen. Sometimes, as in lines 8 and 9, which comprise formula IX⁴, the lines

of the formula practically coincide in length with the lines of the text. In other cases, as in lines 20 and 21, comprising formula IX², the lines of the formula are much shorter than those of the text. In these cases the latter lines are filled up with repetitions of the formula, in a more or less complete state.

Formula IX¹ occurs five times, in lines 2 and 3, 16 and 17, 24 and 25, 34 and 35, 44 and 45. Accordingly, considering that there are two columns, the formula is repeated ten times. In lines 2 and 3, it stands reversed; in all the other lines, it stands upright.

Formula IX² occurs six times, in lines 4 and 5, 10 and 11, 20 and 21, 22 and 23, 30 and 31, 38 and 39. Altogether it is repeated twelve times on the roll. This formula and the fourth are the only ones in which the symbols stand sufficiently apart to permit of being discriminated and counted. Its first line consists of eight, and its second line, of seven symbols. The second (or sixth, according as the series is read from the left or right) symbol of the latter line has a striking resemblance to the Sanskrit (Brāhmī) letter for *a*, as written in North-India about 800 A.D.; but this must be a mere accidental coincidence, as no resemblance can be seen in any of the other symbols.

Formula IX³ occurs three times, in lines 6 and 7, 12 and 13, 14 and 15. The number of symbols comprised in its two lines is uncertain; probably 11 and 13 respectively.

Formula IX⁴ occurs twice, in lines 8 and 9, 32 and 33. Both lines appear to consist of eleven symbols.

Formula IX⁵ occurs six times, in lines 18 and 19, 26 and 27, 28 and 29, 36 and 37, 40 and 41, 42 and 43. In the two pairs of lines 18, 19 and 26, 27 it stands reversed; in the other four pairs it stands upright. The two lines appear to comprise 12 and 14 symbols respectively.

No. III. THE BOOK.

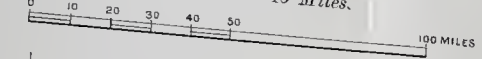
Belongs to G. 10. Size $6 \times 4\frac{1}{4}$ ". Number of forms $34\frac{1}{2}$; many cut into separate leaves; number of leaves 69. No blank covers. Many leaves torn. Paper rather brittle, and of the same kind as that of the Roll No. II. Stitched with four loops of thread.

Contains the identical text of the roll; as a rule, arranged in columns, running parallel to the narrower side of the book; but on a few exceptional pages, they run parallel with the longer side. As in the roll, the formulas are repeated at irregular intervals, two or three formulas being found repeated on each page.

Map of
EASTERN TURKISTAN
TO ILLUSTRATE THE REPORT ON
CENTRAL ASIAN ANTIQUITIES

N. B.—Find-places are in red ink

Scale 1 Inch = 40 Miles.





MEMOIR
ON MAPS ILLUSTRATING
THE ANCIENT GEOGRAPHY
OF
K A Ś M Ī R.

BY

M. A. STEIN, P_H.D.

PRINCIPAL, MADRASAH COLLEGE, CALCUTTA.

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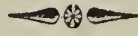
1899.

“ ... *quae loca fabulosus*
Lambit Hydaspes.”

Q. HOR. FLACCI, Od. I, xxii.

**N.B.—For Table of Contents and List of Abbreviations
see pp. 223-231.**

JOURNAL
OF THE
ASIATIC SOCIETY OF BENGAL.



Part I.—HISTORY, LITERATURE, &c.

Extra-Number 2.—1899.

Memoir on Maps illustrating the Ancient Geography of Kaśmīr.—
By M. A. STEIN, PH.D.

CHAPTER I.

INTRODUCTORY.

1. The maps accompanying this memoir are primarily intended to show the results which a detailed study of Ancient topography in Kaśmīr Chronicle. Kalhaṇa's RĀJATARANĠIṆĪ has furnished regarding the early topography of Kaśmīr and the adjacent territories. From the first when engaged in preparing a critical edition of that text,¹ the earliest and most important of the Sanskrit Chronicles of Kaśmīr, I had realized that an exact identification of the very numerous old localities mentioned in it was indispensable for a correct understanding of the narrative. This conviction forced itself even more strongly upon me in the course of the labours I devoted to the preparation of the commentated translation of the work which is now passing through the press.²

¹ *Kalhaṇa's Rājataranḡiṇī or Chronicle of the Kings of Kaśmīr*, Bombay Education Society's Press, 1892, pp. xx and 296, 4to.

² To be published, with a Historical Introduction, by MESSRS. A. CONSTABLE AND Co., London, in two volumes, 4to.

Many of the questions thus raised were so detailed and intricate that it would have been manifestly impossible to attempt their solution without carefully studying on the spot those topographical facts which alone could elucidate them. It was, therefore, fortunate for my researches in this direction that I was able during successive years to make a series of antiquarian tours in Kaśmīr. These acquainted me not only with the extant ancient remains of the Valley, but also with its actual topography and that of the neighbouring mountain regions.¹ I cannot feel too grateful for the advantage I thus enjoyed. It has allowed me in more than one case to fix with certainty the position of important ancient sites, which no amount of philological acrobacy would have sufficed to locate correctly.

2. In order to place before the student of the Kaśmīr Chronicle the results of these researches, as well as the evidence on which they were based, the preparation of maps appeared necessary that would show the modern topography of the country in full detail together with the ancient sites and local names identified. While considering the means for the execution of such maps I received in the autumn of 1896 the generous offer of the Asiatic Society of Bengal to bear the cost connected with their preparation, on the understanding that the maps would be published also in the Society's Journal with a separate explanatory memoir. I accepted this offer all the more readily as it gave me the desired opportunity of treating the subject of the early geography of Kaśmīr in a connected form and before a larger public. For the liberal assistance thus rendered to me, I wish to record here my sincere thanks. I owe special obligations to Dr. G. A. GRIERSON, C.S., C.I.E., and Dr. A. F. R. HOERNLE, C.I.E., whose kind offices were mainly instrumental in securing the above arrangement.

The successful execution of the maps as now published was rendered possible by the ready co-operation of Colonel J. WATERHOUSE, I.S.C., late Assistant Surveyor General, in charge of the Lithographic and Photographic Office of the Survey of India Department. The preparation of a new ground map to show on a sufficiently large scale the details of the modern topography of Kaśmīr would have cost much trouble and entailed very heavy, almost prohibitory, expense. At the same time it had to be considered that there were no other materials available for such a map but those supplied by the Trigonometrical

¹ The tours referred to occupied the greatest part of my summer vacations in 1888, 1889, 1891, 1892, 1894 and were supplemented by shorter visits to particular sites during the summers of 1895-96.

Survey operations in Kaśmīr, 1856-60, which had been embodied on the scale of 4 miles to 1 inch in the corresponding sheets of the 'Atlas of India.'

It hence appeared to me the most convenient plan to use as a ground-map a mechanical reproduction of that portion of the 'Atlas of India' which contains Kaśmīr and the adjacent territories. Over this ground-map the entries relating to the ancient topography of the country could be printed in a distinguishing colour. This plan having received Colonel Waterhouse's approval, the required portions of the engraved plates containing Sheets 27 and 28 of the 'Atlas,' were transferred to the stone and the copies of the larger map reproduced from the latter by lithography. A similar process was used for the smaller map showing the capital, ŚRĪNAGAR, and its environs on the enlarged scale of 1 mile to 1 inch. But in this case the original map which was not engraved but only zincographed, had to be retraced on the stone.¹

In the case of either map the entries marking ancient sites and names were printed in red over the ground-map from a separate stone. In order to distinguish at a glance the old local names in the Rājatarāṅgiṇī from those known only to the later Chronicles and other sources, the former were shown in GROTESQUE type and the latter in *Italic*.

By following the method here briefly explained it was possible to provide maps which exhibit in all needful detail the latest and most authentic survey of Kaśmīr and at the same time show clearly all important features of the old topography. The success of the technical execution is due mainly to the great care and attention bestowed on it by Colonel WATERHOUSE and his staff. For this as well as much valuable advice accorded to me in connection with the work I may be allowed to offer here my grateful acknowledgments.

3. It has already been stated that the maps here presented are in the first place intended to illustrate those data of the ancient geography of Kaśmīr which are contained in KALHAṆA'S Chronicle. But in addition to the old local names and sites taken from this our most important source of information those mentioned in the later Sanskrit Chronicles and other Kaśmīrian texts have also been inserted as far as they can claim antiquity and interest. These maps may, therefore, equally well serve to illustrate a comprehensive account of the historical topography of Kaśmīr, such as I shall attempt to give here, up to the close of the Hindu epoch.

Arrangement of memoir.

¹ The original of this smaller ground-map had appeared as an inset in the "Map of Jummoo, Kashmir and Adjacent Territories," 4 miles to 1 inch, published by the Survey of India, 1861.

In treating this subject it appears to me most convenient to examine first the sources of information from which our knowledge regarding the ancient topography of Kaśmīr is drawn. I shall next proceed to notice what we can learn from these sources as to the general physical features of Kaśmīr geography and their bearing on the historical and economical conditions of the country during the Hindu period. In the last chapter I intend to discuss the political divisions of the territory and to indicate briefly the information available to us regarding the particular places of historical or religious interest.

Most of the data upon which this account of the old topography of Kaśmīr is based, are contained in Kalhaṇa's Chronicle, and have therefore already been explained by me in the notes which accompany my translation of that work. In order to avoid unnecessary repetition I shall refer to these notes for all such detailed evidence as could not conveniently be set forth within the limits of the present paper.

4. Before, however, closing these preliminary remarks it is necessary to refer briefly to those few publications **Earlier publications.** in which facts bearing on the old topography of Kaśmīr have received an earlier treatment.

In view of what has been said above we naturally turn first to the works which have dealt directly with the interpretation of the Rājatarāṅgiṇī. Dr. WILSON who was the first European to study the Chronicle in the original, published an abstract of the contents of the first six Books as early as 1825.¹ He seems to have fully realized the importance of an accurate and sober examination of the geographical questions connected with the narrative. The textual materials at his disposal were, however, extremely defective, and European knowledge of Kaśmīr restricted at the time solely to the accounts of BERNIER and FORSTER. He could hence scarcely do more than indicate the more or less corrupt modern equivalents by which the Persian Chronicles render some of the Kaśmīr local names taken from Kalhaṇa's account. The judgment and accuracy with which Dr. Wilson discussed the Chronicle's notices of countries and places situated outside Kaśmīr and better known at that time, shows sufficiently that only the defective character of the available materials prevented that distinguished Sanskrit scholar from doing justice to the task.

The elaborate commentary with which Mr. TROYER accompanied his French translation of the Rājatarāṅgiṇī,² does not represent any material advance beyond the contents of Wilson's Essay. Yet Mr. Troyer

¹ *An Essay on the Hindu History of Cashmir*, in *Asiatic Researches*, vol. xv., 1825, pp. 1 sqq.

² *Rājatarāṅgiṇī on Histoire des rois du Kachmīr*, Paris, 1840-52.

had already the whole text of the Chronicle to refer to, and in the meantime a considerable amount of information about Kaśmīr had become available through the works of travellers like Moorcroft, Jacquemont, Vigne, Von Hügel, and others. The serious shortcomings which characterize Mr. Troyer's labors notwithstanding his patient devotion to the task, have already been fully indicated by Prof. Bühler.¹ Detailed reference to the defects of the topographical notes is hence unnecessary.

The English translation of the Chronicle published in the years 1879-87 by Babu Jogesh Chunder DUTT makes no attempt whatever to elucidate the many points of topographical interest. Though the translation itself is decidedly better than that of Mr. Troyer, yet it necessarily shares the defects arising from the use of the same corrupt text. Both versions strikingly demonstrate the importance of topographical researches by the frequent instances in which the translators have mistaken local names for words of ordinary meaning or *vice versa*.²

The advantages offered for enquiries of this kind by a personal acquaintance with the country were fully illustrated by the valuable contributions which General (then Captain) CUNNINGHAM was able to make to our knowledge of ancient Kaśmīr in connection with his visit to the Valley in November 1847. Though his stay was short and primarily devoted to a survey of the more conspicuous of the temple-ruins still extant, he succeeded in identifying correctly a number of important ancient sites such as *Purāṇādhiṣṭhāna* 'the old capital,' *Jyeṣṭheśvara*, *Mārtāṇḍa*, *Padmapura*, *Pattana*, *Khonamuṣa*.³

General Cunningham subsequently had occasion to discuss comprehensively these localities in his *Ancient Geography of India*, a work which, notwithstanding its deficiencies in detail, amply testifies to the great antiquarian experience and natural acumen of its author. The chapter on the "Kingdom of Kashmir"⁴ utilizes the evidence afforded by the Chinese sources and Alberūnī, and indicates correctly the old names of the petty hill states to the south and south-east of Kaśmīr (*Rājapurī*, *Vallāpura*, *Campā*, *Kāṣṭhavāṭa*). It further adds to the identifications already mentioned equally important notes on *Pravara-pura*, the present S'rīnagar, *Vijayeśvara*, *Huṣkapura*, *Juṣkapura*, *Jayapura*. If General Cunningham was less successful in his attempts at

¹ See *Report on a tour in search of Sanskrit Manuscripts made in Kashmir*, J. Bo. B. R. A. S. 1877, pp. 55 sqq.

² For some of the imaginary territories and places which figure in these translations, see *Vienna Oriental Journal*, 1898, pp. 67 sqq.

³ See his *Essay on the Arian Order of Architecture as exhibited in the temples of Kashmir*, J. A. S. B., 1848, pp. 242-327.

⁴ See *Ancient Geography of India*, 1871, pp. 89-103, 128-141.

locating *Parikhāsapura* and some other ancient sites, this may fairly be attributed to his inability to consult the Sanskrit sources in the original.¹

Professor LASSEN'S "Indische Alterthumskunde" gives an extensive analysis of the historical contents of Kalhaṇa's work.² But his explanations as to the ancient localities mentioned are generally only there well-founded where they are based on General Cunningham's researches. Ancient territories and places are often connected with modern localities merely on the ground of a faint resemblance of the names and without sufficient internal evidence. This tendency has frequently led that distinguished scholar to ignore the narrow territorial limits within which most of the local and ethnic names occurring in the later portion of Kalhaṇa's narrative have to be looked for. It is only natural that identifications of real (or imaginary) localities which transferred the scene of contemporary events described by Kalhaṇa to territories so distant as Lahore, Eastern Afghānistān or Ajmīr,³ have helped to produce a very ill-focussed picture of the political power and extent of the Kaśmīr kingdom in those later times.

The merit of having definitely shown the right methods and means for re-constructing the ancient geography of Kaśmīr belongs to Professor BÜHLER. This great scholar by whose lamented death so many branches of Indian research have suffered irreparable loss, had in the masterly

¹ If particular proof were wanted to show that a through acquaintance with the modern topography of a country is in itself not sufficient to lead to useful results in regard to its historical geography, Mr. VIGNE'S work, *Travels in Kashmir, Ladak, Iskardo*, (London, 1842, two Vols.) would supply it. This estimable artist and traveller evidently took a great deal of interest in the antiquities of the country which he traversed in many directions. His book, however, as far as the old geography of Kaśmīr is concerned, furnishes scarcely anything more than a series of amusingly naïve etymologies of local names. Thus *Hūrāpōr* (Sūrāpura) is "the Diamond City," *Pāndrēṭhan* (Purāṇādhiṣṭhāna) the place of the 'Pandus and Duryndun' (*i. e.*, Duryodhana), *Sōpūr* (Suyyapura) 'the Golden City,' etc.; see i. p. 267, ii. pp. 37, 157.

Mr. Vigne is responsible for the strange derivation of the name of the Kaśmīr capital, *Srīnagar* (Srīnagara), or as he spells it, 'Siri-Nagur,' from "*Surya Nagur*, the city of the sun" (p. ii. 137). Judging from the persistence with which the error has been copied by a succession of modern writers on Kaśmīr, this etymology bids fair to establish itself as a piece of orthodox creed with European visitors to the Valley.

² See *Indische Alterthumskunde* (second ed.), ii. pp. 885-915; iii. pp. 984-1128.

³ I refer to locations like those of *Lohara* (Loharin) at Lahore; of the [imaginary] province *Kampanā* in eastern Afghānistān; of the *Lavanya* tribe near the Sambhar salt lake; of the feudal chief *Koṣṭheśvara* at Kōṭgarh on the Satelej, etc.; comp. *Ind. Alterth.* iii. pp. 1057, 1041, 1069, 1105, and for the supposed territorial extent of the Kaśmīr state, iii. p. 1119.

report on his Kaśmīr tour lucidly set forth the work that remained to be done in connection with the Rājatarāṅgīnī.¹ He had there shown that for a full comprehension of its contents a minute study of the ancient geography of Kaśmīr was indispensable. He was the first to call attention to the ample materials which are offered for such a study by the later Sanskrit Chronicles, the Nilamatapurāṇa and other Kaśmīrian texts. But he also realized that “some of the geographical questions would probably require a final re-examination in Kaśmīr.”

Other labors prevented my lamented master from undertaking this task himself. But the most graphic and accurate notices which his Report gives of those sites in the Valley he had himself been able to visit,² prove convincingly—if any proof were needed—that no important point connected with the old topography of the country could easily have escaped his attention. The particular identifications first made by Prof. Bühler will be duly mentioned in their proper places. It was a source of true satisfaction to me that I was able during my last year’s visit to Europe to present personally the departed with the first clean copies of the maps now published. That the results recorded in them were such as obtained his approval, will always appear to me the highest reward for the labour their preparation and the preceding researches had cost me.

¹ See *Report on a tour in search of Sanskrit manuscripts made in Kashmir*, Bombay, 1877, p. 58.

² See *loc. cit.*, pp. 4–18.



CHAPTER II.

ACCOUNTS OF OLD KASHMIR.

SECTION I.—CLASSICAL NOTICES.

5. Our sources for the early geography of Kashmīr may be conveniently divided into foreign notices and indigenous records. As the information supplied by the former is on the whole earlier in date though by no means more precise or important, we shall commence our review with them. Having learned what little the outer world knew or recorded of the secluded alpine land, we shall appreciate all the more the imposing array of Kashmīrian authorities which offer themselves as our guides in and about the Valley. With the foreign accounts but in a kind of intermediate position we may class those Indian texts the authors of which may have possessed some more detailed information of Kashmīr, but have not thought it necessary to vouchsafe it to us.

It is significant for the isolated position which its mountain barriers assured to Kashmīr, that we do not find any mention of the country in those accounts to which we are accustomed to look for the first truly historical notices of the North-West of India. I mean the relations of Alexander's invasion. The march from Taxila to the Hydaspes (Jehlam) took the Macedonian forces along a line of route which lay comparatively near to the confines of Kashmīr. Yet there is no notice in the accounts of Alexander's expedition which can be shown to imply even a hearsay knowledge of the Kashmīr Valley. On the other hand the names of the neighbouring territories on the West and South have long ago been recognized in the names of their rulers *Arsakes* and

Abisares. These names clearly represent ethnic appellations derived from *Urasā* (Ptolemy's *Oṽapσα*) and *Abhisāra*.¹

The only certain reference to Kaśmīr which classical literature has preserved for us, is found in PTOLEMY'S *Geography*. There can be no doubt that D'Anville was right in recognizing its name in that of the region of *Κασπερία* situated 'below the sources of the Bidaspes (*Vitastā*) and of the Sandabal (*Candrabhāgā*) and of the Adris (*Irāvātī*)'.² Ptolemy mentions this territory correctly enough between that of the *Daradrai* or Dards on the Indus and *Kylindrine* or the land of the Kulindas on the Hyphasis (*Biās*) and eastwards. In his subsequent detailed description of Indian territories, however, he makes the region 'held by' the Kaspeiræans' extend eastwards from the land of the Pandoouoi on the Bidaspes as far as Mount Ouindion or the Vindhya.³

It is clear that the limits here indicated which would embrace a great portion of the present Panjāb with parts of the North-West Provinces and Central India, can have nothing to do with Kaśmīr. It has been suggested that Ptolemy's statement refers to a period when the power of the dynasty ruling over Kaśmīr actually extended over the wide territories above indicated.⁴ The assumption, put into a form more in keeping with historical probability, would be that Kaśmīr was then subject to a great foreign dominion the rulers of which, for one reason or the other, were in Ptolemy's source designated from this part of their realm.

However this may be, it is curious to note that we meet with the name *Κάσπειρα* also in the long list of cities located within the region belonging to the Kaspeiræans. The geographical position assigned to it by Ptolemy's table (or map) would bring Kaspeira close to the junction of the Hydaspes and Zaradros (*Satlej*), *i.e.*, the neighbourhood of Multān.⁵ Yet it seems difficult to believe that the information originally underlying this entry referred to any other locality but Kaśmīr.⁶

¹ See LASSEN, *Ind. Alt.*, ii. p. 174; WILSON, *Essay*, p. 116; also my notes on *Rājatar.* i. 180; v. 217.

² See Ptolemy VII. i. 42 and pp. 21, 40 sq. in *Antiquité Géographique de l'Inde*, par M. D'Anville, *Premier Géographe du Roi*, etc., Paris, 1775.—The accuracy and sound judgment displayed in this work fully justify the great fame it has enjoyed.

³ Ptolemy, VII. i. 47.

⁴ Compare, *e.g.*, LASSEN, *Ind. Alt.* ii. p. 898; V. DE ST. MARTIN, *Mémoires de l'Académie des Inscriptions*, Sav. étrang., 1^{re} Série, t. v., p. 380.

⁵ See the old map reproduced in DR. MCCRINDLE'S *Ancient India as described by Ptolemy*, Bombay, 1885.

⁶ This had been rightly seen already by D'ANVILLE. He points out, p. 40, that the error in latitude implied by Ptolemy's position of Kaspeira (if Srmagar

It would be useless to attempt to seek now for an explanation of the erroneous location. The researches of the most competent scholars have amply proved how little reliance can be placed on the apparent exactness of Ptolemy's latitudes and longitudes in the Asiatic portion of his work.¹ None of the other city names in the same list can be connected with Kaśmīr. Nor is the identification of any one of them certain, except that of Μόδουρα ἡ τῶν Θεῶν, the sacred Mathurā. This alone suffices to show how far away from Kaśmīr we are liable to be taken.

The value of Ptolemy's notice of *Kaspeiria* lies mainly in the fact that it presents us with an accurate enough transcription of that form of the country's name which on independent phonetic evidence we must assume as an intermediate stage between the Sanskrit *Kaśmīra* and the modern Kaśmīrī form *Kaśīr*. The explanations given below (§ 36) will show that a well-established phonetic law presupposes a form **Kaśvīra* for the earlier Prakrit stage of Kaśmīrī. Of this form we have in *Kaspeira* (pronounced *Kaspīra*) as close a rendering as Greek writing permitted.²

The Sanskrit form of the name, *Kaśmīra*, has, as far as we can go back, been always the one in official use. By it the country has been, and is still to this day, generally known abroad (Hindī *Kaśmīr*, Persian *Kashmīr*.) The preservation of the popular Prakrit **Kaśvīra* by Ptolemy deserves hence attention with regard to the original source from which this particular item of information was obtained.

6. It is very probable that we have also to connect with Kaśmīr a curious notice which Stephen of Byzance has preserved from the *Bassarika*, a lost poem of Dionysios of Samos. The passage, first apparently noticed by D'Anville, mentions the KASPEIROI as a tribe famous among all Indians for their fast feet.³ We do not know the (is really meant) is not greater than that which can plainly be proved in the case of his entry for *Barbarei*, the port at the mouth of the Indus.

¹ I cannot refrain from quoting here in full the very just remarks of SIR HENRY YULE, *Cathay and the Way Thither*, p. cli, which ought ever to be remembered by those who have to deal with Ptolemy on Indian soil. "We see here how Ptolemy's Asiatic Geography was compiled. It is evident that he first drew his maps embodying all information that he had procured, however vague and rough it might be. From these maps he then deduced his tables of latitudes and longitudes and his systematic topography. The result is that everything assumes an appearance of exact definition; and indications on the map which meant no more than (somewhere hereabouts is said to be such a country), became translated into a precision fit for an Act of Parliament."

² Thus the tribal name *Aspasioi* of Arrian (iv. 23) reproduces the Sanskrit *Aśvaka*; comp. MCCRINDLE, *Invasion of India*, p. 333.

³ The text of the passage is reproduced by TROYER, ii. p. 307. Another short quotation from the same text mentions the *Ariēnoi* along with the *Κασπεῖροι*.

time of this Dionysios. Nor is there any indication as to the source from which he may have taken the reference. That the Kaśmīris had abroad the reputation of being good pedestrians may be concluded from a remark of Albērūnī.¹ It is clear that the natural conditions of an alpine valley enclosed by difficult mountain ranges are likely to develop the marching powers of its inhabitants. The Rājatarāṅgiṇī gives us in fact several instances of very respectable marching performances. It shows at the same time the scant use made of riding animals in the mountains.² There is thus more than the mere name to justify us in referring the notice of Dionysios of Samos to Kaśmīr.

We meet with the name of the *Kaspeiroi* also in the Dionysiaka of Nonnos. There they are mentioned among the Indian tribes rising in arms against Bacchos.³ As Nonnos' list names in the same passage also the Ariēnoi whose name we see coupled with that of Kaspeiroi in the fragment of the Bassarika, it is probable that Nonnos has taken his reference either from the latter work or from some common source.

7. We should, indeed, have a far earlier reference to Kaśmīr in classical literature, and one by no less an authority than the 'Father of history,' if the opinion of those scholars could be accepted who

**Kaspatyros of
Herodotos.**

have thought to recognize the name of the Valley in the KASPATYROS of Herodotos. The facts are briefly the following. Herodotos mentions the city of Kaspatyros as the place at which the expedition under Scylax of Koryanda, sent by Darius to explore the course of the Indus, embarked.⁴ He distinctly places this city in the Paktyan land (Πακτυϊκὴ γῆ). This is described as being to the north of the other Indians and apparently bordering on the Baktrian territory. The place meant by Herodotos is evidently the same that Hekataios knew before him by the name of KASPAPYROS and as a city of the Gandarians.⁵

The notice of Hekataios (circ. 549-486 B.C.) makes it clear that Kaspatyros or Kaspapyros, whichever form may be more accurate, must have been situated in that territory where the Indus first becomes navigable, *i.e.*, in the ancient Gandhāra, the present Peshawar District. That the designation *Paktyikē* used by Herodotos refers to the same

¹ *India*, transl. Sachau, i. p. 206.

² Compare *Rājat.* vii. 140, 1301; viii. 192, 379, 1588, 1796, 1887, 2673 sq.

³ See *Dionysiaka*, xxvi. 165 sqq. I take this reference from TROYER, ii. p. 308.

⁴ See iv. 44, also iii. 102. The points bearing on the interpretation of the passage have been fully discussed by SIR E. H. BUNBURY, *History of Ancient Geography*, i. pp. 228, 256.

⁵ See Stephanos Byzant., s.v. ΓΑΝΔΑΡΙΚΗ; also Müller's *Fragmenta historic. graec.*, i. p. 12.

territory and represents the earliest mention of the ethnic name *Pakhtūn* or the modern Indian *Paṭhān*, seems also probable.¹ The exact site of Kaspatyros has not been identified. Considering the great changes which local nomenclature in Gandhāra has undergone, it perhaps never will be.²

WILSON was the first who distinctly attempted to connect the name of Kaspatyros with Kaśmīr.³ But the idea seems to have occurred earlier. For D'Anville thought it necessary to refer to it and to refute it. Wilson saw clearly enough that the city of Scylax must have been situated close to the Indus and hence far away from Kaśmīr. If notwithstanding this important fact he yet proposed to identify its name with that of Kaśmīr, on the assumption that the borders of the latter kingdom extended as far as the Indus, the mistake must be traced to a fanciful etymology of the latter name.

Wilson assumed that the name Kaśmīr was derived from **Kaśyapa-pura*, a name which he supposed to have been given to the country owing to its colonization by the Ṛṣi Kaśyapa. He supported this strange derivation by a reference to the uniform assertion of 'Oriental writers.'⁴ But it is difficult to believe that he could have meant any

¹ This identification seems to have been first made simultaneously by DORN and LASSEN; compare V. DE ST. MARTIN, *Étude sur la géographie grecque de l'Inde*, Mém. de l'Acad. des Inscriptions, Sav. Étrang., 1re Série, V., p. 17 sqq. His note on Kaspatyros, *ib.* pp. 81-86, contains a judicious review of the whole question from the geographical point of view and a detailed account of earlier opinions. For a more recent résumé compare DARMESTETER, *Chants Populaires des Afghans*, pp. clxxx sqq.

² Proper navigation begins now at Jahāngīra, a place situated on the left bank of the Kābul River, some six miles above the confluence of the latter with the Indus at Attock. The lower part of the Kābul River's course lies in a well-defined single bed which, in view of the natural configuration of the banks, cannot have changed materially in historical times. Above Jahāngīra the current becomes too strong for safe navigation.

I doubt very much whether the Indus immediately above Attock can ever have been suitable for proper navigation. The river is cut up there into many, often very shallow, channels and obstructed by continually shifting sandbanks. On the eastern bank spreads the low plain of Chach, which must have always left a wide scope to the vagaries of the great river. Taking into account these circumstances I should not be surprised if Scylax's expedition had chosen some place near Jahāngīra for the start on their voyage. There are many ruined sites near the latter place, and near Alladhēr closeby on the Indus.

³ See *Essay*, p. 117; for a reproduction of the argument, also, *Ariana Antiqua*, p. 136 sq.

⁴ "This (the name of Cashmir) was derived, it is uniformly asserted by the Oriental writers, from the colonization of the country by Casyapa, the first settlement or city being named after him Casyapapur, converted in ordinary pronuncia-

better authorities than the Persian *Tārīkhs* of Kaśmīr, of the 17th and 18th century, which he had occasion to consult in connection with his above-quoted Essay. They, indeed, indulge in whimsical etymologies like Kashmīr, *i.e.*, *Kashap* (Kaśyapa) + *mar* (maṭha), etc. But neither these etymologies nor the name **Kaśyapapura* are in any way known to our genuine sources.

Wilson would scarcely have chosen to put forth such a derivation, had the whole of the Chronicle or the other Kaśmirian texts been at the time accessible to him. Extensive as this literature is, it does not furnish any evidence whatever for **Kaśyapapura* or a similar name having ever been used as a designation of the country. This fact is all the more significant as allusions to the legendary origin of the country are otherwise so frequent. The philological impossibility of deriving Kaśmīra from **Kaśyapapura* need scarcely be specially indicated at the present day.¹ A reference to the theory was, however, here necessary, as it has found its way into works of authorities like Ritter, Lassen and Humboldt, and has hence been reproduced even by recent writers.²

SECTION II.—CHINESE RECORDS.

8. If classical literature has thus nothing to tell us of Kaśmīr but the bare name, it is very different with the Chinese records. Buddhist pilgrims from China on their way to the sacred sites of the Indian plains visited Kaśmīr and chose it as a resting place. Their itineraries as well as the records of the political relations established with Kaśmīr during a period of Chinese extension to the west, furnish us with a series of interesting data for the old geography of Kaśmīr.

It seems difficult to ascertain from the materials at present accessible in translations or notices of European scholars, which is to be considered the earliest Chinese reference to Kaśmīr. The difficulty is connected with the use of the geographical term *Ki-pin*. This name

tion into Cashappur or Caspapur, the latter of which forms is the proper reading of the Greek text;” *Essay*, p. 117.

¹ It is curious to note that *Kāśyapapura* was, according to an Indian authority quoted by Albērūnī, *India*, transl. Sachau, i. p. 298, one of the old names of Multān.

² See RITTER, *Erdkunde*, ii. p. 1087; LASSEN, *Ind. Alt.*, ii. p. 635 (where for **Kaśyapapura* > *Kaśmīra* an equally unfounded derivation from **Kaśyapamīra* is substituted); HUMBOLDT, *Asie Centrale*, i. p. 102; for modern works, *e.g.*, MCCRINDLE, *Ancient India*, p. 108; Beal, *Si-yu-ki*, i. p. 148.

originally and properly designated the Upper Kābul Valley.¹ It appears, however, at a period when Chinese knowledge of India was less developed, to have been used in a vague and general fashion for a variety of territories on the northern confines of India, among them also Kāsmīr. However this may be, our loss seems scarcely to be great, as these notices of the Chinese Annualists regarding Ki-pin do not seem to give characteristic local details.²

The first clear reference to Kāsmīr which I can trace at present, is contained in a record dating from 541 A.D. It is taken from the account of an Indian envoy who reached China during the early part of the reign of the T'ang dynasty.³ The name of Kāsmīr is not mentioned. Yet it is evident that M. PAUTHIER who published the extract, was right in referring to Kāsmīr the description given of the northern portion of India as a country "situated at the foot of the snowy mountains and enveloped by them on all sides like a precious jewel. In the south there is a valley which leads up to it and serves as the gate of the kingdom." The points noticed here are exactly those with which we meet in all Chinese accounts of Kāsmīr.

9. Ninety years after the date of this notice Kāsmīr was visited by
Visit of Hiuen HIUEN TSIANG. He reached the Valley from
Tsiang. Uraśā in the west and resided in it as an
 honoured guest for fully two years. The

records of the great Chinese pilgrim contain by far the fullest and most accurate description of Kāsmīr that has come down to us from a foreign pen during the period with which we are here concerned.⁴

Hiuen Tsiang must have entered Kāsmīr by the valley of the Vitastā as he describes his route as leading to the south-east of Uraśā, the present Hazāra District. After 'crossing over mountains and treading along precipices' he arrived at the 'stone gate which is the western entrance of the kingdom.' We shall see below that this gate known also to Ou-k'ong and Albērūnī, was the frontier watch-station or *Dvāra* in the gorge of Bārāmūla (Varāhamūla). He passed the first night on Kāsmīr soil at *Huṣkapura*, the modern Uṣkūr, opposite Bārāmūla. Thence he proceeded to the capital which he describes

¹ Compare the explanations of Messrs. Lévi and Chavannes in their paper '*L'itinéraire d'Ou-k'ong*, *Journal asiatique*, 1895, vi. pp. 371 *sqq.*, together with the supplementary and modifying statements, *ib.*, 1896, vii. pp. 161 *sq.*

² These notices are enumerated by Messrs. Lévi and Chavannes, *Journal asiat.*, 1895, vi. pp. 378 *sq.*

³ G. PAUTHIER, *Examen méthodique des faits qui concernent le Thian-Tchou ou l'Inde*, Paris, 1839, p. 40.

⁴ See *Si-yu-ki*, transl. Beal, i. pp. 148 *sqq.*; *Life of Hiuen Tsiang*, transl. Beal, pp. 68 *sqq.*

exactly in the position of the present Srinagar. There he was lodged in the convent known as the *Jayendravihāra* which is named also in the *Rājatarāṅgīnī*.¹ A two years' stay, though chiefly passed in the study of 'the Sūtras and Sāstras', must have enabled Hiuen Tsiang to acquaint himself thoroughly with the Valley.

His description of the kingdom *Kia-shi-mi-lo* shows clearly that the geographical application of the term Kaśmīr must have been then, exactly as now, restricted to the great basin of the Vitastā and the side valleys drained by its tributaries above the Bārāmūla defile. He notices that the country is enclosed on all sides by mountains which are very high. "Although the mountains have passes through them, these are narrow and contracted." These natural bulwarks protected the country from neighbouring states 'which had never succeeded in subduing it.' Though the climate is cold and the snow plentiful, the soil is fertile and abounds with fruits and flowers. The inhabitants seem to have changed as little as the soil since Hiuen Tsiang's days. It is still easy to recognize in them the people whom he describes as "light and frivolous, and of a weak, pusillanimous disposition. The people are handsome in appearance, but they are given to cunning. They love learning and are well-instructed."

"Since centuries learning had been held in great respect in this kingdom." Hiuen Tsiang dwells with evident pleasure on the recollection of the learned conferences he had with the Kaśmīr doctors of the sacred law.² Kaśmīr had in earlier times played a great part in the traditions of the Buddhist church. Hiuen Tsiang relates at length the legends how the Arhat Madhyāntika had first spread the law of Buddha in the land; how in the time of Aśoka the five hundred Arhats had taken up their abode there; and how finally under the great Kanīṣka, king of Gandhāra, Kaśmīr had been the scene of the universal Council which fixed and expounded the Sacred Canon. Yet he observes that in his own time the kingdom as a whole was "not much given to the faith, and that the temples of the heretics were their sole thought."³

It is probably owing to this not very flourishing condition of contemporary Buddhism that Hiuen Tsiang mentions only a comparatively small number of Vihāras and Stūpas in the Valley. Among the Stūpas there were four ascribed to Aśoka. Beneath another Kanīṣka was believed to have deposited the canonical texts as fixed by his Council, engraved on sheets of copper. None of these structures have yet been

¹ Compare note iii. 355.

² See *Life*, p. 71 sq.

³ See *Si-yu-ki*, i. p. 158.

identified with any certainty. But in their description the pilgrim furnishes us incidentally with a valuable topographical indication.

Speaking of the convent which prided itself on the possession of a miraculous tooth of Buddha, he indicates its site as being about 10 *li* (circ. 2 miles) to the south-east of the new city and to the north of the old city.¹ This proves that the capital of Hiuen Tsiang's time which corresponds to the present Śrīnagar, was then a comparatively new foundation, exactly as the Chronicle's account has it. At the same time the reference to the 'old city' enables us to fix with absolute certainty the earlier capital of Śrīnagarī at the present *Pāndrēṭhan*, the *Purāṇā-dhiṣṭhāna* of Kalhaṇa.²

The two full years which Hiuen Tsiang, according to his own statement spent in Kaśmīr,³ represent a longer halt than any which the pious traveller allowed himself during his sixteen year's wanderings through the whole of India and Central Asia.⁴ With all due respect for the spiritual fervour of the pilgrim and the excellence of his Kaśmīrian preceptors, it is difficult to suppress the surmise that the material attractions of the Valley had something to do with his long stay. The cool air of Kaśmīr, the northern aspect of its scenery and products, have at all times exercised their powerful charm over those visitors who themselves born in colder climes have come to the Valley from the heat and dust of the Indian plains. Just as these advantages attract in yearly increasing numbers European visitors from India Proper, so the modern Turkī pilgrims from Kashgar, Yarkaud and other parts of Central Asia, whether on the way to Mecca or on their return, never fail to make a long stay in Kaśmīr.

We should undoubtedly find the example of the modern Ḥājīs followed also by Buddhist pilgrims if there were still any from those northern regions to take their way through Kaśmīr to the holy places of India. It would be an interesting task to examine to what extent the fame of Kaśmīr as the 'paradis terrestre des Indes,' is the creation of the Valley's northern visitors, both European and Asiatic. Here it may suffice to add that Hiuen Tsiang before he reached Kaśmīr, must have had already his experience of the torrid heat and the other amenities of a Panjāb summer.⁵ We shall also see that the example of the other Chinese pilgrim whom we are able to follow on his visit to Kaśmīr, points exactly to the same conclusion.

¹ *Si-yu-ki*, i. p. 158.

² See below §§ 88, 89.

³ See *Life*, p. 72.

⁴ Compare the table of dates for Hiuen Tsiang's itinerary, CUNNINGHAM, *Ancient Geography*, pp. 563 sqq.

⁵ See CUNNINGHAM, *Ancient Geography*, p. 563 sq.

Hiuen Tsiang's narrative tells us that he left the Valley going in a south-westerly direction. He reached *Pun-nu-tso*, the Parṇotsa of the Chronicle and the modern Prūnt̄s, after crossing mountains and passing precipices.¹ As the Tōṣ²maidān route is the direct and most frequented route to that territory, it is very probable that Hiuen Tsiang also followed it. Parṇotsa as well as Rājapurī (Ho-lo-she-pu-lo) to which the pilgrim subsequently proceeded, had at the time of his visit no independent ruler, but were subject to Kaśmīr.

10. The next Chinese notice of Kaśmīr, and one which is of considerable historical interest, is contained in the **T'ang Annals.** Annals of the T'ang dynasty.² They inform us that the first embassy from Kaśmīr arrived at the imperial court in or shortly after A.D. 713. In the year 720 *Tchen-t'o-lo-pi-li*, ruler of Kaśmīr, the Candrāpīḍa of the Chronicle, was accorded by imperial decree the title of king.

His brother and successor *Mou-to-pi* in whom Kalhaṇa's Muktāpīḍa or Lalitāditya has long ago been recognised, sent after the first Chinese expedition against *Po-liu* or Baltistān (between 736 and 747) an envoy called *Ou-li-to* to the Chinese court. He was to report the alleged victories of his master over the Tibetans but at the same time also to solicit the establishment of a camp of Chinese troops by the banks of the lake *Mo-ho-to-mo-loung* (the Mahāpadma Nāga or Volur lake). The Kaśmīr king offered to provide all necessary supplies for an auxiliary force of 200,000 men. But the 'Divine Khān' found it more convenient to content himself with issuing decrees for the sumptuous entertainment of the ambassador and for the registration of Muktāpīḍa with the title of king. Since that time the relations of Kaśmīr with the celestial empire and the receipts of tribute from the former are said to have continued without interruption.

The description of Kaśmīr which is coupled with this record of the T'ang Annals, appears to be in the main copied from Hiuen Tsiang's *Si-yu-ki*. But in addition it furnishes us with an exact statement as to the Kaśmīr capital at that time. In my *Notes on Ou-k'ong's Account of*

¹ *Si-yu-ki*, i. p. 162 *Life* p. 72.

² The notice was first made known by A. RÉMUSAT'S translation of the corresponding extract in Matuanlin's encyclopædia; see *Nouveaux Mélanges asiatiques*, Paris, 1829, i. pp. 196 sqq. An abstract of the same notice, but from the original text of the Annals, where the names are more correctly rendered, will be found in Messrs. LÉVI and CHAVANNES' *L'Itinéraire d'Ou-k'ong*, *Journal asiat.*, 1895, vi. pp. 354 sqq.

From REINAUD, *Mémoire sur l'Inde*, pp. 189 sq. it would appear that the names of Kaśmīr kings in this Chinese record and that of the Mahāpadma lake were first correctly identified by KLAPROTH, *Mémoires relatifs à l'Asie*, ii. pp. 275 sq. This work is at present not accessible to me.

*Kaśmīr*¹ I have shown that the *Po-lo-ou-lo-po-lo* of the Annals is a correct reproduction of *Pravarapura*, the old and official name of S'rī-nagara. In the same way the name *Mi-na-si-to* given to the great river which flows to the west of the capital, represents a correct enough transcription of *Vitastā*. Both the names are recorded in the form which they bore in the official Sanskrit, and are, therefore, evidently taken from the information given by the Kaśmīr envoys.

11. Not many years after Muktāpīḍa's embassy Kaśmīr was visited by another Chinese pilgrim, OU-K'ONG. Though greatly inferior to Hiuen Tsiang in learning and power of observation, he has yet left us information regarding the country which is of interest and value. The itinerary of Ou-k'ong the discovery and recent publication of which we owe to Messrs. Lévi and Chavannes,² contains the reminiscences of forty years' wanderings, taken down after the pilgrim's return to China and in a form regrettably brief. But whether it be due to Ou-k'ong's long stay in Kaśmīr or to other causes, his account is fortunately far more detailed in the case of Kaśmīr than in that of any other territory visited by him. His description of the Valley and the several sites mentioned by him have been fully discussed by me in the separate paper already quoted.³ I need hence indicate here only the main results of this analysis.

Ou-k'ong reached Kaśmīr in the year 759 from Gandhāra, presumably by the same route as Hiuen Tsiang had followed. He took there the final vows of a Buddhist monk and spent there fully four years engaged, as his itinerary tells us, in pilgrimages to holy sites and in the study of Sanskrit.⁴ Though he is said to have studied from day-break till night-fall, his diligence does not seem to have brought him much literary culture. This is curiously shown by the popular Apabhraṃśa forms in which our pilgrim records the names of the monasteries he specially singles out for notice. Four of these I have been able to identify with Vihāras mentioned in the Chronicle,⁵ and two of them have left their names to villages which survive to the present day.

¹ See pp. 26 *sqq.* in the above-quoted paper, published in the "Proceedings" of the Imperial Academy, Vienna (Philos.-histor. Class), 1896, vol. cxxxv.

² See *L' Itinéraire d'Ou-k'ong*, Journal asiat., 1895, vi. pp. 341 *sqq.*

³ See *Notes on Ou-k'ong's account of Kaśmīr*, *loc. cit.*

⁴ See *L' Itinéraire d'Ou-k'ong*, p. 356.

⁵ Thus the monastery of *Ngo-mi-t'o-p'o-wan* (**Amitabhavana*) corresponds to the *Amṛtabhavana* Vihāra of Rājat. iii. 9, which has given its name to the present *Āntabavan* near S'rīnagar. The 'monastère du mont *Ki-tché*, (**Kicā* < Skr. *krtyā*) is no other than the *Kṛtyāśrama* Vihāra, at the modern village *Kiṭṣāhōm*, the legend of which is related at length by Kālhaṇa, i. 131 *sqq.* The Vihāra of the great king *Moung-ti* (**Mutti*) was one of Muktāpīḍa's foundations, probably the *Mukta-

While Hiuen Tsiang mentions only about one hundred convents in the country, Ou-k'ong found more than three hundred and speaks in addition of the number of Stūpas and sacred images as considerable. We may conclude from this that there had been a rise in the popularity of Buddhism in the century intervening between the visits of the two pilgrims.

Ou-k'ong describes the kingdom of Kaśmīr correctly enough as enclosed on all sides by mountains which form its natural ramparts. Only three roads have been opened through them, and these again are secured by gates. In the east a road leads to *T'ou-fan* or Tibet; in the north there is a road which reaches into *Poliu* or Baltistān; the road which starts from 'the western gate' goes to *K'ien-t'o-lo* or Gandhāra.¹

We have here a clear enough description of the great routes through the mountains which since ancient times have formed the main lines of communication between the Valley and the outer world. The road to *T'ou-fan* corresponds undoubtedly to the present route over the *Zoji-Lā* to Ladākh and hence to Tibet. The road to *Po-liu* is represented by the present "Gilgit Road," leading into the Upper Kiṣangaṅgā Valley and thence to Skardo or Astōr on the Indus. The third road can be no other than the route which leaves the Valley by the gorge of Bārāmūla and follows the Vitastā in its course to the west. We have seen already that Hiuen Tsiang followed it when he entered Kaśmīr by 'the stone gate, the western entrance of the kingdom.' There can be doubt that in the gates (*fermetures*) closing these roads we have a reference to the ancient frontier watch-stations of which we find so frequent mention in our Kaśmīrian records.

Besides these three roads Ou-k'ong knew yet a fourth. "This, however, is always closed and opens only when an imperial army honours it with a visit." It is probable that this curious notice must be referred to one of the roads leading over the Pīr Panṭsāl range to the south. Owing possibly to political causes these routes may have been closed to ordinary traffic at the time of Ou-k'ong's visit.²

The political relations between China and the northern kingdoms of India seem to have ceased soon after the time of Ou-k'ong. This was probably due to the Chinese power under the later T'ang gradually losing ground in Central Asia before the Uigurs and the Tibetans. The

vihāra at Huṣkapura: Uṣkūr, iv. 188. In the 'monastère du général (*tsiang-kiun*)' it is easy to recognize the Vihāra of the Turk (Tuḥkhāra) *Caṅkuṇa* who was one of Muktāpīḍa's ministers. He is reported to have founded two monasteries called after his own name (iv. 211, 215).

¹ See *L' Itinéraire d' Ou-k'ong*, p. 356.

² See *Notes on Ou-k'ong*, p. 24 sq.

pilgrimages, however, of Chinese Buddhists to India continued during the next two centuries, and of one at least of these pilgrim parties it is recorded that it took the route through Kaśmīr.¹ But no detailed account bearing on Kaśmīr has yet come to light of these later pilgrimages.

SECTION III.—MUHAMMADAN NOTICES.

12. After the Greeks and the Chinese the early Muhammadan writers are our next foreign informants regarding the historical geography of India. If with one very remarkable exception they have nothing to tell us of Kaśmīr topography, the explanation is not far to seek. The first rush of Arab invasion in the Indus Valley during the eighth century had carried the Muhammadan arms at times close enough to the confines of Kaśmīr.² No permanent conquest, however, had been effected even in the plains of the Northern Panjāb. Protected in the West by the unbroken resistance of the Sāhis of Kābul and in the South by a belt of war-like Hindu hill-states, Kaśmīr had never been seriously threatened. Even when Islām at last after a long struggle victoriously over-spread the whole of Northern India, Kaśmīr behind its mountain ramparts remained safe for centuries longer.

Conquest and trade were the factors which brought so large a part of the ancient world within the ken of the early Muhammadan travelers and geographers. Both failed them equally in the case of Kaśmīr. For a classical witness shows us that a system of seclusion,—ever easy to maintain in a country so well guarded by nature as Kaśmīr,—hermetically sealed at that time the Valley to all foreigners without exception.

Even the well-informed Al-Mas'ūdī who had personally visited the Indus Valley, is unable to tell us more about Kaśmīr than that it is a kingdom with many towns and villages enclosed by very high and inaccessible mountains, through which leads a single passage closed by a gate.³ The notices we find in the works of Al-Qazwīnī and Al-Idrīsī are practically restricted to the same brief statement. The references in other geographical works are even more succinct and vague.⁴

¹ Compare YULE, *Cathay*, p. lxxi., and JULIEN, *Journal asiat.*, 1847, p. 43.

² See REINAUD, *Mémoire sur l'Inde*, pp. 195 sq.; ALBĒRŪNĪ, *India*, i. p. 21.

³ See Al-Mas'ūdī's "Meadows of Gold," transl. Sprenger, i. p. 382.

⁴ The silence of the early Muhammadan geographers as regards Kaśmīr was duly noticed by RITTER, *Asia*, ii. p. 1115.—For Al-Qazwīnī, see GILDEMEISTER, *De rebus Indicis*, p. 210; for Al-Idrīsī, ELLIOT, *History of India*, i. pp. 90. sq.

For the notices of other Arab geographers, see *Bibliotheca geographorum*

13. Notwithstanding the circumstances above indicated, Arabic literature furnishes us with a very accurate and valuable account of old Kaśmīr. We owe it to the research and critical penetration of ALBĒRŪNĪ of whom indeed it might be said as of an early British explorer of Afghānistān,¹ that he could look through the mountains. The great Muhammadan scholar had evidently utilized every opportunity during his long stay at Ghazna and in the Panjāb, (A.D. 1017–30) for collecting information on Kaśmīr.

His interest in the distant alpine valley is easily understood. He, himself, tells us in the first chapter of his great work on India, how Hindu sciences when the victories of Maḥmūd had made the Hindus 'like atoms of dust scattered in all directions,' had retired far away from the conquered parts of the country. They "fled to places which our hand cannot yet reach, to Kaśmīr, Benares and other places."² In another passage he speaks again of Benares and Kaśmīr as the high schools of Hindu sciences.³ He repeatedly refers to Kaśmīrian authors, and from the notices shown below it is evident that among his informants, if not among his actual teachers, there were Kaśmīrian scholars.⁴

The curious fact that Albērūnī himself composed some Sanskrit treatises for circulation among 'the people of Kaśmīr,'⁵ proves beyond all

arabiorum, ed. De Goeje, i. p. 4; ii. pp. 9, 445; v. p. 364; vi. pp. 5, 18, 68; vii. pp. 89, 687; also *Abū-l-Fidā*, ed. Reinaud, pp. 361, 506.

¹ Mountstuart Elphinstone.

² ALBĒRŪNĪ'S *India*, transl. Sachau, i. p. 22.

³ *India*, i. p. 173.

⁴ Albērūnī, ii. 181, refers particularly to Kaśmīrian informants with whom he conversed regarding the miracle of the 'Kūdaishahr,' i.e., the *Kapateśvara* Tīrtha (see below § 112). The way in which the pilgrimage to this spot was described to Albērūnī, makes it quite certain that his informants were personally familiar with the Tīrtha. The same must be said of his note on the pilgrimage to the temple of Sārādā (i. 117; see below § 127). The details regarding a local Kaśmīr festival (ii. p. 178), the anecdote about the propagation of the *Sīsyahitāvṛtti* in Kaśmīr (i. 135), are such as could not well have reached Albērūnī otherwise but by verbal communication.

Writing himself in A.D. 1030 he refers to a statement contained in the almanac for the Śaka year 951 (A.D. 1029–30) 'which had come from Kashmīr' (i. p. 391). He could scarcely have secured such an almanac except through Kaśmīrian Paṇḍits who even at the present day, wherever they may be, make it a point to provide themselves from home with their local *nakṣatrapattrikā*.

For references to Kaśmīrian authors or texts specially connected with Kaśmīr, see i. pp. 126, 157, 298, 334, i. p. 54 (*Viṣṇudharma*), etc. Compare also the very detailed account of the calendar reckoning current in Kaśmīr and the conterminous territories, ii. p. 8.

⁵ See *India*, Prof. Sachau's preface, p. xxiv., and the introduction to his edition of the text, p. xx.

doubt the existence of special relations between the great *Mleccha* scholar and that jealously guarded country. These relations seem strange considering what Albērūnī himself tells us so graphically about the rigid isolation of Kaśmīr. We can scarcely explain them otherwise than by personal intercourse with Kaśmīrian Pandits.

In view of these indications we can hardly go wrong in attributing a great portion of Albērūnī's detailed knowledge of Kaśmīr topography to these learned informants. But we also know that the chances of war had given him an opportunity of supplementing this knowledge in part by personal observation. Albērūnī refers in two places to his personal acquaintance with the fortress *Lauhūr* (or *Lahūr*) on the confines of Kaśmīr. In an extract from my commentary on the *Rājatarāṅgiṇī* already published,¹ I have proved that Albērūnī's *Lauhūr* is identical with the castle of *Lohara*, so frequently mentioned in the Chronicle. Its position is marked by the present *Lohārin* on the southern slope of the *Pir Pantṣāl* range.

'*Loharakoṭṭa*' is undoubtedly the same as the Fort of *Lōh-kōt* which according to the uniform report of the Muhammadan historians brought Maḥmūd's attempt at an invasion of Kaśmīr to a standstill. It is hence certain that Albērūnī had accompanied this unsuccessful expedition. It probably took place in A.D. 1021. Though it failed to reach Kaśmīr, it must have given Albērūnī ample opportunity to collect local information and to acquaint himself with the topography of those mountain regions which formed Kaśmīr's strongest bulwark to the south. The result is yet clearly traceable in the accuracy with which he describes the relative position of the most prominent points of this territory.

Is it too much to suppose that Albērūnī had at one time or the other Kaśmīrian Paṇḍits in his employ? We know that in preparing the vast materials digested in his book he worked largely with the help of indigenous scholars. Judging from his own description of the state of Hindu sciences in the conquered territories and the bitter enmity prevailing there against the dominant *Mlecchas*, it is doubtful whether he could have secured there such assistance as he required.

Albērūnī himself, when describing the difficulties in the way of his Indian studies, tells us (i. p. 24): "I do not spare either trouble or money in collecting Sanskrit books from places where I supposed they were likely to be found, and in procuring for myself, even from very remote places, Hindu scholars who understand them and are able to teach me."

Kaśmīr has always been distinguished by an over-production of learning. Its Paṇḍits have been as ready in old days as at present to leave their homes for distant places wherever their learning secured for them a livelihood (compare BÜHLER, *Introd. to the Vikramāṅkadevacarita*, p. xvii; also *Indische Palæographie*, p. 56).

¹ See my note on the '*Castle of Lohara*,' *Indian Antiquary*, 1897, pp. 225 *sqq.*, or Note *E*, on *Rājat.* iv. 177, §§ 12, 13.

14. Albērūnī's main account of Kaśmīr is contained in Chapter xviii. which gives 'various notes on the countries of the Hindus, their rivers and their ocean.'¹ Compared with the description of the rest of India, it is disproportionately detailed. Albērūnī first sketches in broad but correct outlines the political division of the mountain region which lies between the great Central Asian watershed and the Panjāb plain. He then refers to the pedestrian habits of the Kaśmīrians and notes the use by the nobles of palankins carried on the shoulders of men, a custom fully illustrated by the Chronicle and accounted for by the nature of the communications in the mountains.²

What follows deserves full quotation. "They are particularly anxious about the natural strength of their country, and therefore take always much care to keep a strong hold upon the entrances and roads leading into it. In consequence it is very difficult to have any commerce with them. In former times they used to allow one or two foreigners to enter their country, particularly Jews, but at present they do not allow any Hindu whom they do not know personally to enter, much less other people."

We have here a full and clear statement of that system of guarding all frontier-passes which we have found alluded to already in the Chinese records. It explains the great part which is played in the Kaśmīr Chronicles by the frontier watch-stations, the *Dvāras* and *Draṅgas*. It is of all the more interest as the last traces of the system, in the form of *rāhdārī*, have disappeared in Kaśmīr only within quite recent memory.³

Albērūnī then proceeds to describe the 'best known entrance to Kaśmīr.' Though the starting point of his itinerary cannot be identified with absolute certainty, it is clear that he means the route which ascends the Jehlam Valley. From "the town *Babrahān*, half way between the rivers Sindh (Indus) and Jailam, 8 farsakh are counted to the bridge over the river where the water of the *Kusnārī* is joined by that of the *Mahwī*, both of which come from the mountains of *Shamīlān* and fall into the Jailam." Though there seems to be here some slight confusion, I have little doubt that the point meant by 'the bridge over the river' corresponds to the present Muẓaffarābād, at the confluence

¹ See *India*, i. pp. 206 sqq.

² Compare e.g. *Rājat*. iv. 407; v. 33, 219; vii. 478; viii. 2298, 2636, 2674, 3165, etc.

The word *katt* which Albērūnī gives as the indigenous term of the palankin, is perhaps a corrupted Apabhraṃśa form of *karnīratha*, often named in the *Rājat*.

³ Compare my *Notes on the Ancient Topography of the Pīr Panṭāl Route*, J. A. S. B., 1895, pp. 382 sqq.; also below § 40.

of the Jehlam and Kiṣangaṅgā. The easiest route to Kaśmīr from the west leads through the open central portion of Hazāra (Uraśā) to Mansahra; hence across the Kunhār and Kiṣangaṅgā rivers to Muḏaffarābād, and then up by the right side of the Jehlam Valley to Bārāmūla.¹ In *Kusnārī* it is easy to recognize with Prof. Sachau the present Kunhār River which falls into the Jehlam a few miles below its great bend at Muḏaffarābād.² The Mahwī is evidently meant to designate the Kiṣangaṅgā.³ If thus interpreted the only error in Albērūnī's description is that it makes the Kunhār join the Kiṣangaṅgā whereas in reality it falls into the Jehlam after the latter's junction with the Kiṣangaṅgā.

I have shown in my note on Rājat. v. 215 that the route here indicated, which was a favorite one until the modern "Jehlam Valley Tonga Road" was constructed, is distinctly referred to already in Kalhaṇa's account of Śamkaravarman's march to and from Uraśā. The distance of 8 farsakh corresponds according to Albērūnī's reckoning to about 39 English miles.⁴ Referring to the map and the modern route measurements⁵ this distance carries us to a point between Mansahra and the next stage Abbottabad, *i.e.*, exactly into the neighbourhood where according to the evidence given in the above-quoted note the old capital of Uraśā must be located. 'Babrahān' which cannot be identified at present, is perhaps intended to represent the name of this old town which could fairly be described as situated midway between the Indus and Jehlam.

From Muḏaffarābād onwards,—where there is still a bridge over the Kiṣangaṅgā just as at the time (1783) when Forster crossed here on his way from Kaśmīr to Attock,⁶ and as, if our explanation is right, in the time of Albērūnī,—we can follow the route quite plainly. Albērūnī counts five days of march "to the beginning of the ravine whence the

¹ This route is described, *e.g.*, by DREW, *Jummoo*, p. 528, 'as the easiest route from the Panjāb to Kaśmīr.'

² *Kunhār* represents the regular phonetic derivative of a Skr. **Kusnārī*, medial ś becoming always *h* under a phonetic law common to Kaśmīrī and the related dialects; for the change *hn* > *nh* compare GRIERSON, *Phonology of Indo-Aryan Vernaculars*, Z. D. M. G., 1896, p. 33.

³ I am unable to account for the name *Mahwī*. Could it be the corruption of an Apabhraṁśa derivative of *Madhumatī*? This name, though properly applied to an affluent of the Kiṣangaṅgā, is used in a Māhātmya also for the latter river itself; see Note B, Rājat. i. 37, § 16.

⁴ Compare Prof. Sachau's note, *India*, ii. p. 316. Albērūnī values his *farsakh* at 4 Arabian miles or approximately 4×2186 yards. Hence 1 *farsakh* = $4\frac{17}{76}\frac{1}{3}$ English miles.

⁵ See DREW, *loc. cit.*

⁶ See G. FORSTER, *Journey from Bengal to England*, 1808, ii: p. 46.

river Jailam comes,' that is, of the gorge through which the river flows immediately below Bārāmūla. This estimate agrees closely with the actual road distance between Muẓaffarābād and Bārāmūla which is given by Drew as 84 miles.¹ At the other or Kaśmīr end of the ravine Albērūnī places quite correctly 'the watch-station *Dvār*' (Skr. *Dvāra*) the position of which, as we shall see below, is marked to this day by the site of the old gate known as *Drang*.

“Thence leaving the ravine you enter the plain, and reach in two more days *Addishtān*, the capital of Kashmīr, passing on the road the village *Ūshkārā*.” All this is perfectly accurate. *Adhiṣṭhāna* 'the capital' is, of course, meant for *Srīnagara*² and *Ūshkārā* for *Uṣkūr*, opposite Bārāmūla, the ancient *Huṣkapura* already mentioned by Hiuen Tsiang.³ Albērūnī's mention of *Uṣkūr* which is on the left river bank, shows that then as now the ordinary road from the 'Gate of *Varāhamūla*' to *Srīnagara* passed on the left or southern side of the Valley. Two marches are still counted for this part of the journey.

The capital is correctly described as “being built along both banks of the river Jailam which are connected with each other by bridges and ferry boats.” It is said to cover 'a space of four *farsakh*.' This if interpreted to mean 'a space of four *Farsakh* in circumference,' would not be too far from the truth, assuming that all suburban areas around the city are included in the estimate. The course of the river above and below the capital is traced rightly enough as far as the Valley is concerned. “When the Jailam has left the mountains and has flowed two days' journey, it passes through *Addishtān*. Four *Farsakh* farther on it enters a swamp of one square *Farsakh*.” Here, of course, the *Volur* lake (*Mahāpadma*) is meant. “The people have their plantations on the borders of this swamp, and on such parts of it as they manage to

¹ See *loc. cit.* According to Drew's table six marches are counted, but one of them is very short. On the modern route following the opposite side of the river five marches are now reckoned from *Domēl*, opposite to *Muẓaffarābād*, to *Bārāmūla*.

² *Adhiṣṭhāna*, used again ii. p. 181, is a term which indicates that Albērūnī's informant was a Sanskrit-speaking person. The common designation of the capital was *Srīnagara* or simply *Nagara*; see § 91 below.

³ The text as rendered by Prof. Sachau, speaks of “*Ūshkārā* which lies on both sides of the Valley, in the same manner as *Barāmūlā*.” There is either some corruption in the text here or Albērūnī's informant had not made himself sufficiently clear. What he must have meant, is that *Ūshkārā* lay on the opposite side of the river in the same manner as *Barāmūlā*, that is at the entrance of the ravine. *Barāmūlā* as the text spells the name, reproduces an earlier form of the Kaśmīrī *Varahmul*, from Skr. *Varāhamūla*.

reclaim. Leaving this swamp, the Jailam passes the town of Ūṣhkārā, and then enters the above-mentioned ravine.”

The only mistake and this one easily explained is contained in the account of the river's origin. It is described as rising “in the mountains *Haramakōt* where also the Ganges rises; cold, impenetrable regions where the snow never melts nor disappears.” It is easy to recognize here the reference to Mount *Haramukuṭa* and the sacred Gaṅgā-lake at the foot of its glacier in which Kāsmīrian tradition places the source of the Sindhu river.¹ The latter is the greatest tributary of the Vitastā within Kāsmīr and is traditionally identified with the Gaṅgā, as on the other hand the Vitastā with the Yamunā.² The special sanctity of the Sindhu (‘Uttaragaṅgā’) and the popularity of its supposed source as a pilgrimage place sufficiently account for the substitution in Albērūnī's notice.

Entering the open plain of the Kāsmīr Valley by the Bārāmūla gorge “you have for a march of two more days, on your left the mountains of Bolor and *Shamīlān*, Turkish tribes who are called *Bhattavaryān*. Their king has the title of *Bhatta-Shāh*.” It is clear that Albērūnī's informant here means the mountain ranges to the north and north-west of the Valley which form its borders towards the Dard country and Baltistān. The latter has been known by the name of Bolor for many centuries.³ I am unable to trace in Kāsmīrian or other sources the names of the ‘*Shamīlān*’ and ‘*Bhatta*.’⁴ But as a subsequent remark mentions ‘*Gilgit*, *Aswīra*, and *Shītās*,’ that is the modern Gilgit, Hasōr (Astōr) and Cilās as their chief places, there can be no doubt that the inhabitants of the Dard territory to the north-west of Kāsmīr are meant together with the Baltīs.

**Description of Pīr
Pantsāl.**

“Marching on the right side [of the river], you pass through villages, one close to the other, south of the capital and thence you reach the mountain *Kulārjak*, which is like a cupola, similar to the

¹ See below, § 57, and *Rājat*. note i. 57.

² See *Rājat*. note i. 57. In *Haracar*. iv. 54 the Vitastā itself is designated as the ‘Gaṅgā of the north’ (Uttaragaṅgā). This renders the location of its source in the lake of Haramukuṭa still more intelligible from a traditional point of view.

³ Compare YULE, *Marco Polo*, i. pp. 187, sq.; CUNNINGHAM, *Anc. Geogr.*, p. 83.

⁴ Albērūnī's *Bhatta* may possibly represent the term *Bhuṭṭa* or *Bhauṭṭa* (the modern Kś. *Buṭa*) which is applied in the Sanskrit Chronicles to the population of Tibetan descent generally, from Ladākh to Baltistān. (See *Rājat*. note i. 312). Albērūnī calls their language Turkish, but it must be remembered that he has spoken previously (i. p. 206) of ‘the Turks of Tibet’ as holding the country to the east of Kāsmīr. There the Tibetans in Ladākh and adjacent districts are clearly intended.

mountain *Dunbāwand* (Damāwand). The snow there never melts. It is always visible from the region of Tākēshar and Lauhāwar (Lahore)."

I have already elsewhere shown that the mountain here described is the *Taṭakūṭī* peak ($33^{\circ} 45'$ lat. $74^{\circ} 33'$ long.).¹ It rises to a height of 15,500 feet in the central part of the Pīr Panṭsāl range and is the loftiest as well as the most conspicuous point of the mountain chain to the south of Kaśmīr. It has the shape described by Albērūnī, is surrounded by extensive snow-fields and can be seen through the greatest part of the year from the Panjāb districts of Siālkōt and Gujṛānwāla corresponding to the old Tākēshar (Ṭakkadeśa). Albērūnī puts the distance between this peak and the Kaśmīr plain at two farsakh. This estimate is somewhat too low, inasmuch as the direct distance on the map between the peak and the nearest point of the open Valley is about 15 miles.

He is, however, quite exact in placing the fortress *Lauhūr* to the west of it as we have already seen that this stronghold is identical with the *Loharakoṭṭa* of the Chronicle, the present Lohārin. The entrance to the Lohārin Valley lies almost due west of Taṭakūṭī. To the south of the peak he places 'the fortress *Rājagirī*' which is also mentioned by Kalhaṇa, vii. 1270, and must be looked for somewhere in the Upper Sūran Valley. Albērūnī speaks of these two hill fortresses as "the strongest places" he had ever seen.

He had personally had an opportunity of judging of their strength when accompanying Maḥmūd's expedition against Kaśmīr. On that occasion he had made the observation of the latitude of Lauhūr (Lohara) to which he refers in another chapter of his work.² The result of this observation, $33^{\circ} 40'$ lat. as shown in the author's Canon Masudicus, very closely approaches the real one, which is $33^{\circ} 48'$ according to the Survey map. It is very probable that he obtained at the same occasion the very accurate information regarding the distance from Lauhūr to the Kaśmīr capital. He gives it as 56 miles, "half the way being rugged country, the other half plain." Albērūnī's measurement according to the previously stated valuation represents about 69 English miles. This is but little in excess of the actual road distance viâ the Tōṣāmaidan pass as estimated by me on the tour referred to in the above-quoted paper. The description of the road, too, corresponds closely to the actual character of the route.

Albērūnī closes his account of Kaśmīr geography with a reference to the town of *Rājawarī* which is the *Rājapurī* of the Chronicles, the

¹ See my paper 'The Castle of Lohara,' *Ind. Ant.*, 1897, § 12.

² See *India*, i. p. 317, with Prof. Sachau's note ii. p. 341. In the same passage he quotes the latitude of S'rīnagar as $34^{\circ} 9'$ from the *Karaṇasāra*.

modern *Rajaurī*. In Hindu times it was the capital of a small hill-state situated immediately to the south of the Pir Pant̥sāl range and often tributary to Kāsmīr. Albērūnī distinctly names it as the farthest place to which Muhammadan merchants of his time traded and beyond which they never passed. We have already seen what the connection was which enabled him to collect reliable and detailed information of the region beyond that barrier. As another proof of the accurate knowledge thus acquired, we may finally mention his description of the Kāsmīr climate which is far more exact than any account available to us previous to the second quarter of this century.¹

SECTION IV.—INDIAN NOTICES.

15. Nothing, perhaps, can illustrate better the lamentable lack of exact geographical information in general Sanskrit literature than to turn from the accounts of the Chinese pilgrims and Albērūnī to what Indian authors, not Kāsmīrians themselves, can tell us of the Valley.

Deficiency of non-Kāsmīrian texts.

Were we to judge merely from the extreme scantiness of the data to be gleaned from their extant works, we might easily be led to assume that Kāsmīr was to them a country foreign and remote in every way. However, we observe the same vagueness and insufficiency of local references in the case of territories immediately adjoining the old centres of literary activity. It is hence evident that the conspicuous absence of useful information on Kāsmīr may equally well be attributed to the general character of that literature.

The name *Kāsmīra*, with its derivative *Kāsmīra*, as the designation of the country and its inhabitants, respectively, is found already in the *Gaṇas* to Pāṇini's grammar and in Patañjali's comments thereon.² The *Mahābhārata* too refers in several passages to the *Kāsmīras* and their rulers, but in a fashion so general and vague that nothing more but the situation of the country in the hill region to the north can be concluded therefrom.³

The *Purāṇas* enumerate the *Kāsmīras* accordingly in their lists of northern nations. But none of the tribal names, partly semi-mythical,

¹ See *India*, i. p. 211, and below, § 77.

² See the references in the *Thesaurus* of BÖHTLINGK-ROTH, s. v. *Kāsmīra*, and in supplement V., p. 1273. The references to other texts in this paragraph have also been taken from that work except where otherwise specified.

³ Compare in particular *Mahābh.* II. xxvii. 17.

which are mentioned along with them in the Purāṇas examined by me, indicate any more distinct location of the country.¹

Varāhamihira (circ. 500 A.D.) in his *Bṛhatsamhitā* includes the Kāśmīras curiously enough in the north-eastern division. Among the regions and peoples named under the same heading there are a number of purely legendary character like 'the kingdom of the dead' (*naṣṭa-rājya*), the 'gold region,' 'the one-footed people,' etc. But besides these names and others of a different type which cannot be clearly identified, we recognize the names of tribes which undoubtedly must be located in the immediate neighbourhood of Kaśmīr. Thus we have the *Abhisāras*, *Daradas*, *Dārvas*, *Khaśas*, *Kīras*, and somewhat more distant the country of *Kulūta* (Kulu) and the *Kauṇindas* or *Kaulindras* (Ptolemy's *Κυλινδρίνη*).²

Perhaps the most specific piece of information regarding Kaśmīr that Sanskrit literature outside the Valley can convey to us, is contained in the term *Kāśmīra* or *Kāśmīraja* which designates the saffron and according to the lexicographers also the root of the *kuṣṭha* or *costus speciosus*. Both the saffron and the Kuṣṭha have since early times been famous products of Kaśmīr.³

SECTION V.—THE KAS'MĪR CHRONICLES.

16. The want of detailed and exact geographical information just noticed in old Indian literature generally stands in striking contrast to the abundance of data supplied for our knowledge of old Kaśmīr by the indigenous sources. The explanation is surely not to be found in the mere fact that Kaśmīrian authors naturally knew more of their own country than others for whom that alpine territory was a distant, more or less inaccessible region. For were it so, we might reasonably expect to find ourselves equally well informed about the early topography of other

¹ Compare *Vāyupur.* xlv. 120; xlii. 45; *Padmapur.* I. vi. 48, 62; *Bhāgavatapur.* XII. i. 39; *Viṣṇupur.* IV. xxiv. 18.

² See *Bṛhatsamhitā*, xiv. 29 sqq., and *Ind. Ant.*, 1893, pp. 172, 181; also ALBĒRŪNĪ, *India*, i. p. 303.

³ Regarding the saffron cultivation of Kaśmīr, compare LAWRENCE, *Valley*, p. 342, and below, § 78.

The *kuṣṭha*, now known in Kaśmīr by the name of *kuṭh*, is the aromatic root of the *Saussurea Lappa* which grows in abundance on the mountains of Kaśmīr; see LAWRENCE, p. 77. The *kuṭh* is still largely exported to China and might be hence one of the medicinal plants which Hiuen Tsiang particularly notices among Kaśmīr products; see *Si-yu-ki*, i. p. 148.

parts of India which have furnished their contingent to the phalanx of Sanskrit authors. Yet unfortunately this is by no means the case.

The advantageous position we enjoy in Kaśmīr is due to a combination of causes of which the most important ones may at once be here indicated. In the first place we owe it to the preservation of connected historical records from a comparatively early date which acquaint us with a large number of particular localities and permit us to trace their connection with the country's history.

Another important advantage results from the fact that Kaśmīr, thanks chiefly to its geographical position and the isolation resulting from it, has escaped those great ethnic and political changes which have from time to time swept over the largest portion of India. Local tradition has thus remained undisturbed and still clings to all prominent sites with that tenacity which is characteristic of alpine tracts all over the world. The information preserved by this local tradition in Kaśmīr has often proved for our written records a most welcome supplement and commentary.

Finally it must be remembered that in a small mountain country like Kaśmīr, where the natural topographical features are so strongly marked and so permanent, the changes possible in historical times as regards routes of communication, sites for important settlements, cultivated area, etc., are necessarily restricted. The clear and detailed evidence which the facts of the country's actual topography thus furnish, enables us to elucidate and to utilize our earlier data, even where they are scanty, with far greater certainty and accuracy than would be possible on another ground. The observations here briefly indicated will be in part illustrated by the review of our Kaśmīrian sources.

17. Epigraphical records on stone or copper such as elsewhere in India form the safest basis for the study of local topography, have not yet come to light in Kaśmīr. The few fragmentary inscriptions hitherto found are all of a late date and do not furnish any topographical information. In their absence Kalhaṇa's Rājatarāṅgiṇī is not only the amplest but also the most authentic of our sources for the historical geography of Kaśmīr. The questions connected with the historical value of the work, its scope and sources, have been fully discussed in the introduction to my translation. Here we have only to consider its character as our chief source of information on the old topography of Kaśmīr.

KALHAṆA'S work, composed in the years 1148-49 A.D., is our oldest record of the history of the various dynasties which ruled Kaśmīr from the earliest period to the time of the author. The earlier Chronicles

which Kalhaṇa has used and quoted, have all been lost. We are hence unable to judge what he took from each, and how he worked up their contents. Largely legendary in the first three Books, his narrative reaches firm historical ground with the Kārkoṭa dynasty in the Fourth Book. From Avantivarman's reign (A.D. 855-883) onwards which opens the Fifth Taraṅga, the Chronicle may be considered an accurate and reliable historical record. As the author approaches his own time, his narrative grows more and more detailed.

In illustration of the latter fact it may be mentioned that of the whole work comprising nearly eight thousand Ślokas, more than one-half is devoted to the relation of the reigns which fill the century and a half immediately preceding the date of composition. We have certainly no reason to regret the fulness with which Books vii. and viii. relate the events of the author's own time and of the period that lay near it. From a historical point of view, Kalhaṇa's detailed account of contemporary history and the near past must always retain its value. We can appreciate its advantages also with special regard to the elucidation of the old topography of the country. This will become at once clear by a brief analysis of the topographical information contained in the Chronicle.

It is doubtful whether Kalhaṇa writing for readers of his own country and time, would have deemed it necessary to give us a connected and matter-of-fact description of the land, even if the literature which he knew and which was his guide, had furnished him with a model or suggestion for such a description. The nearest approach to it is contained in a brief passage of his introduction, i. 25-38. This acquaints us in a poetical form with the legends concerning the creation of Kaśmīr and its sacred river, the Vitastā, and enumerates besides the most famous of the many Tirthas of which Kaśmīr has ever boasted in abundance. The few panegyric remarks which are added in praise of the land's spiritual and material comforts, i. 39-43, do credit to the author's love of his native soil. But they can scarcely be held to raise the above to a real description of the country.

18. Notwithstanding the absence of such a description Kalhaṇa's Chronicle yet proves by far our richest source of information for the historical geography of Kaśmīr. This is due to the mass of incidental notices of topographical interest which are spread through the whole length of the narrative. They group themselves conveniently under three main heads.

**Kalhaṇa's notices
of Tirthas.**

Considering the great attention which the worship of holy places has at all times claimed in Kaśmīr, we may well speak first of the

notices which appertain to the *Topographia sacra* of the Valley. Kāsmīr has from early times to the present day been a land abundantly endowed with holy sites and objects of pilgrimages. Kalhaṇa duly emphasizes this fact when he speaks, in the above-quoted introductory passage, of Kāsmīr as a country 'where there is not a space as large as a grain of sesamum without a Tīrtha.'¹

Time and even the conversion to Islām of the great majority of the population has changed but little in this respect. For besides the great Tīrthas which still retain a fair share of their former renown and popularity, there is scarcely a village which has not its sacred spring or grove for the Hindu and its Ziārat for the Muhammadan. Established as the latter shrines almost invariably are, by the side of the Hindu places of worship and often with the very stones taken from them, they plainly attest the abiding nature of local worship in Kāsmīr.

This cannot be the place to examine in detail the origin and character of these Tīrthas and their importance for the religious history of the country. It will be enough to note that the most frequent objects of such ancient local worship are the springs or *Nāgas*, the sacred streams and rivers, and finally the so-called *svayambhū* or 'self-created' images of gods which are recognized by the eye of the pious in various natural formations. These several classes of Tīrthas can be traced throughout India wherever Hindu religious notions prevail, and particularly in the sub-Himalayan regions (Nepāl, Kumaon, Kāngra, Udyāna or Swāt). Still there can be no doubt that Kāsmīr has from old times claimed an exceptionally large share in such manifestations of divine favour.

Nature has indeed endowed the Valley and the neighbouring mountains with an abundance of fine springs. As each of these has its tutelary deity in the form of a *Nāga*,² we can easily realize why popular tradition looks upon Kāsmīr as the favourite residence of these deities.³ Hiuen Tsiang already had ascribed the superiority of Kāsmīr over other countries to the protection it received from a *Nāga*.⁴ Kalhaṇa, too, in his introduction gives due prominence to the distinction which the land

¹ i. 38.

² Compare my note i. 30 on the *Nāgas* and their worship.

³ The *Nīlamatapurāṇa*, 900-972, gives a long list of Kāsmīr *Nāgas* and puts their number at thousands, nay *Arbudas* (see 971).

⁴ *Si-yu-ki*, i. p. 148. Hiuen Tsiang, like other Chinese pilgrims, calls the *Nāgas* by the term of 'dragon;' no doubt because the popular conception represents them under the form of snakes living in the water of the springs or lakes they protect.

enjoys as the dwelling-place of *Nīla*, king of *Nāgas*, and of many other of his tribe.¹

Kalhana's frequent references to sacred springs and other Tirthas are of topographical interest, because they enable us to trace with certainty the earlier history of most of the popular pilgrimage places still visited to the present day. The list already mentioned acquaints us with the miraculous springs of *Pāpasūdana* and *Tri-Saṁdhyā*, *Sarasvatī's* lake on the *Bheḍa* hill, the 'Self-created Fire' (*Svayāmbhū*), and the holy sites of *Nandikṣetra*, *Sāradā*, *Cakradhara* and *Vijayēśa*. It shows which were the Tirthas most famous in Kalhana's time. The legends connected with the early semi-mythical kings give the chronicler frequent occasion in the first three Books to speak in detail of particular sacred sites. Almost each one of the stories furnishes evidence for the safe location of the latter.² But also in the subsequent and purely historical portions of the work we read often of pilgrimages to such sacred places or of events which occurred at them.

Kalhana shows more than once so accurate a knowledge of the topography of particular Tirthas that his personal visits to them may be assumed with great probability. This presumption is particularly strong in the case of *Nandikṣetra* which his father Canpaka is said to have often visited as a pilgrim and to have richly endowed, and of the neighbouring shrine of *Bhūteśvara*.³ Also the distant Tirtha of *Sāradā* in the *Kiṣangaṅgā* Valley seems to have been known personally to the Chronicler.⁴ Considering the popularity which pilgrimages to sacred sites have always enjoyed among Kaśmīrians, the conclusion seems justified that Kalhana owed perhaps no small part of his practical acquaintance with his country's topography, to the tours he had made as a pilgrim.

19. A second fruitful source of valuable topographical notices is contained in those very numerous references which Kalhana makes to the foundation of towns, villages, estates, shrines, and buildings by particular kings. If we leave aside the curious list, i. 86-100, taken by

¹ *Rājat.* i. 28-31. The *Nāgas* are supposed to have come to Kaśmīr when Kaśyapa, their father, had drained 'the lake of *Satī*,' and to have found there a refuge from *Garuḍa*; comp. *Nīlamata*, 59 sqq.

² Compare the legends of the *Sodara* spring, i. 123 sqq.; of the *Kṛtyāśrama* *Vihāra*, i. 131 sqq.; of the *Jyeṣṭharudra* at *Nandikṣetra* and *Sṛinagarī*, i. 113, 124; the story of the *Suśravas* *Nāga*, i. 203 sqq.; the description of the pilgrimage to the *Takṣaka* *Nāga*, i. 220 sqq.; the story of the *Īśeśvara* temple, ii. 134; of *Raṇasvāmin*, iii. 439 sqq., etc.

³ See vii. 954; viii. 2365 and note v. 55 sqq. Compare also below, § 57.

⁴ See Note L, viii. 2492, § 4.

Kalhana from Padmamihira in which certain local names are by fanciful etymologies connected with seven of the 'lost kings,'¹ it may be safely assumed that these attributions are based either on historical fact or at least on genuine local tradition. Kalhana specially informs us in his introduction² that among the documents he had consulted for his work, there were 'the inscriptions recording the consecration of temples and grants [of land] by former kings.' Such records no doubt supplied a great portion of the numerous notices above referred to. Often such notices may have been taken from less authentic sources. But we may always claim for them the merit of acquainting us with the names of the respective localities and buildings, as used in the official language of Kalhana's time, and with the traditions then current regarding their origin and date.

The system of nomenclature which was regularly followed in Kaśmīr in naming new foundations, must have helped to preserve a genuine tradition regarding the founder. In the vast majority of cases the names of new towns and villages are formed by the addition of *-pura* to the name of the founder, either in its full or abbreviated form.³ Similarly the names of temples, monasteries, Maṭhas and other religious structures show the name of their builder followed by terms indicating the deity or the religious objects to which the building was dedicated.⁴ Many of

¹ See regarding this unhistorical list note i. 86. The local names, like *Khona-muṣa*, *Godharā*, *Sāmāṅgāsā*, etc., are all genuine enough. What Padmamihira did was to evolve fictitious names of kings out of these by means of popular etymology.

² i. 15.

³ Thus we have, e.g., the well-known localities of *Huṣkapura*, *Kaniṣkapura*, *Juṣkapura* (which retain the memory of their Indo-Scythian founders); *Pravara-pura* (for Pravarasenapura), the old official designation of the present capital; *Padmapura*, *Avantipura*, *Jayapura* (for Jayāpīḍapura) and a host of others. The custom of naming new localities in this fashion, or of renaming earlier ones in honour of the actual ruler, can be traced through successive periods of Muhammadan and Sikh rule down to the present day; comp. e.g., *Zaināpūr* (named after Zainu-l-'ābidīn); *Shahābuddīnpūr* (now *Shāhāpūr*); *Muḥammadpūr*; *Raṅbīrsinghpūr* (intended to replace *Shāhābād*), etc.

⁴ Thus in the case of Siva-temples *-īśa* or *-īśvara* is invariably added (comp., e.g., *Pravareśvara*, *Amṛteśvara*, etc.), as in that of Viṣṇu-shrines with equal regularity *-svāmin* (*-keśava*); comp. e.g., *Muktasvāmin* (built by Muktāpīḍa), *Avantisvāmin*, *Bhīmakeśava* (erected by Bhīmapāla Sāhi), etc.

Buddhist monasteries receive the name of their founder with the addition of *-vihāra* or *-bhavana*; comp. *Jayendravihāra*, *Caṅkuṇavihāra*, *Amṛtabhavana* (founded by Queen Amṛtaprabhā, the present Āntābavan), *Skandabhavana* (for Skandaguptabhavana), and many more, as shown in my *Notes on Ou-k'ong*, p. 4.

For Maṭhas compare e.g. *Diddāmaṭha* (*Didāmar*); *Subhaṭāmaṭha*, *Nandāmaṭha*, *Loṭhikāmaṭha*, *Cakramaṭha*, etc.

these religious structures left their names to the sites at which they were erected. They can thus be traced to the present day in the designations of villages or city quarters.¹

The topographical interest which Kalhaṇa's notices of town-foundations possess is considerably enhanced by the fact that in more than one case they are accompanied by accurate descriptions of the site chosen and the buildings connected with them. Thus Kalhaṇa's detailed accounts of the foundation of *Pravarapura*, iii. 336-363, is curiously instructive even in its legendary particulars. It enables us to trace with great precision the original position and limits of the city which was destined to remain thereafter the capital of Kaśmīr.² Similarly the description given of *Parihāsapura* and its great shrines has made it possible for me to fix with accuracy the site of the town which Lalitāditya's fancy elevated for a short time to the rank of a capital, and to identify the remains of the great buildings which once adorned it.³ Not less valuable from an antiquarian point of view is the account given to us of the twin towns *Jayapura* and *Dvāravatī* which King Jayāpīḍa founded as his royal residence near the marshes of Andarkōṭh.⁴ We shall see below to what extent the correct identification of the extant ruins of Kaśmīr has been facilitated by these and similar accounts of the Rājatarāṅgiṇī.

20. Valuable as the data are which we gather from the two groups of notices just discussed, it may yet be doubted whether by themselves, that is, unsupported by other information, they can throw as much light on the old topography of Kaśmīr as the notices which we have yet to consider. I mean the whole mass of incidental references to topographical points which we find interwoven with the historical narrative of the Chronicle.

It is evident that where localities are mentioned in the course of a connected relation of events, the context if studied with due regard to the facts of the actual topography, must help us towards a correct identification of the places meant. In the case of the previous notices the Chronicler has but rarely occasion to give us distinct indications as to the position of the sites or shrines he intended. In our

¹ The name of the *Amṛtabhavana*, iii. 9, survives in the present *Āntabavan*; *Didāmaṭha* and *Skandabhavana* in the *Didamar* and *Khandabavan* quarters of *Srīnagar*; similarly Lalitāditya's great temple of *Māntāṇḍu* left its name to the village and district of *Maṭan*.

² See note iii. 339-349 and below, § 92.

³ Compare Note *F*, iv. 194-204, and below, § 121.

⁴ See note iv. 506-511; also below, § 122.

attempts to identify the latter we have therefore only too often to depend either on the accidental fact of other texts furnishing the required evidence, or to fall back solely on the comparison of the old with modern local names. That the latter course if not guided and controlled by other evidence, is likely to lead us into mistakes, is a fact which requires no demonstration for the critical student.

It is different with the notices the consideration of which we have left to the last. Here the narrative itself, in the great majority of cases, becomes our guide and either directly points out to us the real locality meant or at least restricts to very narrow limits the area within which our search must proceed. The final identification can then be safely effected with the help of local tradition, by tracing the modern derivative of the old local name, or by other additional evidence of this kind.

For the purpose of such a systematic search it is, of course, a very great advantage if the narrative is closely connected and detailed. And it is on this account that, as already stated above (§ 17), Kalhana's lengthy relation of what was to him recent history, in Books vii. and viii., is for us so valuable. An examination of the topographical notes in my commentary on the Chronicle will show that the correct identification of many of the localities mentioned in the detached notices of the first six Books has become possible only by means of the evidence furnished by the more detailed narrative of the last two.

In this respect the accounts of the endless rebellions and other internal troubles which fill the greater portion of the reigns of the Lohara dynasty, have proved particularly useful. The description of the many campaigns, frontier-expeditions and sieges connected with these risings supplies us with a great amount of topographical details mutually illustrating each other. By following up these operations on the map,—or better still on the actual ground, as I was often able to do,—it is possible to fix with precision the site of many old localities which would otherwise never have emerged from the haze of doubt and conjecture.

In order to illustrate these general remarks it will be sufficient to refer to a few typical examples among the many identifications thus arrived at. As the corresponding notes of my commentary fully indicate the evidence on which these identifications are based, as well as the process of reasoning by which they were arrived at, it will not be necessary here to go into details. A very characteristic example is furnished by the important stronghold and territory of LOHARA, which was formerly supposed to be Lahore. Its correct location at the present *Loharin* and the identification of the several places and routes

mentioned in the same neighbourhood became possible only, as Note *E*, iv. 177, shows,¹ through the indications contained in Kalhaṇa's description of the several sieges which this mountain fastness underwent in his own time. Similar instances are the identifications of the GOPĀDRI hill (the present Takht-i Sulaimān), and of the streams MAHĀSARIT and KṢIPTIKĀ (Mār and Kut^akul). Though prominent features in the topography of the capital itself, they could not have been correctly located but for the evidence supplied by the narrative of the last Book.² The same is the case, *e.g.*, with the name of the district HOLAPĀ (Vular) and the important ethnic designation of *Khaśa*.³

21. It is impossible to read attentively Kalhaṇa's Chronicle and in particular those portions which give fuller occasion for the notice of localities, without being struck with the exactness of his statements regarding the latter and with, what I

**Accuracy of
Kalhaṇa's
topography.**

may call, his eye for matters topographical.

We must appreciate these qualities all the more if we compare Kalhaṇa's local references with that vague and loose treatment which topographical points receive at the hands of Sanskrit authors generally.⁴ If it has been possible to trace with accuracy the great majority of localities mentioned in the Chronicle, this is largely due to the precision which Kalhaṇa displays in his topographical terminology. It is evident that he had taken care to acquaint himself with the localities which formed the scene of the events he described. Here too I may refer for more detailed evidence to my translation of the work and the notes which accompany it. A few characteristic points may, however, be specified as examples.

Striking evidence for the care with which Kalhaṇa indicates topo-

¹ Compare also my paper on the 'Castle of Lohara,' *Ind. Ant.* 1897, p. 225 sqq. below, § 49.

² Compare for *Gopādri*, notes i. 341; viii. 1104-10; for the *Mahāsarit*, note iii. 339-349; for the *Kṣiptikā*, note viii. 732.

³ See notes i. 306 and i. 317.

⁴ Nor should we forget the difficulty which Kalhaṇa had to face by writing in metrical form. True indeed it is what Albērūnī says of this form as adopted by Hindu scientific writers: "Now it is well-known that in all metrical compositions there is much misty and constrained phraseology merely intended to fill up the metre and serving as a kind of patchwork, and this necessitates a certain kind of verbosity. This is also one of the reasons why a word has sometimes one meaning and sometimes another" (*India*, i. p. 19).

Fortunately Kalhaṇa has managed to escape these dangers as far as the topographical notices of his work are concerned. We find in his local terminology neither that mistiness nor multiplicity of meaning Albērūnī so justly complains of.

graphical details, is furnished by his description of the great operations which were carried out under Avantivarman with a view to regulating the course of the Vitastā and draining the Valley.¹ Thanks to the exactness with which the relative position of the old and new confluence of the Vitastā and Sindhu is described, before and after the regulation, respectively, it has been possible even after so many centuries to trace in detail the objects and results of an important change in the hydrography of the Valley.²

Equal attention to the topographical details we find in numerous accounts of military operations. Of these it will suffice to quote here the descriptions of the several sieges of Śrīnagar, under Sussala;³ the battle on the *Gopādrī* hill in the same reign;⁴ the blockade of *Lohara*, with the disastrous retreat through the mountains that followed,⁵ and, last but not least, the siege of the *Siraḥśilā* castle. The topographical accuracy of the latter account as proved in Note *L*, viii. 2492, almost presupposes on Kalhaṇa's part a personal examination of the site. It is all the more noteworthy, because the scene of the events there recorded was a region outside Kaśmīr proper, distant and difficult of access.

There are also smaller points that help to raise our estimate of Kalhaṇa's reliability in topographical matters. Of such I may mention for example the close agreement we can trace everywhere between Kalhaṇa's statements regarding distances, whether given in road or time-measure, and the actual facts. The number of marches reckoned by him is thus always easily verified by a reference to the stages observed on the corresponding modern routes.⁶ Not less gratifying is it to find how careful Kalhaṇa is to distinguish between homonymous localities.⁷ In addition we must give credit to our author for the just observation of many characteristic features in the climate, ethnography, and economical condition of Kaśmīr and the neighbouring regions.⁸ All these notices help to invest with additional interest the data furnished for the old topography of the country.

¹ Compare v. 84-121.

² Compare Note *I*, v. 97-100, on the *Vitastāsindhusaṅgama*, and below, §§ 69-72.

³ See viii. 729 *sqq*; 1060 *sqq*.

⁴ Compare viii. 1099-1115.

⁵ See viii. 1842-80 and Note *E*, iv. 177, § 10.

⁶ Compare for distance measurements note i. 264; v. 103; vii. 393; for the reckoning of marches on the Vitastā Valley route, v. 225; on the Tōṣāmaidān pass, vii. 140; on the route to the Pīr Pantṣāl Pass, vii. 558; on the way to Mārtāṇḍa, vii. 715, etc.

⁷ Compare notes i. 113; i. 124; v. 123 on the several *Jyeṣṭharudras* and the way in which Kalhaṇa specifies them.

⁸ Compare below, §§ 77-79.

If the advantages thus accorded to us are duly weighed there seems every reason to congratulate ourselves on the fact that the earliest and fullest record of Kaśmīr history that has come down to us was written by a scholar of Kalhaṇa's type. Whatever the shortcomings of his work from a historical point of view may be, we may well claim for him the merit that he has provided us with a sound and ample basis for the study of the historical geography of his country.

22. Another point still remains to be considered here in connection with Kalhaṇa's Chronicle, *viz.*, to what extent can we accept the Sanskrit forms found in his text as the genuine local names of the period.

Sanskrit form of
local names.

This question deserves attention, because the popular language actually spoken in Kaśmīr in Kalhaṇa's time and for many centuries earlier, was not Sanskrit but undoubtedly an Apabhraṃśa dialect derived from it, which has gradually developed into the modern Kaśmīrī.

Notwithstanding this circumstance I think that Kalhaṇa's local names can on the whole safely be taken as the genuine designations of the localities, *i.e.*, those originally given to them. My grounds for this belief are the following.

We have ample evidence to show that Sanskrit was the official and sole literary language of the country, not only in Kalhaṇa's own time but also in those earlier periods from which the records used by him may have dated. This official use of Sanskrit we know to have continued in Kaśmīr even into Muhammadan times. It assures us at once that the vast majority of village and town names must from the beginning have been given in Sanskrit. A detailed examination of Kalhaṇa's local names will easily demonstrate, on the one hand that these names are of genuinely Sanskrit formation, and on the other, that their modern Kaśmīrī representatives are derived from them by a regular process of phonetic conversion. We look in vain among this class of old local names for any which would show a foreign, *i.e.*, non-Aryan origin and might be suspected of having only subsequently been pressed into a Sanskrit garb.

As Sanskrit was used as the language of all official records for many centuries previous to Kalhaṇa's time, the Sanskrit names originally intended for the great mass of inhabited places could be preserved, in official documents anyhow, without any difficulty or break of tradition. And from such documents most of Kalhaṇa's notices of places were undoubtedly derived, directly or indirectly.

Only in rare cases can we suppose that the original form of a local name of this kind had been lost sight of, and that accordingly the Chronicler, or his authority, had to fall back on the expedient of sanskriti-

zing in its stead the Apabhraṃśa or Kaśmīrī form, as well as he could. There are in fact a few instances in which we have indications of such a metamorphosis. Thus we find the same local name spelt either *Bhaleraka* or *Baleraka* in the Chronicle, and a village which Kalhaṇa calls *Ghoramūlaka*, referred to by Abhinanda, the author of the *Kādambarīkathāsāra* (first half of 9th century), as *Gauramūlaka*.¹ It is difficult to avoid the conclusion that we have here varying attempts to reproduce in a Sanskrit garb original Apabhraṃśa names. But these cases are very rare indeed, and even in them other explanations of the different spellings are possible.

These observations apply with nearly the same force also to other local names recorded in the Chronicle, such as those of mountains, streams, passes, etc. The great majority of these names must have very early found their place in official documents or, as we shall see below, in the Sanskrit legendaries or *Māhātmyas* of the numerous *Tirthas*. If any of them are in reality adaptations of Prakrit or Apabhraṃśa forms, their quasi-official use is yet likely to have originated a long time before the date of Kalhaṇa.

Even to the present day the local nomenclature of Kaśmīr, whether in the Valley or in the mountains, shows throughout an unmistakeably Sanskrit character. This is most clearly illustrated by the constant recurrence of such terms as *-pūr* or *pōr* (< *pura*), *-mar* (< *maṭha*), *-hōm* (< *āśrama*), *-kōṭh* (< *koṭṭa*), *-gām* or *gōm* (< *grāma*), *-kuṇḍal* (< *kuṇḍala*), *-vōr* (< *vāṭa*), in village names; of *-sar* (< *saras*), *-nambal* (< *naḍvalā*), *nāg* (< *nāga*) in names of lakes, marshes, etc.; of *-van* (< *vana*), *-nār*, (< *nāḍa*), *-marg* (< *maṭhikā*), *-gul* (< *galikā*), *brāṛ* (< *bhaṭṭārikā*), *-vath* (< *patha*) in designations of alpine localities, peaks, passes, etc.; *-kul* (< *kulyā*), *-khan* (< *khani*) in names of streams and canals.

The Sanskrit etymology of the specific names preceding these terms, is even in their modern phonetic form very often equally transparent. At an earlier stage of the language the Apabhraṃśa names must have approached the corresponding Sanskrit forms much more closely. The reproduction of the popular names in a Sanskrit form could have then but rarely been attended with much difficulty or doubt. We may hence safely assume that the Sanskrit forms recorded by Kalhaṇa represent in most cases correctly the original local names, and in the remainder cannot differ much from them.

23. The later Sanskrit Chronicles which were composed with the distinct object of continuing Kalhaṇa's work, furnish valuable supplements to the topographical information contained in the latter.

**Later Sanskrit
Chronicles.**

¹ Compare notes viii. 1861, and vii. 1239; viii. 2410.

These Chronicles are the *Rājatarāṅgiṇī* of Jonarāja who continued the narrative down to the reign of Sultān Zainu-l-'ābidin and died over his work, A.D. 1459;¹ the *Jaina-Rājatarāṅgiṇī* composed by Jonarāja's pupil Śrīvara which deals in four Books with the period A.D. 1459-86;² and finally, the Fourth Chronicle which was begun under the name *Rājāvalipatākā* by Prājyabhaṭṭa and completed by his pupil Suka some years after the annexation of Kaśmīr by Akbar, A.D. 1586.³

It will be seen from the above dates that the narrative of the last two works falls entirely beyond the period of Hindu rule to which our enquiry is limited, and which may be considered to close finally with the usurpation of Shāh Mīr, A.D. 1339. The same holds good of the greater portion of Jonarāja's Chronicle. The reigns of the late Hindu rulers, from Jayasimha to Queen Koṭā, are there disposed of with a brevity corresponding more to their own insignificance than to the intrinsic historical interest of the epoch.⁴ Notwithstanding this difference in date the materials supplied by these later Chronicles have often proved of great use in clearing up points of the old topography of Kaśmīr. For the mass of localities mentioned in them goes back to the Hindu period, and the names by which they are referred to, are also still mostly the old ones.

Yet on the whole the inferiority of these later Chronicles when compared with Kalhaṇa's work, is as marked in the matter of topographical information as it is in other respects. In the first place it must be noted that the whole text of these three distinct works does not amount to more than about one-half of Kalhaṇa's work. For references to sacred sites and buildings and other places of religious interest the account of Muhammadan reigns offers naturally but little opportunity. The incidental notices of other localities are also in proportion less numerous and instructive. For these later authors allow considerably more room to episodic descriptions and do by no means show that care for accuracy in topographical statements which we have noticed in Kalhaṇa.

It is curious to note how the gradual decline of Hindu learning in Kaśmīr during the period of troubles and oppression which lasted with short interruptions for two and a half centuries previous to Akbar's conquest, is marked also in the character and contents of these later

¹ See *Śrīv.* i. 6.

² See Fourth Chron. 6.

³ Compare Fourth Chron. 8 *sqq.* Prājyabhaṭṭa's composition ended with the year A.D. 1513-14 and the reign of Fataḥ Shāh (verses 14-64).

⁴ The narrative of the period 1149-1339 A.D. fills only 305 verses in Jonarāja's Chronicle (347 according to the Bombay edition).

Chronicles. JONARĀJA was a scholar of considerable attainments, but apparently without any originality. He shows himself yet well-acquainted with the old local nomenclature of the Valley, though outside it he too commits himself to forms like *Puruṣavīra* (for Peshawar, recte *Puruṣapura*), etc.

ŚRĪVARA is a slavish imitator of Kalhaṇa, not above reproducing whole verses of his predecessor. His text looks often more like a *cento* from the *Rājatarāṅgiṇī* than an original composition. Notwithstanding the thorough study of Kalhaṇa's work which this kind of exploitation presupposes, we find Śrīvara more than once betraying ignorance of the old names for well-known Kaśmīr localities. Thus we have the name of the *Mahāsarit* stream transformed into *Mārī*, an evident adaptation of the modern *Mār*;¹ *Siddhapatha*, the modern *Sidau*, represented as *Siddhādeśa*;² the Tirtha of *Mārtāṇḍa* regularly referred to by its modern name *Bhavana* (*Bavan*), etc.³

The work of PRĀJYABHAṬṬA and ŚUKA is inferior in composition even to Śrīvara's Chronicle, and by the increased number of modern local names proves its authors' scant familiarity with the old topography of Kaśmīr. Thus the ancient *Kṛtyāśrama*, the scene of Kalhaṇa's Buddhist legend, i. 131 *sqq.*, figures repeatedly in their narrative as *Kīcāśrama*, *i.e.*, by its modern name *Kiṭs^ahōm*.⁴ Even the well-known *Rājapurī* is metamorphosed into *Rājavīra* (!), a queer reproduction of the modern *Rajaurī*.⁵ The old castle of *Lohara* reappears as *Luhara*, an evident approach to the present *Lōh^arin*;⁶ the ancient site of *Cakra-dhara* is turned into *Cakrādhāra*, etc.⁷

It is evident that when Sanskrit ceased to be the language used for official purposes, the knowledge of the ancient names of localities and of the traditions connected with the latter must have become gradually more and more restricted. In view of this decrease of traditional knowledge we have to exercise some caution when utilizing the evidence of the later historical texts for the elucidation of the old topographical data. At the same time it is easy to realize that their help is often of considerable value when connecting links have to be traced between those earlier data and the facts of modern topography.

¹ See *Śrīv.* i. 440; iii. 278; comp. note on *Rājat.* iii. 339.

² *Śrīv.* iii. 354; iv. 203, 661.

³ *Śrīv.* i. 376; iii. 372.

⁴ See Fourth Chron. 234, 240, 384; compare also note on *Rājat.* i. 147.

⁵ Fourth Chron. 542, *sqq.*

⁶ *Ib.*, 134, 143, *sqq.*

⁷ *Ib.*, 330.

24. It is convenient to refer here briefly to the Persian *Tārīkh* of Kaśmīr which to some extent may be looked upon as continuing the works of Kalhaṇa and his Paṇḍit successors. Unfortunately they furnish no material assistance for the study of the old topography of the country.

All these works give in their initial portion an account of the Hindu dynasties which pretends to be translated from the *Rājatarāṅgīnī*. Yet the abstract so given is in each case very brief and chiefly devoted to a reproduction of the legendary and anecdotal parts of Kalhaṇa's narrative. We thus look in vain in these abstracts for the modern equivalents of those local names, the identification of which is attended with any difficulty.

In illustration of this it may be mentioned that even the *Tārīkh* of Ḥaidar Malik Cādura (*Tsād^{ur}*),¹ which is the earliest work of this class accessible to me and the fullest in its account of the Hindu period, compresses the narrative of Jayasimha's reign, filling about two thousand verses in the *Rājatarāṅgīnī*, into two quarto pages. Of the localities mentioned in the original account of this reign not a single one is indicated by the Muhammadan Chronicler.

The later works which all belong to the 18th or the present century, are still more reticent on the Hindu period and seem to have largely copied Ḥaidar Malik's abstract. Taking into account the endless corruptions to which local names written in Persian characters are exposed, it will be readily understood why reference to these texts on points of topographical interest yields only in the rarest cases some tangible result.

25. It is a fortunate circumstance that several of the older Kaśmīr poets whose works have been preserved for us, have had the good sense to let us know something about their own persons and homes. The topographical details which can be gleaned from these authors, though comparatively few in number, are yet of distinct value. They enable us to check by independent evidence Kalhaṇa's local nomenclature, and in some instances acquaint us with localities of which we find no notice in the *Chronicles*.

The first and most helpful of these Kaśmīrian authors is the well-known polyhistor KṢEMENDRA. His works, composed in the second and third quarter of the 11th century, form important landmarks in various fields of Indian literature. Kṣemendra seems to have felt a genuine

¹ Written A.H. 1027, *i.e.*, A.D. 1617, in the twelfth year of Jahāngīr's reign. Ḥaidar Malik takes his epithet *Cādura*, recte *Tsād^{ur}*, from the Kaśmīr village of that name situated in the Nāgām Pargaṇa, some 10 miles south of Śrīnagar, close to the village of Vahṛtōr.

interest, rare enough among Indian scholars, for the realities of his country and the life around him. He does not content himself with informing us of his family, the date of his works and the places where he wrote them.¹

In the *Samayamātrkā*, one of his most original poems, which is intended to describe the snares of courtezans, he gives among other stories an amusing account of the wanderings of his chief heroine, Kaṅkāli, through the length and breadth of Kaśmīr.² The numerous places which form the scene of her exploits, can all easily enough be traced on the map. More than once curious touches of true local colour impart additional interest to these references. To Kṣemendra's poem we owe, e.g., the earliest mention of the Pir Panṭsāl Pass (*Pañcāladhārā*) and its hospice (*maṭha*).³ There too we get a glimpse of the ancient salt trade which still follows that route with preference. Elsewhere we see the heroine smuggling herself as a Buddhist nun into the ancient Vihāra of *Kṛtyāśrama*, etc.⁴

A different sketch of topographical interest we owe to the poet BILHAṆA. He left his native land early in the reign of King Kalaśa (1063-89 A.D.), and after long wanderings became famous as the court poet of the Cālukya king Tribhuvanamalla Parmāḍi in the Dekhan. In the last canto of his historical poem, the *Vikramāṅkadevacarita*, Bilhaṇa gives us a glowing picture of the beauties of the Kaśmīr capital. Notwithstanding its panegyric character, this account is laudably exact in its local details.⁵ In another passage the poet describes to us his rural home and its surroundings at the village of *Khonamuṣa*, south-east of Śrīnagar. His touching verses attest as much his yearning for his distant home as the faithfulness of his local recollections.⁶

¹ Compare the colophons of the various works first discovered and noticed by Prof. BÜHLER, *Report*, pp. 45 sqq. and Appendix.

² This humorous peregrination fills the ii. Samaya of the work; see *Kāvya-mālā* edition, pp. 6-16. The abundance of curious local details makes a commentated translation of the little Kāvya very desirable, notwithstanding the risky nature of part of its contents. A personal knowledge of Kaśmīr would certainly be required for the task.

³ See *Samayam*. ii. 90 sqq. The *maṭha* on the pass corresponds to the present 'Alīābād Sarai, a short distance below the top of the pass on the Kaśmīr side; see below, § 44.

⁴ *Samayam*. ii. 61 sqq.

⁵ Prof. BÜHLER to whom we owe the discovery of Bilhaṇa's chief work, has given in his Introduction an admirable analysis of the contents of Sarga xviii. as illustrating the poet's biography. For his description of contemporary Śrīnagara, see pp. 7 sqq.

⁶ See *Vikram*. xviii. 70 sqq. Prof. Bühler during his Kaśmīr tour, 1875, had the satisfaction of visiting the poet's native place, the present village of *Khunṣmoh*.

Similar in character though less ample in detail, is the description of Kāsmīr and its capital Pravarapura which Mañkha, Kalhaṇa's contemporary, inserts in the iii. Canto of his *Kāvya Śrīkaṇṭhacarita*.¹ Here we have the advantages of a commentary written by Jonarāja, the Chronicler, which duly notices and explains the points of local interest.

26. To complete our review of those Kāsmīrian texts of topographical interest which may be distinguished as secular, we must refer briefly to the curious **The Lokaparakāśa.** glossary and manual which goes by the name of *Kṣemendra's Lokaparakāśa*. Professor A. Weber has recently published valuable extracts from this text.² I myself have had occasion to refer to it frequently in the notes on the *Rājataranṅinī*.³ The work represents a strange mixture of the usual Kośa and a practical handbook dealing with various topics of administration and private life in Kāsmīr.

A great deal of the information contained in it is decidedly old, and probably from the hand of our well-known Kṣemendra. But there are unmistakable proofs, both in the form and contents of the book, showing that it has undergone considerable alterations and additions down even to the 17th century. This is exactly what we must expect in a work which had remained in the practical use of the Kāsmīrian 'Kārkuṅs' long after the time when Sanskrit had ceased to be the official language of the country.

The Lokaparakāśa supplies us with the earliest list of Kāsmīr Pargaṇas. It gives besides the names of numerous localities inserted in the forms for bonds, 'Huṇḍis,' contracts, official reports, and the like which form the bulk of Prakāśas ii. and iv. The Pargaṇa list as well as these forms exhibit local names of undoubtedly ancient date side by side with comparatively modern ones. Some of the latter belong to places which were only founded during the Muhammadan rule.⁴

He could thus verify on the spot every point of the description which Bilhaṇa gives of that "coquettish embellishment of the bosom of Mount Himālaya;" see *Report*, pp. 4 sqq.

¹ See *Śrīkaṇṭhac.* iii. 10-24, 68 sqq.

² See *Zu Kṣemendra's Lokaparakāśa*, in *Indische Studien*, xviii. pp. 289-412.

³ See particularly Note H (iv. 495), on the Kāsmīr monetary system, § 10.

⁴ Compare, e.g., in Prakāśa ii. *Jainanagara*, founded by Zainu-l-'ābīdīn (see *Jonar.* 1153); *Alābhadenapura* (*Śrīv.* iv. 318), etc.

SECTION VI.—THE NĪLAMATA AND MĀHĀTMYAS.

27. We have already above drawn attention to the fact that Kaśmīr has since early times been pre-eminently a country of holy sites and places of pilgrimage of all kinds. These objects of ancient local worship have always played an important part in the historical topography of the Valley and the adjacent mountain regions. It is hence no small advantage that there are abundant materials at our disposal for the special study of this *Topographia sacra* of Kaśmīr.

**The Nīlamata-
purāṇa.**

The oldest extant text which deals in detail with Kaśmīrian Tirthas, is the *Nīlamatapurāṇa*. This work which Kalhaṇa used as one of his sources,¹ claims to give the sacred legends regarding the origin of the country and the special ordinances which Nīla, the lord of Kaśmīr Nāgas, had revealed for the worship and rites to be observed in it.²

It is unnecessary to refer here to the legends which are related at the commencement of work, and to 'the rites proclaimed by Nīla' which together with the former occupy about two-thirds of the extant text.³ These parts have been fully discussed by Prof. Bühler in his lucid analysis of the Nīlamata.⁴ The remaining portions, however, deserve here special notice as forming,—to use Prof. Bühler's words—"a real mine of information, regarding the sacred places of Kaśmīr and their legends."

In the first place we find there a list of the principal Nāgas or sacred springs of Kaśmīr (vv. 900–975). This is followed by the interesting legend regarding the Mahāpadma lake, the present Volur, which is supposed to occupy the place of the submerged city of *Candrapura* (vv. 976–1008).⁵ The Purāṇa then proceeds to an enumeration of miscellaneous Tirthas chiefly connected with Śiva's worship (vv. 1009–48). To this is attached a very detailed account, designated as *Bhūteśvaramāhātmya*, of the legends connected with the sacred lakes and sites on Mount Haramukuṭa (vv. 1049–1148).⁶ Of a similar Māhātmya relating to the Kapaṭeśvara Tirtha, the present Kōṭhēr,⁷ only a fragment is found in our extant text (vv. 1149–68). The list of

¹ See *Rājat.* i. 14.

² Compare *Rājat.* i. 178–184.

³ *Nīlamata*, vv. 1–366, contain the legends, v. 367–899 the rites above referred to.

⁴ See *Report*, pp. 38 sqq.

⁵ Compare below, § 74, and *Report*, p. 10.

⁶ Compare below, § 57, and *Rājat.* notes i, 36, 107, 113.

⁷ See below, § 112, and *Rājat.* i. 32 note.

Viṣṇu-Tīrthas which succeeds it (vv. 1169-1248), is comparatively short, as indeed the position of this god is a secondary one in the popular worship of Kaśmīr.

After a miscellaneous list of sacred Saṅgamas or river-confluences, Nāgas and lakes (vv. 1249-78) we are treated to a somewhat more detailed synopsis of the chief Tīrthas of Kaśmīr (vv. 1271-1371). This is of special interest, because an attempt is made here to describe the Tīrthas in something like topographical order, and to group with them such localities as are visited on the same pilgrimage. It is thus possible to determine, with more certainty than in the case of other Tīrtha lists, the particular holy sites intended by the author.

This synopsis starts in the east with the fountain of the Nilanāga (Vērnāg), and follows with more or less accuracy the course of the Vitastā and its affluents down to the gorge of Varāhamūla. A short *Vitastāmāhātmya*, describing the origin and miraculous powers of this the holiest of Kaśmīr rivers (vv. 1371-1404), closes the text of Nilamata, such as it is found in our Manuscripts.

This text is unfortunately in a very bad condition owing to numerous lacunæ and textual corruptions of all kinds. Prof. Bühler held that the Nilamata in its present form could not be older than the 6th or 7th century of our era.¹ It appears to me by no means improbable that the text has undergone changes and possibly additions at later periods. On the whole, however, the local names found in it bear an ancient look and agree closely with the forms used by Kalhaṇa. The difference in this respect between the Nilamata and the Māhātmyas, in their extant recensions, is very marked and helps to prove the comparatively late date of most of the latter. On the other hand it deserves to be noted that without the more systematic and detailed accounts of the various Tīrthas as found in the Māhātmyas, the identification of many of the sacred places referred to in the Nilamata would probably have been impossible.

The fact of all extant copies of the work showing practically the same defective text, seems to indicate that the changes and additions to which I alluded above, cannot be quite recent. If such a revision had been made at a time comparatively near to the date of our oldest MS. we could, after the analogy of other instances, expect an outwardly far more correct, *i.e.* 'cooked,' text. The operation here suggested was actually performed some thirty years ago by the late Paṇḍit Sāhibrām. Receiving the orders of Mahārāja Raṅbir Singh to

¹ Compare *Report*, p. 40. The oldest and best MS. of the Nilamata which I was able to secure and collate, is dated in the Laukika year 81. This date judging from the appearance of the MS. probably corresponds to A.D. 1705-6.

prepare the text of the Nilamata for edition, he 'revised' the work with scant respect for its sacred character by filling up the lacunæ, expanding obscure passages, removing ungrammatical forms, etc.¹ Fortunately Prof. Bühler reached Kaśmīr early enough to learn the origin of this 'cooked' text, and to give due warning as to its true character.

The Nilamata seems thus to have escaped in recent times that process of continual adaptation which, as we shall see, must be assumed to have greatly affected all extant Māhātmyas. The reason probably is that it could never have been used, like the latter, as a practical pilgrims' manual and itinerary by the Purohitas of the various Tīrthas.

28. Among the texts dealing specially with the sacred sites of Kaśmīr the *Haracaritacintāmaṇi* can be placed, perhaps, nearest in date to the Nilamata-purāṇa. It is not like the latter and the

The Haracarita-
cintāmaṇi.

Māhātmyas, an anonymous composition, claiming recognition in the wide folds of canonical Purāṇa literature. It owns as its author the poet *Jayadratha*, of the Kaśmīrian family of the Rājānakas, and a brother of Jayaratha. The pedigree of the family as given in Jayaratha's *Tantrālokaviveka*, a Śaiva treatise, shows that Jayadratha must have lived about the end of the 12th or beginning of the 13th century.²

His work which is written in a simple Kāvya style, relates in thirty-two Cantos as many legends concerning Śiva and his various Avatāras.³ Eight of these legends are localized at well-known Kaśmīrian Tīrthas. They give the author ample opportunity of mentioning other sacred sites of Kaśmīr directly or indirectly connected with the former.⁴

Jayadratha's detailed exposition helps to fix clearly the form which the legends regarding some of the most popular of Kaśmīrian Tīrthas had assumed in the time immediately following Kalhaṇa. The local names as recorded by Jayadratha, agree closely with those of the Rājatarāṅgiṇī.⁵ They prove clearly that the forms employed by Kalhaṇa must have been those generally current in the Sanskrit usage of the period. For the interpretation of Nilamata's brief notices the Hara-

¹ See *Report*, pp. 33, 38.

² Compare BÜHLER, *Report*, pp. 61, 81, cliii.

³ The *Haracaritacintāmaṇi* has recently been printed as No. 61 of the *Kāvya-mālā* Series, Bombay, (1897), chiefly from the text as contained in my MS. No. 206.

⁴ The cantos containing these legends are i. Jvālāliṅgāvatāra, iv. Nandirudrāvatāra, vii. Cakrapradāna; x.-xiv. Vijayeśvara-, Piṅgaleśvara-, Vitastā-, Svayambhūnātha-, Kapateśvara Avatāras.

⁵ An index of the Kaśmīr local names in the *Haracaritacintāmaṇi*, with explanatory notes, has been prepared under my supervision by P. Govind Kaul and printed as an Appendix to the *Kāvya-mālā* edition.

caritacintāmaṇi is of great value. Its plain and authentic narrative enables us often to trace the numerous modifications which the various local legends as well as the names of the localities connected with them have undergone in the extant Māhātmyas.

29. Reference has already been made above to the numerous texts known as *Māhātmyas* which we possess of all the more important Tīrthas of Kāśmīr. **The Māhātmyas.** They claim with few exceptions to be extracted from Purāṇas or Purāṇic collections (*Saṁhitās*).¹ Ordinarily they set forth in detail the legends relating to the particular pilgrimage place, the spiritual and other benefits to be derived from its visit, and the special rites to be gone through by the pilgrims at the various stages of the itinerary. The abstract given of the Śāradāmāhātmya in Note B, on Rājat. i. 37, may serve to indicate the manner in which these subjects are usually treated in the average texts of this class.

Prof. Bühler was the first to recognize the value of the Māhātmyas for a systematic study of the old topography of Kāśmīr. Among the Sanskrit Manuscripts which he acquired during his tour in Kāśmīr, there are sixteen distinct texts of this kind.² My own search in this direction, facilitated by successive visits to the various Tīrthas themselves, has enabled me to collect altogether fifty-one separate Māhātmya texts. The list of my collection which has been given in a supplementary Note,³ may be considered fairly to exhaust the present range of this literature.

In extent the Māhātmyas vary greatly. By the side of texts like the *Vitastāmāhātmya* with its fifteen hundred Ślokas, we have legendaries of more modest dimensions amounting only to a few dozens of verses. Equally marked differences in the matter of age become apparent on closer examination.

Unmistakeable indications prove that many of the Māhātmyas now in actual use are of late composition or redaction. Among the texts so characterized, the Māhātmyas of some of the most popular pilgrimage places, like the Haramukuṭa lakes, the cave of Amaranātha, Īśeśvara (Īś̄b̄ar), are particularly conspicuous. The indications here referred to are furnished chiefly by the local names which in their very form often betray a modern origin. This may conveniently be illustrated by a

¹ Most of the Kāśmīr Māhātmyas allege to be portions of the *Bhṛṅgīśasaṁhitā*. Others claim special authority by representing themselves as parts of the Ādi, Brahma, Brahmavaivarta, Varāha and Bhaviṣyat Purāṇas.

² See *Report*, pp. iv. sqq. Nos. 48, 51, 52, 55, 62, 75, 82, 84, 99, 100 there quoted as separate texts are only chapters of the *Amaranāthamāhātmya*.

³ See Supplementary Note AA.

brief analysis of the most instructive of such names found in the *Vitastāmāhātmya*.

This text claims to furnish an account of all the Tirthas along the course of the holy river and is designated as a portion of the *Bhṛṅgiśa-samhitā*. Notwithstanding this pretended antiquity we find the famous Nilanāga introduced to us by the name of *Viranāga* (i. 58; ii. 33). This form is wholly unknown to the Nilamata, Rājatarāṅgiṇī or any old text. It is nothing but a clumsy rendering of the modern name of the village *Vērnāg* near which this fine spring is situated.¹ The ancient site of *Jayavana*, mentioned by Bilhaṇa and Kalhaṇa, the present *Zevan*, is metamorphosed into *Yavanī* (vi. 4).² The village of Pāndrēṭhan which derives its name from *Purāṇādhiṣṭhāna*,³ 'the old capital,' and bears the latter designation even in S'rīvara's Chronicle, figures as *Pādadr̥ṣṭika* (!), xii. 24. That *Mākṣikasvāmin* (Māy²sum)⁴ and the *Mahāsarit* (Mār)⁵ appear as *Māyāsīmā* and *Mārī*, can after this specimen of fancy nomenclature scarcely surprise us.

But we must all the same feel somewhat startled when we find that this text which claims to be revealed by S'iva, refers repeatedly to the modern village of *Shādīpūr*, at the confluence of the Vitastā and Sind, by the name of *Sāradāpura*. *Shādīpūr*, an abbreviation for *Shahābuddīn-pūr*, was, as Jonarāja's Chronicle shows, founded only in the 14th century by Sultān Shahābu-d-dīn.⁶ Quite on a level with the knowledge of old topography here displayed are many other references to localities, e.g., the mention of the modern garden *Shālimār*, a creation of the Mughals (Sālamāra), xxi. 39; of the ancient Huṣkapura as *Uṣah-karaṇa*⁷ (for Uṣkūr!), xxix. 103, etc.

In several cases these fancy renderings of modern local names are explained by whimsical etymologies which again in due turn give rise to new-fangled legends quite in the style of the old *nidānakathās*.

Similar proofs of modern origin can be traced in several other popular Māhātmyas, though perhaps not with equal frequency. Thus we find in the *Haramukutaṅgāmāhātmya* the name of the sacred mountain itself transformed from *Haramukuta* into *Haramukha* (the

¹ The name *Vērnāg* is probably derived from the name of the Pargaṇa *Vēr*, mentioned by Abū-l-Faẓl, ii. p. 370.

² See below, § 105.

³ See *Rājat.* iii. 99 note and below, § 89; also *S'rīv.* iv. 290.

⁴ See *Rājat.* iv. 88 note and below, § 99.

⁵ Compare *Rājat.* iii. 339-349 note and below, § 65.

⁶ See *Jonar.* 409. A popular etymology accepted in good faith by more than one European writer, sees in *Shādīpūr* the 'village of the marriage,' scil. between the Vitastā and Sind Rivers!

⁷ Compare *Rājat.* i. 168 note and below, § 124.

present Haramukh),¹ the ancient site of *Bhūteśvara* (Buth'śēr) so well-known to the Rājatarāṅgiṇī and all old texts, turned into *Bodheśvara*, etc. In the *Amaranāthamāhātmya* of which there is a comparatively old copy in the Poona collection, we are also treated to *Paḍṛṣṭi* as the Sanskrit name of Pāndrēṭhan, to *Suśramanāga* (for Kś. *Suśramnāg*) as the name of the lake where the Nāga *Suśravas* of the old legend took up his abode,² and the like. Examples of local names similarly perverted in other Māhātmyas will have to be mentioned *passim* in our account below.

It is important to note that by the side of texts like those just mentioned, there are others which on the whole show close conformity with our genuine old sources both in matter of legend and local names.³ And even in the Māhātmyas which in their present form we have every reason to consider as recent compositions, there is often abundant evidence of the use of earlier materials and traditions.⁴ It will be easier to understand the singular discrepancies in the value and character of these texts on examining the peculiar conditions under which they have originated.

30. The Māhātmyas are in the first place hand-books for the Purohitas of the particular Tirthas who have the privilege of taking charge of the pilgrims. They serve the priests as chief authorities for the claims they put forth on behalf of the holiness of their Tirtha, and for the rewards they promise for its visit. They are also intended to support their directions as to the rites to be observed by the pilgrim, and the route to be taken by him on the journey. It is usual for the Purohitas to recite the Māhātmya for the benefit of their clients in the course of the pilgrimage tour. At the same time its contents are expounded to them by a free verbal rendering in Kaśmīrī.

**Origin and purpose
of Māhātmyas.**

¹ See below, § 57. The kh at the end of the modern name is due to a phonetic law of Kaśmīrī which requires the aspiration of every final tenuis; see *J. A. S. B.*, 1897, p. 183.

² Compare *Rājat.* i. 267 note. The modern Kś. form *Suśramnāg* is the regular phonetic derivative of *Suśravanāga* by which name the lake is designated in the *Nīlamata*, *Haracaritacintāmaṇi*, etc.

³ Among such the Māhātmya collection known as the *Śarvāvatāra* (No. 213 in my list of MSS.), the *Mārtāṇḍamāhātmya* (No. 219), the *Vijayeśvaramāhātmya* (No. 220), may be particularly mentioned. None of these, however, are now known to the local Purohitas, more recent and inferior texts having taken their place.

⁴ Thus *e.g.*, the Māhātmya of the present *Iśābar* (*Īśeśvara*; see *Rājat.* ii. 134) shows plainly its very recent origin by calling the Tirtha *Īśavihāra* (a garbled reproduction of *Iśābrōr* < *Īśeśvara*), and by similar blunders. Yet it knows correctly the sacred spring of *Śatadhārā* already mentioned by Kṣemendra.

As but very few of the priests have enough knowledge of Sanskrit to follow the text intelligently, these translations are more or less learned by heart. Often as my manuscripts show, interlinear Kaśmīrī glosses are resorted to in order to assist the reader's memory.

These local priests known now in Kaśmīr as *thān^apatī* (Skr. *sthānapati*), are as a rule quite as ignorant and grasping as their confrères, the Pujārīs, Bhōjkīs, etc., of India proper. They are held deservedly in very low estimation by the rest of the Brahman community. That their condition was more or less the same in earlier times too, though their influence and numbers may have been greater, can be safely concluded from more than one ironical allusion of Kalhana.¹ These are the people to whose keeping the Māhātmya texts have always been entrusted. Their peculiar position and calling explain, I think, most of the curious changes which the latter have undergone.

Tenacious as local worship is, there is the evidence of concrete cases to show that not only the route of pilgrimage, but the very site of a Tirtha has sometimes been changed in comparatively recent times. In proof of this it will suffice to refer to the detailed account I have given of the transfers that have taken place in the case of the ancient Tirthas of *Bhedā* and *Sāradā*.² Minor modifications must naturally have been yet far more frequent. The visit of a principal Tirtha is regularly coupled with bathings, S'rāddhas and other sacrificial functions at a series of other sacred spots. The choice of these subsidiary places of worship must from the beginning have depended on local considerations. As these changed in the course of time, variations in the pilgrimage route must have unavoidably followed.

To bring the text of the Māhātmya into accord with these successive changes was a task which devolved upon the local Purohitas. The texts we have discussed above bear, in fact, only too manifestly the traces of their handiwork. Sound knowledge of Sanskrit and literary culture are likely to have been always as foreign to this class of men as they are at present. When it became necessary for them to introduce the names of new localities into the text of the Māhātmya there was every risk of these names being shown not in their genuine old forms, but in hybrid adaptations of their modern Kaśmīrī equivalents. This risk naturally increased when Sanskrit ceased to be the official language of Kaśmīr, and the knowledge of the old local names was gradually lost even among those maintaining scholarly traditions in the country.

¹ Compare *Rājat.* ii. 132 note and v. 465 *sqq.*; vii. 13 *sqq.*; viii. 709, 900 *sqq.*, 939.

² Compare Notes A (*Rājat.* i. 35) and B (*Rājat.* i. 37).

31. Another potent cause seems to have co-operated in this vitiation of the local nomenclature of the Māhātmyas.

Popular etymology
in local names of
Māhātmyas.

I mean 'popular etymology.' We have already referred to the tendency displayed throughout these tracts of making the names of localities,

rivers, springs, etc., the starting-point for legendary anecdotes. For men of such very scant knowledge of Sanskrit as the *thānapatī*s invariably are, it was naturally far easier to explain such etymological stories when they were based on the modern local names.

It is undoubtedly this reason which has, *e.g.*, led the compiler of the present Haramukūṭagaṅgāmāhātmya to substitute the name *Karaṅkanadī* for the old *Kanakavāhinī*. By the latter name the stream coming from the Haramukūṭa lakes is designated in all our old texts, as explained in my note on Rājat. i. 149-150. By turning *Kāṅk^anai*, the modern derivative of this old name, into *Karaṅkanadī*, 'the skeleton-stream,' the compiler of the Māhātmya gets an occasion to treat his readers to a legend likely to appeal to their imagination. The river is supposed to have received this appellation, because Garuḍa had dropped at its Saṅgama with the Sindhu the skeleton (*karaṅka*) of the Ṛṣi Dadhīci which Indra before had used as his weapon, etc.¹ This story, it is true, is wholly unknown to the Nīlamata or any other old text. But, on the other hand, it has got the great merit of being easily explained and proved to any Kaśmīrī pilgrim. He cannot fail to realize the manifest connection between *Karaṅka* and his familiar *k^aranz*, 'skeleton.'

An exactly similar case of 'popular etymology' has been noticed in the analysis of the S'āradāmāhātmya as contained in my Note B (i. 37). There the name of the village *Sun^a-Drang* is reproduced as *Suvarṇārdhāṅgaka* and explained by a legend, how the Muni S'āṅḍilya had at that spot half his body (*ardhāṅgaka*) turned into gold (*suvarṇa*), etc. In reality the village name is derived from the old term *Draṅga*, 'watch-station,' by which the place is mentioned by Kalhaṇa.² The distinguishing prefix *Sun^a-*, meaning 'gold' in Kaśmīrī, was given to it, because it lay on the route to the old gold-washing settlements in the Kiṣaṅgā Valley.³

¹ The story is spun out at great length in Paṭala iii. of the *Haramukūṭagaṅgāmāhātmya*, MS. No. 221.

² See viii. 2507, 2702.

³ For other examples of local names in Māhātmyas metamorphosed for the above reason, compare my notes Rājat. vi. 177 (*Bhīmadvīpa* in the *Mārtāṇḍamāh.*, for *Bum^azu*); i. 267 (*S'eṣanāga* in the *Amareśvaramāh.*, for the older *Suśramanāga*, recte *Suśravonāga*); Note C, i. 124 (*Jyeṣṭheśvara*, the present *Jyēṭhēr*, turned into a site of *Jyeṣṭhā*), etc.

It would be easy to multiply examples showing the strange vicissitudes to which old topographical names are exposed at the hands of the local Purohita. But the explanations already given will suffice to prove that the topographical data found in Māhātmyas can only then be used safely when they are critically sifted and supported by our more reliable sources.

A critical examination of these data is, however, much impeded by the difficulty we experience in fixing the exact age of particular Māhātmyas and their component portions.¹ Even in the case of apparently old texts modern additions and changes may be suspected, while again the most recent concoctions may preserve fragments of genuine tradition.² In view of these considerations I have not thought it safe to crowd my maps with hundreds of names of petty Tīrthas as found in the Māhātmyas, but have marked only those pilgrimage sites the ancient names of which can be established with certainty.

¹ The difficulty here indicated is increased by the fact that no really old manuscripts of Māhātmyas seem to be preserved in Kaśmīr. MSS. written on birch-bark, *i.e.*, earlier than the 17th century, are quite unknown at present. Of the numerous paper MSS. I have examined, none seem to me older than two centuries at the utmost. It is probable that this absence of older copies is due to the rough usage to which Māhātmya MSS. are exposed when carried about on the pilgrimage tours.

² I am glad that chance gave me an opportunity of gaining some personal experience of the manner in which Māhātmyas are occasionally produced. Some ten years ago the Purohitas or Bāchbaṭṭas of the Ganāpatyār quarter in Śrīnagar recovered an ancient Liṅga from a Mosque and began to erect a small shrine for it near the river Ghāṭ of Malāyār. Guided by a local tradition which, as far as I can judge, may be genuine, they believed this to have been the site of the shrine of Śiva Vardhamāneśa mentioned already in the Rājatarāṅgiṇī (see note ii. 123). The Liṅga was re-consecrated accordingly by this name.

In 1891, when examining old sites in this part of the city, I also visited the temple of Vardhamāneśa then under construction. The interest I showed in the old Liṅga and in the tradition regarding it, coupled with an appropriate Dakṣiṇā, soon secured me the confidence of the head-Purohita of the little shrine. 'Paṇḍit' T.R., a man more intelligent than the average of his fraternity, was not slow to confess to me that the Māhātmya of the Tīrtha *in spē* was as yet under preparation. Some weeks later when in camp near Śrīnagar, I received the visit of my Purohita from Vardhamāneśa's shrine. He brought me the draft of the new Māhātmya and asked my assistance in revising it.

I found it to consist chiefly of extracts from the Vitastāmāhātmya. The passages dealing with Vardhamāneśa and the neighbouring Tīrthas within the city had been suitably amplified with laudatory verses in the usual Māhātmya style culled from other texts. The vested interests of other local shrines had received due recognition by being included in the *Yātrā* of Vardhamāneśa. I did what I could to indicate the genuine names of these localities. This quasi-antiquarian co-operation does not seem to have detracted from the popularity of the new Māhātmya among the Bāchbaṭṭas of Ganāpatyār.

32. It is a curious fact that among our authorities for the *Topographia sacra* of Kaśmīr we must allow a conspicuous place to a Muhammadan writer. It is ABŪ-L-FAẒL, the minister of Akbar, who in the chapter of his *Āin-i Akbarī* dealing with the 'Sarkār of Kaśmīr' has left us a very accurate account of many of the holy places in the Valley.¹ Abū-l-FaẒl's detailed description of Kaśmīr is valuable in many respects to the historical student. But it is particularly in connection with our topographical search that we must feel grateful to the author for having like his great master "caught some of the enthusiasm of the Valley" (Rennell).

Abū-l-FaẒl tells us that "the whole country is regarded as holy ground by the Hindu sages." He also refers in general terms to the numerous shrines dedicated to the various deities and to the popular worship of 'snakes,' *i.e.*, the Nāgas, "of whom wonderful stories are told." He then proceeds to describe in detail the most notable sites, giving among these particular prominence to what Dr. Bernier aptly called 'les merveilles' of the country.

This account of Abū-l-FaẒl represents for us an authentic survey of all the Kaśmīrian Tīrthas that were well-known and popular at the end of the 16th century. It serves as a most useful link between our older texts dealing with these pilgrimage places and the modern tradition. It helps us to check the data of the Māhātmyas in many particulars of topographical interest. Abū-l-FaẒl's notes have enabled me to trace in more than one instance the position of ancient Tīrthas or particular features regarding them which have since his time been wholly forgotten.² It cannot be doubted that Abū-l-FaẒl's list of sacred sites to which we have to refer so frequently in our subsequent notes, was supplied by competent Brahman informants just as his abstract of the Sanskrit Chronicles.

¹ Vol. i. pp. 564-570 in Prof. Blochmann's edition of the *Āin-i Akbarī*; vol. ii. pp. 354-366 in the Bibliotheca Indica translation of the work (Col. H. S. Jarrett). Abū-l-FaẒl's account of Kaśmīr would well deserve a fuller commentary than the one which the translator, in the absence of special local studies, was able to give. The account of Mīrzā Ḥaidar (in the *Tārīkh-i Rāshidī*) and Bernier's notes could conveniently be discussed on the same occasion.

² Compare my notes on *Bhedāgiri* (i. 35), the *Sūradātīrtha* (i. 37), the *Takṣakanāga* (i. 220); also supplementary note to i. 107.

SECTION VII.—LOCAL TRADITION.

33. It now remains for us only to indicate briefly what help surviving tradition offers for the study of the ancient topography of Kāsmīr. The tradition with which we are here concerned, presents itself in two forms. One is the tradition of the 'learned,' regarding the ancient sites of the country in general, kept up more or less in connection with written records. The other is that genuine local tradition which is strictly confined in its limits but is kept up equally among literate and illiterate of particular places.

Local tradition of
the learned.

Among those who represent in Kāsmīr learned tradition of the former type there must again be distinguished the few Paṇḍit families of Śrīnagar in which the serious study of Sanskrit Śāstras has been maintained, and the great host of 'Bāchbaṭṭas.' With the latter class we have already become partially acquainted in the course of our examination of the Māhātmyas. We have had occasion to note the conspicuous absence of genuine knowledge as regards the ancient topography of the country in those texts which form the characteristic products of this class' literary activity.

The Purohitas' knowledge of Sanskrit is ordinarily of the scantiest kind, and their 'reading' confined to Māhātmyas and devotional texts learned by heart without proper comprehension. We can hence scarcely expect them to have preserved genuine traditions regarding those historically interesting localities which are mentioned only in the Chronicles. It is only in the matter of those sacred sites, pilgrimage routes and the like which form as it were, their own particular professional domains, that their testimony can claim special attention. Yet even in this limited field the Purohitas' traditions are, as we have seen, often of a very modern growth. Their statements, therefore, require under all circumstances to be tested with critical caution.

34. 'Learned' tradition as represented by the Śrīnagar Paṇḍits of modern times, is best gauged by an examination of what the late Paṇḍit SĀHIBRĀM († 1872) has specially recorded on the subject of ancient sites.

Sāhibrām's Tīrtha-
saṅgraha.

P. Sāhibrām who was undoubtedly the foremost among Kāsmīrian Sanskrit scholars of the last few generations, had been commissioned by the late Mahārāja Raṅbir Singh to prepare a descriptive survey of all ancient Tīrthas of Kāsmīr. For this purpose a staff of Paṇḍits was placed at his disposal whose business it was to collect the necessary

materials in the various parts of the country. The large work which was to be prepared on the basis of these materials, was never completed, and of the latter themselves I was able to recover only small portions.¹ But some time before his death Paṇḍit Sāhibrām had drawn up abstracts of the information he had collected under the title of *Kāśmīratīrthasaṃgraha*, and of these I have been also able to obtain copies. The most detailed and apparently latest recension of this Tīrthasaṃgraha is the one contained in No. 61 of Prof. Bühler's collection of MSS. now at Poona.

This little work gives a list of numerous Tīrthas with brief indications of their special features and position, arranged in the topographical order of Pargaṇas. It is useful enough as a comprehensive synopsis of such sacred sites as were known at the time to local worship. The references to many obscure little shrines, Nāgas, etc., show that the enquiries of Paṇḍit Sāhibrām's assistants had been extensive. But the work proves at the same time how little help traditional learning in Kaśmīr could offer in our days for the serious study of the old topography of the Valley.

Paṇḍit Sāhibrām's plan is to indicate each Tīrtha's position by mentioning the territorial division in which it is situated, as well as the nearest village or other well-known locality. It was undoubtedly the learned author's desire to give all local names in their old Sanskrit forms as far as they were known to him. Accordingly we find a number of localities correctly mentioned by their genuine old designations. But unfortunately the number of the latter is truly insignificant when compared with those local names which are plainly recognizable as new fabrications, as worthless as those already mentioned in connections with the topography of the modern Māhātmyas.

In consideration of the fact that P. Sāhibrām deserves to be looked upon as the best representative of modern Kaśmīrian scholarship,² it is only just to illustrate the above remarks by a few examples. I take them only from among those local names the genuine forms of which can be easily ascertained from the Rājatarāṅgiṇī. The lake of the Nāga *Suśravas*,³ the present Suśram Nāg, is named *Suśramanāga* in one

¹ The papers acquired by me refer to some of the north-eastern Pargaṇas and contain descriptions (in Sanskrit) of the various Nāgas, Liṅgas, etc., the miraculous stories relating to them, together with the devotional texts which are supposed to be used at their worship. Quaint illustrations and maps accompany the text. The whole forms a large-sized folio. The critical value of these records is very slight.

² See Prof. BÜHLER'S *Report*, pp. 4, 38.

³ See *Rājat.* i. 267 note, and below, § 59.

recension and *Suṣumṇanāga* (!) in the other. The old Pargaṇas of *Holaḍā*, *Laulāha*, *Khūyāśrama* are turned on account of their modern names *Vular*, *Lōlau*, *Khuyāhōm*, into the 'Rāṣṭras' of *Volara*, *Lalava*, *Khoyahāma*. *Bānāhāl*, the old *Bāṇasālā*,¹ figures as *Bhānuśālā*; *Khruv*, the ancient *Khadūvī*,² known correctly even to so late a text as the *Lokaparakāśa*, as *Khrāva*. The well-known *Khonamuṣa* (*Khunāmoh*) appears as *Kṣuṣṇamoṣagrāma* (!) The name of the ancient village *Jayavana*³ which fares badly too, as we have seen, in the *Māhātmyas*, is metamorphosed into *Jivana*; *Raṇyil*, the old *Hiraṇyapura*,⁴ is with a flight of historical fancy turned into a foundation of king *Raṇāditya* (!).

Even the sacred Tīrtha of *Tūlamūlya* (*Tulāmul*) does not escape a renaming as *Sthūlamūla*, though in this case the local *Māhātmya*, with its *Tūlamūla*, keeps close enough to the old name.⁵ After this, village names like *Uṣkara*, *Rāmāśrama*, *Kīcakāśrama*, as designations of the old *Huṣkapura*, *Rāmuṣa*, *Kṛtyāśrama* can scarcely surprise us.⁶ The number of districts, towns, villages, streams, lakes and other topographical features (exclusive of Tīrthas) mentioned by Paṇḍit Sāhibrām amounts to nearly three hundred. But scarcely two dozens of the names given for them are in accord with our old authorities.

Paṇḍit Sāhibrām was one of the few modern Kaśmīrian scholars who have seriously occupied themselves with the *Rājatarāṅgiṇī* and the later *Chronicles*. This is shown by the elaborate abstracts he had prepared of these works.⁷ Hence the indifferent knowledge of ancient topography as displayed in his *Tīrthasaṅgraha*, must appear all the more striking. Yet in reality it is easily enough accounted for.

What knowledge learned tradition in Kaśmīr has retained of ancient sites as distinct from Tīrthas and the like, is confined to a few prominent localities which, for one reason or the other, were of special interest to the Paṇḍits. Thus the capital *Pravarapura-Srīnagara* with several of its quarters, *Vijayeśvara*, *Suyyapura*, *Varāhamūla*, *Padmapura*, and some other places of importance in the Valley have continued to be known by their ancient names. This was probably because these names never ceased to be employed in colophons of Sanskrit manuscripts, in horoscopes, and similar records. In the case of a

¹ See note viii. 1665, and below, § 41.

² See note viii. 733; also § 105 below.

³ Compare note vii. 607, and § 105 below.

⁴ See note i. 287, and § 104 below.

⁵ Compare note iv. 638.

⁶ See notes i. 168; ii. 55; i. 147.

⁷ These abstracts, called *Rājatarāṅgiṇīsaṅgraha*, were acquired by Prof. BÜHLER; see Nos. 176-8 of the Poona collection. It deserves to be noted that in them no attempt whatever is made to explain points of topographical interest.

few other localities again like *Jayapura*, *Dāmodara's Uḍar*, *Cakradhara*, there were well-known popular legends which plainly indicated their identity with sites mentioned in the *Rājatarāṅgiṇī*. But for the great mass of ancient places there were no special reasons of this kind to assure a recollection of their old names. It is hence only natural that all genuine knowledge of their identity and earlier history has gradually disappeared from the Paṇḍits' tradition.

Nothing but systematic enquiry on the lines of modern historical research could help towards a recovery of the knowledge thus lost. But such an enquiry could not be expected either from P. Sāhibrām or any other indigenous scholar uninfluenced by Western critical methods.

35. Popular local tradition has fortunately in Kaśmīr proved far

**Popular local tradi-
tion.**

more tenacious than the tradition of the learned. I have often derived from it valuable aid in my local search for particular sites. My

antiquarian tours have given me ample opportunity to convince myself that when collected with caution and critically sifted, such local traditions can safely be accepted as supplements to the topographical information of our written records. In illustration of this statement I may refer to the evidence gathered from local tradition in reference to the sites of *Lohara*,¹ *Hastivañja*,² *Kramavarta*,³ *Jayapura*,⁴ *Skandabhavana*,⁵ etc.

In more than one instance it can be shown that local legends which Kalhaṇa heard, still cling unchanged to the same sites. As striking examples may be mentioned here the legends concerning *Dāmodara's Uḍar*,⁶ the burned city of King *Nara*,⁷ the temple of *Pravareśa*.⁸

It cannot be doubted that this tenacity of local tradition in Kaśmīr is due largely to the isolation secured for the country by its alpine position. Nothing is more instructive in this respect than a comparison with the territories of ancient Gandhāra and Udyāna, or with the Panjāb plains. These regions so rich in ancient Hindu sites are particularly devoid of local traditions connected with them. This fact is easily understood if we think of the many and great ethnic changes which

¹ See *Rājat.* Note *E* (iv. 177), § 15.

² See *Rājat.* note i. 302, and *J. A. S. B.*, 1895, pp. 379 *sq.*

³ Compare Note *D* (iii. 227); *J. A. S. B.*, 1895, pp. 384 *sq.*; also below, § 43.

⁴ See note iv. 506 *sqq.*, and below, § 122.

⁵ See Note *K* (vi. 137).

⁶ See note i. 156; below, § 119.

⁷ See note i. 202; below, § 108.

⁸ See note iii. 350; below, § 96.

have passed over the land. Kaśmīr, fortunately for antiquarian research, throughout its known history has escaped such great convulsions and the breaks of tradition usually connected with them.

The influence of the geographical position of Kaśmīr can be traced here also in another direction. Mountainous surroundings and consequent isolation tend everywhere in alpine countries to develop and foster conservative habits of life and thought. We find these habits most strongly marked in the population of the valley, and may safely ascribe to them a great share in the preservation of local traditions.

CHAPTER III.

GENERAL GEOGRAPHY.

SECTION I.—POSITION AND CONFIGURATION OF KĀSMĪR VALLEY.

36. Nature itself when creating the great Valley of Kāsmīr and its enclosing wall of mountains, seems to have assured to this territory not only a distinct geographical character but also a historical existence of marked individuality. We see both these facts illustrated by the clearly defined and constant use of the name which the territory has borne from the earliest accessible period.

The name **Kāsmīra**.
 This name, KĀSMĪRA in its original Sanskrit form, has been used as the sole designation of the country throughout its known history. It has uniformly been applied both by the inhabitants and by foreigners. We can trace back its continued use through an unbroken chain of documents for more than twenty-three centuries; while the name itself undoubtedly is far more ancient. Yet notwithstanding this long history the current form of the name down to the present day has changed but slightly in the country itself and scarcely at all outside it.

The Sanskrit *Kāsmīra* still lives as *Kāsmīr* (in Persian spelling *Kashmīr*) all through India and wherever to the West the fame of the Valley has spread. In the language of the inhabitants themselves the name is now pronounced as *Kāśīr*.¹ This form is the direct phonetic derivative of *Kāsmīr*, with regular loss of the final vowel and assimila-

¹ The adjective *Kāśūr* 'Kāsmīrian' corresponds to Skr. *Kāsmīra*. The *u* of the last syllable is probably due to the *v* of an intermediate form **Kāśvīra*; see below.

tion of *m* to the preceding sibilant. With reference to a phonetic rule, prevalent through all Indo-Aryan Vernaculars, which favours the change of medial Skr. *m* into *v*,¹ we are led to assume an intermediate Prakrit form **Kaśvīr*[*a*]. In support of this we may point to the striking analogy of the Kaśmīr local name *Sāngas* which, as shown in my note on *Rājat.* i. 100, goes back through an older recorded form *Svāngas* to **S'māṅgāsā*, the *S'amāṅgāsā* of the Chronicle. It has already been shown above that we have to recognize in this **Kaśvīra* the original Prakrit form which Ptolemy's *Κάσπειρα*, *Κασπειρία* (pronounced *Kaspīra*, *Kaspīria*) are intended to transcribe.²

Linguistic science can furnish no clue to the origin of the name *Kaśmīra*, nor even analyze its formation.³

Etymologies of name.

This fact, however, has not saved the name from being subjected to various etymological guesses which for curiosity's sake may receive here a passing notice. It must be held to the credit of Kaśmīrian Sanskrit authors that their extant writings are wholly innocent of this display of etymological fancy.

No less illustrious a person than the Emperor Bābar opens the list. His suggestion was that the name may be derived from the hill-tribe 'Kās' living in the neighbourhood of Kaśmīr.⁴ We easily recognize here the reference to the *Khaśas* of the lower hills. Their name, however, in its true form has, of course, no connection with Kaśmīr. Another etymology, first traceable in the Ḥaidar Malik's Chronicle and hence reproduced by other Muhammadan writers,⁵ derives the first part of the name from '*Kashap*,' i.e., Kaśyapa, and the second either from

¹ Compare DR. GRIERSON'S remarks, *Z. D. M. G.*, i. p. 16.

² See above, § 5.

³ If the *Uṇādisūtra*, 472, *Kaśer muṭ ca* is to be applied to the word *Kaśmīra*, the latter would have to be dissolved into *kaś-m-īra* according to the traditional grammatical system.

⁴ See *Memoirs of Baber*, transl. by Leyden and Erskine, p. 313. A Persian MS. : of the text adds that *mīr* signifies mountain. ERSKINE, *Introduction*, p. xxvii., improves upon this etymology by extending it to Kashgar, the Casia regio and Casii Montes of Ptolemy. RITTER, *Erdkunde*, ii. p. 1127, from whom I take this reference, not unjustly queries why the learned editor should have stopped short of the *Caspium mare* and other equally manifest affinities.

Babar's conjecture figures still seriously in a note of the latest translation of the *Aīn-i Akbarī*, ii. p. 381.

Regarding the name and habitation of the *Khaśas*, compare *Rājat.* i. 317 note.

⁵ It was first introduced to the European reader by TIEFFENTHALER'S extract from Ḥaidar Malik's Chronicle compare *Description historique et géographique de l'Inde*, ed. Bernouilli (1786), i. p. 79 (also p. 89 as to source). Compare also WILSON, *Essay*, p. 94, for a similar note from the *Wāqī'āt-i Kaśmīr* of Muḥammad 'Azīm; here *کشف سر* is a clerical error for *کشف میر*.

Kś. *mar*, i.e., Skr. *maṭha* 'habitation,' or a word *mīr*, supposed to mean 'mountain.'¹

It was, perhaps, a belief that this whimsical etymology represented some local tradition, which induced even so great a scholar as Burnouf to risk the conjectural explanation of Kāsmīra as **Kaśyapamīra*, i.e., 'the sea of Kaśyapa.'² There is neither linguistic nor any other evidence to support this conjecture. It would hence scarcely have been necessary to refer to it had it not on the authority of a great name found its way also into numerous works of a more general character.³

37. Just as the name Kāsmīr has practically remained unchanged through the course of so many centuries, so also has the territorial extent of the country which it designated. This has always been confined to the great valley drained by the headwaters of the Vitastā and to the inner slopes of the ring of mountains that surround it.

**Extent and position
of Kāsmīr.**

The natural limits of the territory here indicated are so sharply marked that we have no difficulty in tracing them through all our historical records, whether indigenous or foreign. Hiuen Tsiang, Ou-k'ong and Albērūnī's accounts, as we have seen, show them clearly enough. Kalhaṇa's and his successors' Chronicles prove still more in detail that the Kāsmīr of Kāsmīrian tradition never extended materially beyond the summit-ridges of those great ranges which encircle and protect the Valley.

A detailed description of the geographical position of Kāsmīr does not come within the scope of this paper. Nor is it needed since there is an abundant modern literature dealing with the various aspects of the geography of the country. For an accurate and comprehensive account I may refer to the corresponding portion of MR. DREW'S work and to the graphic chapter which MR. LAWRENCE devotes to the description of the Valley.⁴ It will, however, be useful to allude here briefly to some of the characteristic features in the configuration of the country which have an important bearing on its ancient topography.

Kāsmīr owes its historical unity and isolation to the same facts which give to its geographical position a distinct and in some respects

¹ The Kś. word *mar* < Skr. *maṭha*, is in common use in the country as the designation of Sarais, shelter-huts on passes, etc. *Mīr* might have been connected by Haidar Malik's Paṇḍit informants with the name of Mount *Meru* or with *mīra*, meaning according to a Kośa *parvataikadeśa*, see *B. R.*, s. v.

² Compare his note in HUMBOLDT, *L'Asie centrale*, i. p. 92.

³ See, e.g., LASSEN, *Ind. Alt.*, i. p. 54 note; MCCRINDLE, *Ancient India as described by Ptolemy*, p. 108; V. DE ST. MARTIN, *Mém. de l'Acad. des Inscript., Sav. E'trang.*, v. ii. p. 83; KIEPERT, *Alte Geographie*, 1878, p. 36.

⁴ See F. DREW, *The Jummoo and Kashmīr Territories*, 1875, Chapters viii.-x.; W. LAWRENCE, *The Valley of Kashmir*, 1895, pp. 12-39.

almost unique character. We have here a fertile plain embedded among high mountain ranges, a single valley large enough to form a kingdom for itself and capable of supporting a highly developed civilization. Its height above the sea, nowhere less than 5000 feet, and its peculiar position assure to it a climate equally free from the heat of India and the rigours of cold, peculiar to the higher mountain regions in the north and east.

The form of the country has been justly likened to a great irregular oval, consisting of a similarly shaped level vale in the centre and a ring of mountains around it. The low and more or less flat part of the country measures about 84 miles in length, from south-east to north-west, while its width varies from 20 to 25 miles. The area comprised in this part has been estimated at 1800 or 1900 square miles.¹ Around this great plain rise mountain ranges which enclose it in an almost unbroken ring. Their summit lines are everywhere but for a short distance at the southernmost point of the oval, more than 10,000 feet above the sea. For the greatest part they rise above 13,000 feet, while the peaks crowning them tower up to altitudes close on 18,000 feet. Reckoned from the summit lines of these ranges, the length of the irregular oval enclosed by them is about 116 miles, with a varying width from 40 to 75 miles. The whole area within these mountain boundaries may be estimated at about 3,900 square miles.

The slopes of the mountains descending towards the central plain are drained by numerous rivers and streams all of which join the Vitastā within the Kaśmīr plain. The side-valleys in which these tributaries flow, add much ground to the cultivated area of the country several of them being of considerable length and width. But even the higher zones of the mountain-slopes where cultivation ceases, add their share to the economical wealth of the country. They are clothed with a belt of magnificent forests, and above this extend rich alpine pastures, close up to the line of perpetual snow.

In the great mountain-chain which encircles the country, there is but one narrow gap left, near to the north-west end of the Valley. There the Vitastā after uniting the whole drainage of Kaśmīr flows out by the gorge of Bārāmūla (Varāhamūla) on its course towards the sea. For a distance of nearly 200 miles further this course lies through a very contracted valley which forms a sort of natural gate to Kaśmīr. It is here that we find the old political frontier of Kaśmīr extending beyond the mountain-barriers already described. For about 50 miles below the Varāhamūla gorge the narrow valley of the Vitastā was held in Hindu times as an outlying frontier tract of Kaśmīr.²

¹ Compare DREW, *Jummoo*, p. 162, for this and subsequent statements.

² See below § 53.

38. The general configuration of the country here indicated in its broadest outlines may be held to account **Legend of Satīsaras.** for the ancient legend which represents Kaśmīr to have been originally a lake. This legend is mentioned by Kalhaṇa in the Introduction of his Chronicle and is related at great length in the *Nilamata*.¹

According to this earliest traditional account the lake called *Satīsaras*, 'the lake of Satī (Durgā),' occupied the place of Kaśmīr from the beginning of the Kalpa. In the period of the seventh Manu the demon Jalodbhava ('water-born') who resided in this lake, caused great distress to all neighbouring countries by his devastations. The Muni Kaśyapa, the father of all Nāgas, while engaged in a pilgrimage to the Tīrthas in the north of India, heard of the cause of this distress from his son Nīla, the king of the Kaśmīr Nāgas. The sage thereupon promised to punish the evil-doer and proceeded to the seat of Brahman to implore his and the other gods' help for the purpose. His prayer was granted. The whole host of gods by Brahman's command started for Satisaras and took up their position on the lofty peaks of the *Naubandhana Tīrtha* above the lake Kramasaras (Kōns^{ar} Nāg). The demon who was invincible in his own element, refused to come forth from the lake. Viṣṇu thereupon called upon his brother Balabhadra to drain the lake. This he effected by piercing the mountains with his weapon, the ploughshare. When the lake had become dry, Jalodbhava was attacked by Viṣṇu and after a fierce combat slain with the god's war-disc.

Kaśyapa then settled the land of Kaśmīr which had thus been produced. The gods took up their abodes in it as well as the Nāgas, while the various goddesses adorned the land in the shape of rivers. At first men dwelt in it for six months only in the year. This was owing to a curse of Kaśyapa, who angered by the Nāgas had condemned them to dwell for the other six months together with the Piśācas. Accordingly men left Kaśmīr for the six months of winter and returned annually in Caitra when the Piśācas withdrew. Ultimately after four Yugas had passed, the Brahman Candradeva through the Nilanāga's favour acquired a number of rites which freed the country from the Piśācas and excessive cold. Henceforth Kaśmīr became inhabitable throughout the year.

The legend of the desiccation of the lake is alluded to also by Hiuen Tsiang, though in another, Buddhistic form.² Its main features as related in the *Nilamata*, live to this day in popular tradition. They

¹ See *Rājat*. i. 25-27; *Nilamata*, vv. 26-237. A detailed extract of the *Nilamata*'s story has been given by Prof. BÜHLER, *Report*, p. 39.

² See *Si-yu-ki*, transl. Beal, i. p. 149.

are also reproduced in all Muhammadan abstracts of the Chronicle.¹ From Haidar Malik's *Tārīkh* the legend became known to Dr. Bernier who prefaces with it his description of the 'Paradis terrestre des Indes.'² It has since found its way into almost every European account of Kaśmīr.

It is probable that this legend had much to do with drawing from the first the attention of European travellers to certain physical facts apparently supporting the belief that Kaśmīr was in comparatively late geological times wholly or in great part occupied by a vast lake. But few seem to have recognized so clearly as the late MR. DREW, the true relation between the legend and the above facts. I cannot put his view which from a critical point of view appears to be self-evident, more clearly than by quoting his words: "The traditions of the natives—traditions that can be historically traced as having existed for ages—tend in the same direction, [*viz.*, of the Vale having been occupied by a lake,] and these have usually been considered to corroborate the conclusions drawn from the observed phenomena. Agreeing, as I do, with the conclusion, I cannot count the traditions as perceptibly strengthening it; I have little doubt that they themselves originated in the same physical evidence that later travellers have examined."³

The geological observations upon which modern scientific enquirers like Mr. Drew and Colonel Godwin Austin, have based their belief as to the former existence of a great lake, are mainly concerned with the undoubted 'lacustrine deposits' found in the so-called Uḍars or Karēwa plateaus to be noticed below. But it seems to me very doubtful whether we can reasonably credit the early Kaśmīrians with a correct scientific interpretation of such geological records. It appears far more probable that the legend was suggested by an observation of the general form of the valley and by a kind of natural inference from the historical changes in the country's hydrography.

We shall see below that great drainage operations took place at various periods of the country's history which extended the cultivated ground and reduced the area covered by lakes and marshes. To any one, however ignorant of geology, but acquainted with the latter fact, the picture of a vast lake originally covering the whole Valley might naturally suggest itself. It would be enough for him to stand on a hill-side somewhere near the Volur, to look down on the great lake and the adjoining marshes, and to glance then beyond towards that narrow gorge

¹ Compare, *e.g.*, *Āīn-i Akb.*, ii. p. 380; WILSON, *Essay*, p. 93.

² See BERNIER, *Travels in the Mogul Empire*, ed. Constable, p. 393.

³ See *Jummoo*, p. 207.

of Bārāmūla where the mountains scarcely seem to leave an opening. It is necessary to bear in mind here the singular flights of Hindu imagination as displayed in the Purāṇas, Māhātmyas and similar texts. Those acquainted with them, will, I think, be ready to allow that the fact of that remarkable gorge being the single exit for the drainage of the country, might alone have sufficed as a starting-point for the legend.

In respect of the geological theory above referred to it may yet be mentioned that in the opinion of a recent authority "even the presence of true lacustrine deposits does not prove that the whole of the Kāsmīr lake basin was ever occupied by a lake."¹ At the present day true lacustrine deposits are still being formed in the hollows of the rock basin represented by the lakes of the north-west portion of the Valley. It is held probable "that the conditions have been much the same as at present, throughout the geological history of the Kāsmīr Valley," only a minor area of the latter having at various periods been occupied by lakes.

Whatever view may ultimately recommend itself to geologists, it is certain that the lacustrine deposits of Kāsmīr, though of no remote date, speaking by a geological standard, are far older than any monuments of man that have yet been discovered.² Mr. Drew was undoubtedly right in denying the existence of lacustrine deposits round any known ancient buildings or other works of man in the Valley.

39. None of the natural features of Kāsmīr geography have had a more direct bearing on the history of the country than the great mountain-barriers that surround it. They may hence rightly claim our first consideration.

The importance of the mountains as the country's great protecting wall has at all times been duly recognized both by the inhabitants and foreign observers. Since an early time Kāsmīrians have been wont to pride themselves on their country's immunity from foreign invasion, a feeling justified only by the strength of these natural defences. We find it alluded to by Kalhaṇa who speaks of Kāsmīr as unconquerable by the force of soldiers and of the protection afforded by its mountain walls.³ The feeling is very clearly reflected in all foreign records. We have already seen what special notice is taken by Hiuen Tsiang and Ou-k'ong of the mountains enclosing the kingdom and of the difficulty of the passes leading through them.⁴ The statements of the early Arab

¹ See OLDHAM'S *Manual of Indian Geology* (1893), quoted by Mr. LAWRENCE, *Valley*, p. 50.

² See DREW, *Jummoo*, pp. 207 sq.

³ See *Rājat.* i. 31, 39.

⁴ Compare above, §§ 9, 11.

geographers brief as they are, lay due stress on the inaccessible character of the mountains. Albērūnī does the same and shows us besides the anxious care taken in old days to maintain this natural strength of the country by keeping strict watch over the passes.¹

Even when Kaśmīr had suffered a partial conquest from the north and had become Muhammadanized, the belief in the invincibility of its bulwarks continued as strong as before. Thus Sharīfu-d-dīn, the historian of Tīmūr, writing apparently from materials collected during the great conqueror's passage through the Panjāb Kōhistān (circ. A.D. 1397), says of Kaśmīr: "This country is protected naturally by its mountains on every side, so that the inhabitants, without the trouble of fortifying themselves, are safe from the attacks of enemies." The subsequent account of the routes into Kaśmīr and other exact details suggest that the author of the *Zafarnāma* had access to genuine Kāśmīrian information.²

40. It is this defensive character of the mountain ranges to which we owe most of our detailed information regarding their ancient topography. We have already in connection with the accounts of Albērūnī and the Chinese pilgrims had occasion to note the system of frontier watch-stations by which a careful guard was kept on the passes leading through the mountains. These fortified posts and the passes they guarded, play an important part in the narrative of Kalhaṇa and his successors. As most of the Chronicle's references to Kaśmīr orography are directly connected with these watch-stations it will be useful to premise here a few general remarks regarding their character and purpose.³

The small forts which since ancient times closed all regularly used passes leading into the Valley, are designated in the Chronicles by the word *dvāra* 'gate' or by the more specific terms *draṅga* or *dhakka*. Numerous passages show that they served at the same time the purposes of defence, customs and police administration. They were garrisoned by troops under special commanders, designated as *draṅgeśa* or *draṅgādhipa*. The control over all these frontier stations and the command of the 'Marches' generally was vested in Hindu times in one high state officer, known by the title of *dvārapati*, 'lord of the Gate,' or equivalent terms.⁴

¹ See above, §§ 12, 14.

² See the extract from Sharīfu-d-dīn's *Zafarnāma* in *Tārīkh-i-Rashīdī*, transl. by N. ELIAS and E. D. ROSS, p. 432; compare also RITTER, *Asien*, ii. pp. 1122, sq.

³ For detailed references regarding these stations see my notes, *J. A. S. B.*, 1895, pp. 382 sqq.; *Rājat*. i. 122; iii. 227 (D).

⁴ Compare *Rājat*. note v. 214.

The organization of the system was somewhat changed in Muhammadan times when the guarding of the several routes through the mountains was entrusted to feudal chiefs known as Maliks (Skr. *mārgeśa*).¹ These held hereditary charge of specific passes and enjoyed certain privileges in return for this duty. In other respects the system underwent scarcely any change. The fortified posts with their small garrisons survived on all important routes almost to our own days being known as *rāhdārī* in the official Persian.²

It may be noted that apart from their character as military defences against foreign inroads the Draṅgas were also in another respect true 'gates' to the country. Nobody was allowed to pass outside them coming from the Valley without a special permit or pass. The system thus provided an important check on unauthorized emigration which was withdrawn only after the last Kaśmīr famine (1878).³

In order to appreciate fully the importance of these frontier watch-stations it should be remembered that the mountain regions immediately outside Kaśmīr were almost in every direction held by turbulent hill-tribes. To the hardy Dards (*Darad*) in the north and the restless Khakhas (*Khaśa*) in the south and west the rich Kaśmīr with its weak population has always appeared as a tempting prey. The last inroad of plundering Khakhas occurred not more than half a century ago and will not soon be forgotten.⁴ At the same time it is certain that the valour of these hardy mountain clans on the confines of Kaśmīr has at all times contributed greatly to the natural strength of the mountain defences. Without this protective belt the latter themselves would scarcely have remained so long proof against foreign invasion.

¹ A detailed and interesting account of the *Maliks* and the routes held by them is given by Baron HÜGEL, *Kaschmir*, ii., pp. 167 *sqq.*; i., p. 347.

² See *J. A. S. B.*, 1895, p. 385; also below, § 49, 52.

³ For an early reference to this system of passports at the *Dvāras*, see *Jonar.* 654. For a description of the cruel exactions often connected with 'Rāhdārī,' compare LAWRENCE, *Valley*, p. 215. I have never been able to visit the sites of the old watch-stations at the several passes without thinking of the scenes of human suffering they must have witnessed for centuries.

⁴ Compare *Rājat.* i. 317 note.

SECTION II.—THE PĪR PANTSĀL RANGE.

41. In order to understand correctly the data relating to the ancient topography of the mountains around Kaśmīr orography. Kaśmīr, it is necessary to acquaint ourselves with their actual configuration and character. In the following account it will be possible only to indicate the most prominent features of this mountain system, and those directly connected with the historical data under discussion. For detailed information on Kaśmīr orography a reference to the lucid and instructive account in MR. DREW'S work may be specially recommended.¹

The mountain ring enclosing Kaśmīr is divided into three main ranges. One of these, usually designated as the *Pīr Pantsāl* Range, forms the boundary of the Kaśmīr Valley to the south and southwest. It may be considered to begin from the southernmost part of the Valley where the Bān^ahāl Pass, 9200 feet above the sea, marks the lowest depression in the chain of mountains. After running for about 35 miles from east to west the range turns to the north-northwest. In this direction it continues for about fifty miles more, and after attaining its greatest elevation in the Tatakūṭi Peak (15,524 feet above the sea), gradually descends towards the Valley of the Vitastā. All important old routes towards the Panjāb cross this great mountain barrier, and this circumstance enables us to trace some interesting information regarding its ancient topography.

The Bān^ahāl Pass at the eastern extremity of the range must owing to its small elevation have always been a convenient route of communication towards the Upper Cināb Valley and the eastern of the Panjāb hill-states. It takes its modern name from a village at the south foot of the pass which itself is mentioned in Kalhaṇa's Chronicle by the name of BĀṆAŚĀLĀ.² The castle of Bāṇaśālā was in Kalhaṇa's own time the scene of a memorable siege (A.D. 1130) in which the pretender Bhikṣācara was captured and killed. Coming from the Cināb Valley he had entered *Viṣalāṭā*,³ the hill district immediately south of the Bān^ahāl Pass with the view to an invasion of Kaśmīr. As his move-

**Eastern portion of
Pīr Pantsāl Range.**

¹ See *Jummoo*, pp. 192-206.

² See *Rājat.* viii. 1665 *sqq.* and note. Bān^ahāl is the direct phonetic derivative of Skr. *Bāṇaśālā*, medial Skr. *ś* being regularly changed into *h* in Kaśmīrī.

³ See *Rājat.* viii. 177. The name of *Viṣalāṭā* is probably preserved in that of the river *Bichlārī*. *Viṣalāṭā* more than once served as a safe retreat for Kaśmīrian refugees; comp. *Rājat.* viii. 177, 697, 1074.

ment fell in the commencement of the winter, he could not have selected a more convenient route. The Bān^ahāl Pass is the only one across the Pir Pantsāl Range on which communication is never entirely stopped by snowfall. Kalhaṇa's narrative shows that the political and ethnographic frontier of Kaśmīr ran here as elsewhere on the watershed of the range. For the castle of Bāṇaśālā, though so near as to be visible already from the top of the pass (*saṃkṛāṭa*), was already held by a Khaśa chief.¹

Proceeding westwards from Bān^ahāl we come to a group of three snowy peaks reaching above 15,000 feet. With their bold pyramidal summits they form conspicuous objects in the panorama of the range as seen from the Valley.² Kaśmīr tradition locates on them the seats from which Viṣṇu, Śiva and Brahman, according to the legend already related, fought Jalodbhava and desiccated the Satisaras. The westernmost and highest of these peaks (15,523 feet) forms the famous NAUBANDHANA Tirtha. According to the legend related in the Nilamata and other texts and connected with the Indian deluge story, Viṣṇu in his fish Avatāra had bound to this peak the ship (*nau*) into which Durgā had converted herself to save the seeds of the beings from destruction.³ At the foot of this peak and to the northwest of it, lies a mountain lake over two miles long known now as *Kōns^ar Nāg*, the KRAMASARAS or *Kramasāra* of the Nilamata and Māhātmyas.⁴ It is supposed to mark a footstep (*krama*) of Viṣṇu, and is the proper object of the Naubandhana pilgrimage.

About 8 miles straight to the west of this lake, the range is crossed by a pass, over 14,000 feet high, known now by the name of *Sidau* or *Būdil*. It lies on a route which in an almost straight line connects Śrīnagar with Akhnūr and Siālkōt in the Panjāb plain. Running up and down high ridges it is adapted only for foot traffic, but owing to its shortness was formerly a favourite route with Kaśmīris.⁵ The name *Sidau* is given to the pass from the first village reached by it on the

¹ *Rājat.* viii. 1674, 1683. *Samkṛāṭa* is the regular term for 'pass.'

² Marked on maps as 'Brama Sakal,' perhaps a corruption for *Brahmaśikhara* 'Brahman's peak.'

³ See *Nilamata*, 33 sqq.; *Haracar.* iv. 27; *Śrīv.* i. 474 sqq.; *Śarvāvatāra* iii. 4, 12; v. 43, etc.

⁴ See *Śrīv.* i. 482 sqq. where a visit of Sulṭān Zainu-l-'ābidīn to this lake is related at length; *Nilamata*, 121, 1272; *Naubandhanamāhātmya*, passim; *Śarvāvatāra* iii. 10; v. 174, etc.

⁵ According to DREW, *Jummoo*, p. 524, the distance from Jammu to Śrīnagar by the Sidau route is reckoned at 129 miles while *viā* the Bān^ahāl it is 177 miles.

The name Būdil is given to the pass from the hill-district adjoining it on the south; compare my note *Rājat.* vi. 318.

Kaśmīr side. It is by this name, in its original form *SIDDHAPATHA*, that the pass is mentioned in Kalhana's Chronicle as the route chosen for a pretender's irruption in Sussala's reign.¹

A snowy peak close to the west of the pass of Siddhapatha marks the point where the main range changes its direction towards north-northwest. From the same point there branches off in a westerly direction the lower Ratan Pīr Range to which we shall have to refer below. Beyond this lie the passes of Rūprī and Darhāl, both above 13,000 feet in height. They are not distinctly named in the Chronicles. But as they give most direct access to Rajaurī, the ancient *Rājapurī*, and are crossed without much trouble during the summer months they are likely to have been used from an early time. Near the Darhāl Pass lies the *Nandan Sar*, one of the numerous tarns which along this portion of the chain mark the rock-ground beds of old glaciers. It is probably the *Nandana Nāga* of the *Nilamata*.

42. About five miles due north of the Nandan Sar we reach the lowest dip in the central part of the whole range. It is marked by the pass known as *Pīr Pantsāl Route*. *Pīr Pantsāl*, 11,400 feet high. The route which crosses it has from early days to the present time been the most frequented line of communication from Kaśmīr to the central part of the Panjāb. The frequent references which the Chronicles make to this route, permit us to follow it with accuracy from the point where it enters the mountains. This is in the valley of the Rembyār² River (*Ramaṇyātavī*), a little below the village of *Hūr³pōr*.

This place, the ancient *S'URAPURA*, is often referred to as the entrance station for those reaching Kaśmīr from Rājapurī and the neighbouring places, or *vice versā* as the point of departure for those travelling in the opposite direction.² *S'urapura* was founded by *S'ura*, the minister of *Avantivarman*, in the 9th century evidently with the intention of establishing a convenient emporium on this important trade-route.³ He transferred to this locality the watch-station (*draṅga*) of the pass. Its site, as I have shown in my *Notes on the Ancient Topography of the Pīr Pantsāl Route*,⁴ can still be traced at the place known as *Ilāhī Darwāza* ('the gate of God'), a short distance above the village. We find the

¹ See *Rājat.* viii. 557. In the Chronicles of *S'rīvara* and his successors the tract about Sidau is repeatedly referred to as *Siddhādeśa*, an evident adaptation of the *Kś.* form of the name.

² See *Rājat.* iii. 227, Note D, § 1.

³ Compare *Rājat.* v. 39 note.

⁴ See *J. A. S. B.*, 1895, p. 385. This paper should be compared for all details regarding the other sites along this route.

commanders of this frontier-station more than once engaged in military operations against intending invaders from the other side of the mountains.

Ascending the valley of the Rembyār² or Ramanyāṭavi for about 7 miles we reach the point where the streams coming from the Pīr Pantsāl and Rūpri Passes unite. In the angle formed by them rises a steep rocky hillock which bears on its top a small ruined fort known as *Kāmelankōṭh*. These ruins probably go back only to the time of 'Aṭā Muḥammad Khān,' the Afghān Governor of Kaśmīr, who, about 1812, fortified the Pīr Pantsāl Route against the Sikh invasion then threatening. But I have proved in the above-quoted paper that they mark the original position of the ancient watch-station on this route before its transfer to Sūrapura.¹ Kalhaṇa, iii. 227, calls this site *Kramavarta*. This name is rendered by a glossator of the 17th century as *Kāmelanakoṭṭa* and still survives in the present *Kāmelankōṭh* (**Kramavartānām koṭṭa*).

43. The old 'Imperial Road' constructed in early Mughal times then ascends the narrow valley, keeping on its left side high above the Pīr Pantsāl stream.

Hastivañja.

At a distance of about four miles above Kāmelankōṭh and close to the Mughal Sarai of 'Aliābād, a high mountain-ridge slopes down from the south and falls off towards the valley in a wall of precipitous cliffs. The ridge is known as *Hastivañj*. This name and the surviving local tradition makes it quite certain that we have here the spot at which a curious legend told by Kalhaṇa was localized from early times.²

The Chronicle, i. 302 *sqq.* relates of King *Mihirakula* whose identity with the White Hun ruler of that name (circ. 515-550 A.D.) is not doubtful, that when on his return from a tour of conquest through India he reached the 'Gate of Kaśmīr,' he heard the death-cry of an elephant which had fallen over the precipice. The gruesome sound so delighted the cruel king that he had a hundred more elephants rolled down at the same spot. The old glossator on the passage informs us that "since that occurrence the route by which Mihirakula returned, is called *Hastivañja*." The Persian Chroniclers too in reproducing the anecdote give *Hastivanj* as the name of the locality.

The local tradition of the neighbouring hill tracts still knows the story of a king's elephants having fallen down here into the gorge below. It also maintains that the old route to the Pass, in the times before the construction of the 'Imperial Road', crossed the *Hastivañj* ridge and followed throughout the right bank of the Pīr Pantsāl

¹ *J. A. S. B.*, 1895, pp. 384 *sq.*

² Compare *J. A. S. B.*, 1895, pp. 378 *sqq.*

stream. This is fully borne out by a statement of Abū-l-Fazl.¹ Describing the several routes available on the march from Bhimbhar to Kaśmīr, he clearly distinguishes "the route of Hastivanj (MSS. Hastivatar) which was the former route for the march of troops," from the 'Pir Pantṣāl route' which Akbar used on his visits to Kaśmīr.

The name Haṣṭivanj contains in its first part undoubtedly *haṣṭi*, the Kś. derivative of Skr. *hastin*, 'elephant.' The second part is connected by the Persian compilers with the root *vañj* meaning 'to go' in Western Panjābī. The close connection between the name and the local legend already heard by Kalhaṇa is evident enough. But whether the latter had any foundation in fact or merely arose from some 'popular etymology' of the name, cannot be decided.

The story helps in any case to make it quite clear that the ancient route from the Pir Pantṣāl Pass kept to the right or southern side of the valley. My enquiries on the spot showed that this route though neglected for many centuries is passable for laden animals and not unfrequently used by smugglers.²

44. 'Aliābād Sarai is a Mughal hospice erected for the shelter of travellers about half a mile above Haṣṭivañj. Pañcāladhārāmaṭha. It is about the highest point on the ascent to the pass where fuel can conveniently be obtained. I think it hence probable that the *Maṭha* or hospice which Kṣemendra mentions on the Pir Pantṣāl Pass, must have been situated somewhere in this neighbourhood.

¹ See *Āin-i Akb.*, ii. pp. 347 sq. The form *Hastivatar* in the text is a clerical error for *Hastivanj*, easily explained in Persian characters.

² DR. BERNIER who in the summer of 1665 accompanied Aurangzeb's court to Kaśmīr, has left us, in his Ninth Letter to M. de Merveilles, an accurate and graphic account of the Pir Pantṣāl Route. While ascending the Pass from the Panjāb side he passed the spot where two days earlier an accident had happened curiously resembling Mihirakula's story. Fifteen of the elephants carrying ladies of the Imperial seraglio, owing to some confusion in the line of march, fell over the precipice and were lost; see *Bernier's Travels*, ed. Constable, p. 407. The curious Map of Kaśmīr given in the Amsterdam edition of 1672 shows accordingly the '*Pire Penjale*' mountain with a troop of elephants rolling in picturesque confusion over its side.

Former editions of Ince's '*Hand-book*' placed the scene of this accident at a spot called Lāl Ghulām just opposite Haṣṭivañj on the 'Imperial Road.' It is evident that this wrong location was due to the original compiler having somehow confused Bernier's account and the local tradition referring to Haṣṭivanj. The edition of 1888, p. 64, rectifies this mistake, but still indicates Lāl Ghulām as the site "of many a dreadful accident" before the causeway of the 'Imperial Road' was made. As a matter of fact, the left side of the valley was not used at all as a route before the construction of the 'Imperial Road' along its cliffs.

Of the accident on Aurangzeb's march no recollection survives.

Kṣemendra makes this interesting reference in that curious portion of the *Samayamātrkā* already alluded to, which describes the wanderings of the courtesan Kaṅkālī.¹ The heroine of his story after effecting some petty thefts in Kaśmīr proceeds to *Sūrapura*. There she passes herself off as the wife of a load-carrier (*bhārika*) engaged on the 'salt road.'² By this term the Pir Pantsāl route is quite correctly designated. It has remained to the present day the chief route by which the produce of the Panjāb salt-mines coming *viā* Jehlam and Bhimbhar enters Kaśmīr.³ She keeps up the disguise which is evidently intended to help her through the clutches of the officials at the frontier watch-station, by taking next morning a load on her head and starting with it towards the pass (*saṅkaṭa*). On the way she passes along high mountains by precipitous paths deeply covered with snow. By night-fall she reaches the PAÑCĀLADHĀRĀMAṬHA after having in the meantime assumed the guise of a respectable housewife and apparently disposed of her load. It being late in the season, she passes the night there shivering with cold. Thence she finds her way open to India where a career of successful adventures awaits her.

45. Kṣemendra's itinerary is of particular value because it supplies us with the only mention of the old name of the pass I can trace. It is certain that with him PAÑCĀLADHĀRĀ designates the highest portion of the route, *i.e.*, the Pass of the Pir Pantsāl. It is equally obvious that *Pañcāla* is the original of the modern Kś. *Pantsāl* which is in fact identical with the earlier form except for the regular change of Skr. *c* into Kś. *ts*. In the Pahārī dialect of the population inhabiting the valleys to the south the name is still pronounced *Pañcāl*.⁴

¹ See *Samayam*. ii. 90 *sqq.*, and above, § 25.

² Professional load-carriers or Coolies are found to this day in numbers in Hūrāpōr, Paṣiāna and other places near the Pir Pantsāl Pass. Of Zainu-l-'ābidīn it is specially reported that he settled a colony of load-carriers from *Abhisāra* (*i.e.*, the country about Bhimbhar) at the customs-station of *Sūrapura*; see *Srīv.* i. 408. Coolies are the only means of transport on the Pir Pantsāl and other passes when the snow lies to any depth.

³ Salt is a considerable article of import into Kaśmīr where it is wholly wanting; see LAWRENCE, *Valley*, p. 393. I remember vividly the long strings of salt-laden bullocks which I used to meet daily when marching into Kaśmīr by the Pir Pantsāl route.

⁴ I am not certain of the origin of the pronunciation of the name as *Pir Panjāl* now accepted by Anglo-Indian usage. It is known neither on the Kaśmīr nor on the Panjāb side of the range itself. It meets us first in Bernier's 'Pire Penjale.' Tieffenthaler, however writes more correctly *Pensal*; see *Description de l'Ind* 1786, pp. 87 *sq.*

The term *dhārā* which is added to *Pañcāla*, represents in all probability the equivalent of our 'pass.' Skr. *dhārā* means generally the sharp edge of some object. According to Wilson's Dictionary, as quoted by Böthlingk-Roth, the word also carries the specific meaning of 'edge of a mountain.' It is probable that this meaning was taken by Wilson's Paṇḍits from some Kośa. In any case it agrees closely with the use of the word *dhār* in the modern Pahārī dialects south of Kāsmīr. There it is well-known as the designation of any high mountain ridge above the region of alpine pasture.

We are tempted to see in *Pañcāla* a distinct local name, either of the Pass itself or of the whole mountain chain. But the use of the modern derivative *Pantsāl* presents difficulties in the way of a certain conclusion. The word *Pantsāl* is applied in Kāsmīr chiefly to the great mountain chain which forms the boundary of the country to the south, *i.e.*, the range to which conventional European usage gives the name of 'Pīr *Pantsāl*.' Yet the meaning now conveyed to a Kāsmīrī by the term *Pantsāl*, is scarcely more than that of 'high mountain range.'

The word is used in combination with specific names for the designation of subordinate branches of the great range towards the Panjāb. Thus the range crossed on the way from the Pīr *Pantsāl* Pass to Rajaurī, is known as '*Ratan Pantsāl*,' and the one crossed by the Hāji Pīr Pass between Ūrī and Prūnts (Pūnch) as '*Hāji Pantsāl*.' Sometimes, but not so generally, the term is applied also to mountains wholly unconnected with the Pīr *Pantsāl* system.

On the whole I am inclined to believe that *Pañcāla* > *Pantsāl* had originally the character of a specific local name. It may have been applied either to the whole of the great southern chain of mountains or its central portion about the Pīr *Pantsāl* Pass. Subsequent usage may then have extended the application of the term just as it has that of the name 'Alps' in Europe. Our materials, however, are not sufficient to enable us to trace the history of the word with certainty.¹

46. In this connection it will be useful briefly to notice also the word *Pīr* which forms the first part of the modern designation of the Pass. This word is now used more or less frequently for 'Pass' both in Kāsmīr and the hill-tracts south of it. MR. DREW who seems to have given more attention to local nomenclature in these hills than other travellers, in his explanation of the term starts from the well-known meaning of *Pīr* in Persian, an 'old man' and thence a 'saint or Faqīr.'²

¹ The main facts regarding the modern use of the word *Pantsāl* have been quite correctly recognized already by DREW, *Jummoo*, p. 157.

² See *Jummoo*, p. 157 note.

He refers to the common practice of Faqīrs establishing themselves on Passes for the sake of refreshing travellers and of receiving their alms. "When any noted holy Faqīr died on a Pass, the place became sacred to his memory, and was often called after him, his title of Pīr being prefixed; at last it became so common for every important Pass to have a name beginning with Pīr that the word acquired the secondary meaning of Mountain Pass." MR. DREW refers to the fact that Dr. Bernier already found an aged hermit established on the Pass who had resided there since the time of Jahāngīr. He was supposed "to work miracles, cause strange thunders, and raise storms of wind, hail, snow and rain." From this 'Pīr,' Mr. Drew thinks, the Pass acquired the first part of its present name.

I agree with the above explanation as far as the use of the Persian word *Pīr* is concerned. But I suspect that the custom of connecting mountain passes with holy personages rests on a far older foundation. Superstitious belief has at all times and in all mountainous regions peopled the solitary summits and high ridges with spirits and other supernatural beings. To this day Kaśmīrian Brahmans fully believe in the presence of Devatās and 'Bhūtas' of all sorts on high mountain passes. In those parts of the Himālaya where Hinduism has survived among all classes, this superstition can, no doubt, be found still more fully developed.

On all Kaśmīr Passes, however rarely visited, stone-heaps are found marking the supposed graves of imaginary 'Pirs.' Every pious Muhammadan on passing adds his stone to them. Yet these little cairns existed there in all probability long before Islām reached the country. Exactly the same custom is observed, *e.g.*, by the Hindu Pilgrims to Amaranātha on crossing the Vāv^ajan Pass above the lake of Suśravonāga, 'to please the Devas' as the Māhātmya says.¹

We can show that almost all famous Ziārats in Kaśmīr, whether of real or imaginary Muhammadan saints, occupy sites which were sacred in earlier times to one or the other Hindu divinity. We can scarcely go far wrong in concluding by their analogy that the 'Pirs' of the Muhammadan wayfarers have only taken the place of the older Hindu 'Devas.'

This surmise is strikingly corroborated by the only passage of the

¹ See *Amaranāthamāhātmya*, vii. 1 sqq. The stones placed are supposed to represent *maṭhikās*, 'shelter-huts', in which the gods can find refuge from the evil wind blowing on the pass (hence its alleged Sanskrit name *Vāyuvarjana*). The duty of making these *Maṭhikās* is enjoined in vii. 19. *Maṭhikām ye na kurvanti tatraiva Vayuvarjanam | dāruṇam narakam yānti śatakalpam na saṁśayah || kṛtvā tu maṭhikām devi pūjayed vidhipūrvakam | arpayed devaprītyartham dakṣiṇābhiḥ samanvitam ||*

Sanskrit Chronicles which mentions the Pir Pantṣāl Pass by its proper name. Śrīvara iii. 433, when relating the return of a Kāsmīr refugee 'by the route of Sūrapura' in the time of Ḥasan Shāh (circ. A.D. 1472-84), tells us of a fatal chill he caught "on the top of the *Pañcāladeva*." It is clear that the name here used corresponds exactly to the modern Pir Pantṣāl, 'Pir' being the nearest Muhammadan equivalent for 'Deva.' Dr. Bernier's account has already shown us that popular superstition had not failed to transfer also the supernatural powers of the 'Deva' to the Pir who acted as his representative on the Pass.

47. We may now return to the description of the old route where we left it at 'Alīābād Sarai and resume our
Pass of Pīr Pantṣāl. journey towards the Pass. From the Mughal hospice the road ascends in a gently sloping valley westwards until at a distance of about $4\frac{1}{2}$ miles the height of the Pass is reached. Close to the point where the descent towards the Panjāb begins, stands the hut of a Faqīr. He has inherited the post of Bernier's Pir, but little of his spiritual powers and his emoluments. An octagonal watch-tower close by, occupied by a Sepoy post till a few years ago, may mark the site of an earlier outpost.

The descent is here as on all Passes of the range far steeper on the Panjāb side than towards Kāsmīr. *Puṣiāna*, the next stage, which is reached by zigzag paths along the rocky slope of the mountain, lies already more than 3000 feet below the Pass. The little village is an ancient place. It is undoubtedly the *PUṢYĀṆANĀḌA* of Kalhaṇa who mentions it repeatedly in connection with the civil wars of his own time.¹ *Puṣyāṇanāḍa* served often as a refuge for rebel leaders for whom Kāsmīr had become too hot. They could thence conveniently resume their inroads. We see here again clearly that the Kāsmīr frontier ran on the watershed of the range; for of *Puṣyāṇanāḍa* it is distinctly said that it belonged already to the territory of *Rājapurī*.

From *Puṣiāna* the road descends in a westerly direction along the bed of a stream which belongs to the headwaters of the *Tauṣī* (*Tohī*) of *Prūntṣ*. The next stage is the hill-village of *Bahrāmgala*, a considerable place which is mentioned already by Śrīvara under the name of *BHAIRAVAGALA*.² From *Bahrāmgala* the route turns to the south and crosses, by the Pass known as *Ratan Pīr* (8200 feet), the range which has already been mentioned as a branch from the *Pīr Pantṣāl* chain. There the route enters the region of the middle mountains and descends in an open valley to *Rajaurī*, the ancient *Rājapurī*, where we may leave it.

¹ Compared *Rājat*. viii. 959 note. The ending *nāḍa* is identical with *nāla*, Anglo-Indicè 'Nullah,' i.e., 'valley, ravine.'

² See *Śrīv*. iv. 529, 589.

48. Beyond the Pīr Pantsāl Pass the summit-line of the main range rises again considerably. The *Tang-tala* Pass which is about five miles due north of the Pīr Pantsāl Pass and is mentioned by Abū-l-Fazl, ¹ is already far higher. The track crossing it is scarcely practicable for animals.

Central part of Pīr
Pantsāl.

The same is the case, as personal experience showed me, with the next two Passes, known by the Pahārī names of *Oittapānī* and *Cōṭī Galī*; they are both over 14,000 feet high. The first one was probably used on occasion of the inroad related by Śrīvara, iv. 589 sqq. We are told there of a rebel force which coming from Rajaurī evaded the troops of Sultān Muḥammad Shāh posted at Sūrapura, by crossing the mountains in the direction of KĀCAGALA. This place, as shown on the map, corresponds undoubtedly to the alpine plateau or 'Marg' of *Kācāgul* on the northern slope of the Pīr Pantsāl range.

A short distance to the northwest of the Cōṭī Galī Pass the range culminates in its greatest snowy peak, Mount *Tatakūṭī*, which rises to a height of 15,524 feet. Owing to its bold shape and central position this peak is the most conspicuous object in the panorama of the whole range, whether seen from the Kaśmīr Valley or from the Panjāb plains. To the north it presents a precipitous face of unscalable rocks. On the south it is surrounded by snowfields which on the occasion of an ascent made late in the season I found still of considerable extent. We have already seen that it is this peak which Albērūnī describes under the name of *Kulārjak*.² For an observer from the Panjāb plain about Gujrāt the appearance of the peak, with its glittering dome of snow, is very striking, notwithstanding the great distance (about 87 miles as the crow flies). I have sighted it on very clear days even from Lahore Minārs.

From *Tatakūṭī* the chain continues at a great elevation for a considerable distance, the summit ridge keeping an average height between 14,000 and 15,000 feet. We find it crossed first by the Passes of *Sangsafed*, *Nūrpūr* and *Cōrgalī*, all difficult routes leading down into the valley of Lohārin, the ancient Lohara. It is only at the Tōṣāmaidān Pass that we meet again with an important and ancient line of communication.

49. This Pass being on the most direct route between the Kaśmīr capital and Lohara, was of special importance during the reigns of the later Kaśmīrian kings whose original home and safest stronghold was in Lohara. We

Tōṣā maidān Route.

¹ See *Āin-i Akb.*, ii. p. 348.

² Compare above, § 14.

find accordingly the route leading over the Tōṣṣ²maidān Pass often referred to in the last two Books of Kalhana's Chronicle.

But apart from this historical connection the Tōṣṣ²maidān route must have always been prominent among the old lines of communication from Kaśmīr owing to its natural advantages. It was the shortest route into the Valley of Pūnch (Parnotsa) and hence to that portion of the western Panjāb which lies between the Jehlam and Indus. It was besides under the old conditions of road and travel probably the easiest and safest route in that direction.¹

This old route started from the present village of *Drang*, situated at the foot of the mountains in the Bīru Pargaṇa, circ. 33° 57' lat. 74° 36' long. The name of the village is, of course, nothing but the old term of *draṅga*, 'watch-station.' In old times the place was distinguished as KĀRKOTĀDRAṅGA.² It may have received the distinctive first part of its name, *Kārkoṭa*, from the mountain-ridge now known as *Kākōḍar*, which is passed higher up on the route. Kś. *Kākōḍar* could well be derived from an earlier Skr. form like **Kārkoṭadhara*. The Tirtha-saṁgraha also mentions a *Kārkoṭanāga* somewhere in this direction.

From *Drang* where a customs-station exists to this day, the road ascends over an easy forest-clad slope to the edge of the Tōṣṣ²maidān. This is, as the name indicates, a large upland plateau of undulating grazing grounds, rising very gradually from a level of about 10,000 feet. At the point where the road strikes the northern edge of the plateau, there are several ruined towers. They seem to have been last repaired on occasion of the Sikh invasion of 1814 to be referred to below, but are probably far older. The spot is known to this day as *Barbal* which in Kś. means 'the place of the Gate' (Kś. *bar* < Skr. *dvāra*). In view of this designation and the commanding position of the place we can safely locate here the proper *Dvāra* or 'Gate' of this route.³

The route after crossing the Tōṣṣ²maidān plateau ascends over gently sloping grassy ridges to the *Kākōḍar* spur and passing along the south foot of the latter reaches the Pass. The ascent is so gradual and easy that though the elevation of the latter is over 13,000 feet, the construction of a cart-road would so far meet with little difficulty. The Pass itself is equally easy.

On its west side two routes are available. One descends in the

¹ The historical references to this route will be found collected in Note E (*Rājat.* iv. 177) on Lohara, §§ 5-14.

² Compare *Rājat.* vii. 140; viii. 1596 notes.

³ The term *dvāra* is actually used by Kalhana, vii. 140, 1301, for a fortified post on this route. The village *Drang* is a suitable enough position for a customs and police station; the point for military defence, however, is higher up at 'Barbal.'

Gāgrī Valley past the village of *Chāmbār* mentioned in the *Rājatarāṅgiṇī* by the name of SĀRAMBARA.¹ The other leads over a cross-spur in a south-westerly direction straight down into the valley now known as Loharin. The position of the ancient castle of LOHARA which I was able to trace in the centre of this great and fertile valley, has been fully discussed by me in a separate note.² About 8 miles further down the valley and at the point where its waters meet the stream coming from Gāgrī, lies the large village of Maṇḍī. It marks the site of the old 'market of AṬṬĀLIKĀ,' repeatedly mentioned by Kalhaṇa.³ From Maṇḍī onwards the route passes into the open valley of the Tohī (Tauṣī) of Prūntṣ which offers an easy line of communication down to the plains.

The historical importance of the Tōṣmaidān route is best illustrated by the fact that it was chosen on two occasions for expeditions aiming at the invasion of Kaśmīr. We have already referred to Maḥmūd of Ghazna's expedition, probably of A.D. 1021, which Albērūnī accompanied, and to which we owe the valuable information recorded by him.⁴ This attempt at invasion, perhaps the most serious of which we know during Hindu times, was frustrated by the valorous defence of the castle of Lohara and a timely fall of snow. Nor was Mahārāja Raṅjit Singh more successful when in 1814 he first attempted to invade Kaśmīr by this route.⁵ The portion of the Sikh army led by him in person, safely reached the Tōṣmaidān plateau where the Afghān defenders were posted near the towers above mentioned. Difficulties of supplies, however, and the news of a reverse sustained by the column marching by the Pīr Pantsāl route forced on a retreat. This ended in a complete rout in the mountain defiles about Loharin.

It may yet be mentioned that the route over the Tōṣmaidān was already in all probability followed by Hiuen Tsiang on his way to Parṇotsa or Prūntṣ.⁶ It remained a favourite trade route until the recent Jehlam Valley cart-road was constructed. Owing to the elevation of the Pass, however, this route is always closed by snow longer than, e.g., that of the Pīr Pantsāl. During the winter, therefore, the road from Lohara to Kaśmīr lay by the lower passes in the west leading into the Vitastā Valley below Bārāmūla.⁷

¹ See *Rājat.* viii. 1875-77 note.

² See Note E, iv. 177; also *Ind. Ant.* 1897, pp. 225 sqq.

³ See *Rājat.* viii. 581 note.

⁴ See above, § 14.

⁵ For a more detailed account of this expedition, see Note E, iv. 177, § 14.

⁶ Compare above, § 9.

⁷ See Note E (*Rājat.* iv. 177), §§ 7, 8, for Kalhaṇa's references to the occasions when this more circuitous route was used.

Not far to the north of the Tōṣṣ^amaidān Pass the range still attains a height of over 15,000 feet in a group of bold snowy peaks. Its summit ridge then gradually descends and is crossed by some lower passes from the neighbourhood of the well-known alpine plateau of Gulmarg. From a summit behind Gulmarg (marked 'Sallar' on the map) several spurs radiate. They form the northern end of the range, and descend very steeply and with faces of rugged cliffs into the narrow valley of the Vitastā.

SECTION III —THE VITASTĀ VALLEY.

50. We have already spoken of the Vitastā Valley as the single outlet for the waters of Kaśmīr and as the great gate of the country. We may now cast a glance at the old route leading through it and at the defences by which nature has fortified it.

Valley of Vitastā.

The Vitastā Valley below Bārāmūla is confined between two ranges of mountains. The one to the south is a branch of the Pīr Pantṣāl Range separating from the main chain at a point behind Gulmarg. The range to the north belongs to a mountain-system which culminates in the Kājnāg Peak (14,400 feet) and is usually designated by the name of the latter. These two ranges accompany the course of the river for some eighty miles westwards down to the point near Muḏaffarābād where the Vitastā makes its sudden bend to the south.

Along the whole length of the Valley, cross-ridges, more or less steep and rugged, run from both sides down to the river-bed. This consists from below Bārāmūla of an almost unbroken succession of rapids, the fall in level being nearly 3000 feet in the above distance. The Valley is throughout narrow and wanting in level ground. But for about 50 miles, down to the old Kaśmīr frontier line, it may more fitly be described as a narrow ravine. Only occasional alluvial terraces high above the river afford room here for settlement and cultivation.

Owing to this extremely confined nature of the Valley, communication on the route leading along it must have always been troublesome and risky in old times. The natural difficulties of this long defile were no doubt considerably increased by the restless disposition of the Khaśa tribe which has held it since ancient times. The Sikhs who were the last to fight their way through these passes, suffered more than one disaster at the hand of the hill-men. The line of forts erected by them along the valley attests to this day the trouble they experienced

in holding the passage.¹ The military difficulties of a march through such a succession of dangerous defiles must have been even greater in old times which knew no fire-arms. The protection of the route against an active enemy who could easily seize and hold all commanding positions, was then, no doubt, a still more difficult task.

51. It is probably on account of the circumstances here briefly indicated that we hear in the Chronicles comparatively little of the route following the Vitastā. Being the shortest line of communication to the present Hazāra District and the Indus, it was certainly used from early times. We have seen that Hiuen Tsiang and Ou-k'ong coming from the ancient Gandhāra and Uraśā followed it on their way to Kaśmīr, and that it was well-known to Albērūnī.

But it seems probable that its importance, military and commercial, was then far smaller than that of the Pīr Panṭsāl and Tōṣmaidān routes. It is only in modern times that this western route has attained real prominence. This originated in the time of the Afghān rule over Kaśmīr when the route along the Vitastā to Muḏaffarābād and hence though Hazāra afforded the shortest and least exposed line of communication between Kaśmīr and Peshawar.² Subsequently after the annexation of the Panjāb, the establishment of the hill-station of Murree naturally drew traffic in this direction. The construction of the Tonga Road from Murree to Bārāmūla in our own time finally assured to this route its present supremacy.

There is at present a road on each side of the Valley leading down to Muḏaffarābād. But only the route along the right bank of the river can claim any antiquity. The one on the opposite bank has come into general use only within the last few decades since traffic towards Murree and Rawalpindi sprung up. The track chosen for the old road is easily accounted for by topographical facts. We have already noticed that the Vitastā Valley route was of importance chiefly as leading to Hazāra (Uraśā) and hence to the old Gandhāra. A glance at the map will show that the open central portion of Hazāra is most easily gained by crossing the Kiṣangaṅgā just above Muḏaffarābād and then passing the comparatively low ridge which separates this river from the Kunhār stream. The route here indicated finds its natural continuation towards

¹ Moorcroft's account of his attempt to use the Muḏaffarābād route in 1823 gives a graphic picture of the obstacles created by the rapacious hill-tribes; see *Travels*, ii. pp. 281 *sqq.* Compare also LAWRENCE, *Valley*, p. 200.

² Baron HÜGEL quite correctly notes a Kaśmīr tradition that the Bārāmūla route was properly opened up only about 80 years before his own visit (1835) on the arrival of the Paṭhāns; see *Kaschmir*, ii. p. 174.

Kaśmīr on the right bank of the Vitastā, the crossing of the latter being wholly avoided. It has already been shown above that this route, now marked by the stages of Abbottabad, Garhi Habībullāh, Muẓaffarābād and Bārāmūla, is directly indicated in Albērūnī's itinerary.¹

52. We may now proceed to examine the old notices regarding this route. It started in Kaśmīr from the twin towns of *Varāhamūla-Huṣkapura* which occupied the sites of the present Bārāmūla and Uṣkūr, respectively. Huṣkapura on the left river bank, though the more important of the two places in ancient times, has dwindled down to a mere village. Varāhamūla-Bārāmūla, however, on the opposite bank is still a flourishing place and an emporium of trade. It occupies a narrow strip of open ground between the river and the foot of a steep mountain side.

Close to the western end of the town a rocky ridge with a precipitous slope runs down into the river-bed. Only a few yards' space is left open for the road. At this point there stood till last year (1897) an old ruined gateway known to the people as the *Drang* or 'watch-station.' It had been occupied as a military police post; until the 'Rāhdārī' system was abolished, watch was kept here over those who entered or left the Valley. I had examined the gateway in 1892. When revisiting the spot in May, 1898, I could scarcely trace its foundations. The decayed walls had meanwhile been sold by auction, and its materials carried away by a contractor.

Though the structure I had seen, was scarcely older than the time of Sikh rule, there can be little doubt that it marked the site of the ancient 'Gate' of Varāhamūla. This is clearly indicated by the situation of the spot which is by far the most convenient in the neighbourhood for the purpose of a watch-station. Moorcroft does not mention the name *Drang*, but describes the gateway itself accurately enough. Here then, we may assume, stood in ancient times "the stone gate, the western entrance of the kingdom", through which Hiuen Tsiang had passed before he reached Huṣkapura (*Hu-se-kia-lo*), his first night's quarter in the Valley. Ou-k'ong too and Albērūnī, as we have seen, knew well this watch-station which is also mentioned by Kalhaṇa under the general designation of *Dvāra*.²

The road keeps close by the bank of the river as it winds in rapid fall through the rock-bound gorge. About two and a half miles below 'Drang' the hill sides recede slightly, leaving room for a small village

¹ See above, § 14. [The construction of a Tonga road between Abbottabad and Muẓaffarābād, recently sanctioned (1899), is sure to make the old route through Hazāra again popular.]

² See *Rājat*. viii. 413 note.

called *Nārān Thal*. Near it stands a little temple, with a spring close by which is visited by pilgrims and is probably identical with the *Nārāyaṇa-sthāna* of the *Nīlamata*.¹

About a mile below this point and close to the village of *Khād^a-niyār*,² the river turns sharply round a steep and narrow spur projecting into the valley from the north-west. A ledge of rocks continues the spur below the river-bed and forms the first serious rapid of the *Vitastā* below which boats cannot pass (see map). The road crosses the spur by a narrow and deep cut, known as *Dyār^agul*. *Kalhaṇa*'s *Chronicle* knows this curious cutting by the appropriate name of *Yakṣadara*, 'the demon's cleft.' According to the tradition there recorded the operations by which *Suyya*, *Avantivarman*'s engineer, lowered the level of the *Vitastā*, extended to this point of the river bed.³

53. Two miles below *Dyār^agul* we pass near the village of *Zehenpōr* some ancient sites vaguely described by *Vigne* and *Hügel*. Still further down near the village of *Giugal* the map marks the ruins of a

**Old frontier in
Vitastā Valley.**

temple which I have not been able to visit. But no localities on this route are known to us from our old sources until after about three and a half marches we reach the side valley marked on the map as '*Peliasa*.' This valley and the large village at its entrance are known indeed to the *Pahārī* population by the name of *Peliāsa*. But the *Kaśmīrī*s settled at several places along the *Vitastā Valley* call them *Buliāsa*. This form of the name which I ascertained by local enquiries, enables us to identify this locality with the *BOLYĀSAKA* of the *Rājatarāṅgiṇī*.

Kalhaṇa in his account of *Śaṃkaravarman*'s ill-fated expedition towards the *Indus* (A.D. 902) mentions *Bolyāsaka* as the place where the *Kaśmīr* army retreating from *Uraśā* reached the border of their own territory.⁴ This reference is of special interest as it shows that *Kaśmīr* authority extended in Hindu times down to this point of the Valley. We can easily reconcile this fact with the existence of the '*Dvāra*' at *Varāhamūla*.

The gorge at the latter place offered a convenient position for establishing a watch-station which was to secure control over the traffic and the collection of customs. But in regard to military defence a frontier-line in the immediate vicinity of the *Kaśmīr Valley* would have been very unsafe. I believe, therefore, that the *Vitastā Valley*

¹ See *Nīlamata*, 1179, 1315, 1349. The name occurs also repeatedly in the several *Varābhakṣetramāhātmyas*.

² Perhaps the *Khādanāvihāra* of *Rājat.* iii. 14.

³ Compare *Rājat.* v. 87 note.

⁴ See *Rājat.* v. 225 note.

below Varāhamūla was held as an outlying frontier-tract as far as the present Buliāsa. It is exactly a few miles below this place that ascending the Valley the first serious difficulties are encountered on the road. An advanced frontier-post could scarcely have occupied a strategically more advantageous position.

The conclusion here indicated is fully supported by what Kalhaṇa's narrative tells us of a locality almost exactly opposite to Buliāsa. Kalhaṇa mentions in two places a place called VĪRĀNAKA in connection with events which make it clear that it lay in the Vitastā Valley and just on the border of Kaśmīr territory.¹ I have been able to trace the position of Vīrānaka at the modern hill-village of *Vīran*, near the left bank of the Vitastā and only a short distance above Buliāsa. The valley below the old frontier thus marked is now known as *Dvārbidī*. Its ancient name is given by an old gloss of the Rājatarāṅgiṇī which speaks of Bolyāsaka as situated in DVĀRAVATĪ. Local enquiries have shown me that even to the present day popular tradition indicates a ridge a short distance above Buliāsa as the eastern limit of Dvārbidī.²

In the account of Śaṃkaravarman's above-mentioned expedition six marches are reckoned from the capital of Uraśā to Bolyāsaka. This agrees exactly with the present reckoning which also counts six marches from the vicinity of Buliāsa to Abbottabad.³ Near this place, the modern head-quarter of the Hazāra District, the old capital of Uraśā was in all probability situated.

54. It remains for us to notice briefly what is known of ancient localities on the left side of the Valley. As already explained there was no great line of communication on this side corresponding to the present Murree-Bārāmūla Road. Yet for two marches down the Valley, as far as Ūrī, the route of the left bank is likely to have been much frequented. From Ūrī a convenient route leads over the easy Hāji Pīr Pass to Prūntś or Parnotsa. This pass owing to its small elevation, only 8500 feet, is never completely closed by snow. It is hence much used during the winter-months when the more direct routes to Kaśmīr *viā* the Pīr Pantśāl, Tōṣāmaidān or other high Passes are rendered impracticable.

¹ See *Rājat.* v. 214 and viii. 409. In the first passage we hear of an attack made on Vīrānaka by the chief commander of the frontier posts (*dvāreśa*). In the second *Vīrānaka* is referred to as a settlement of Khaśas which offered the first safe refuge to Sussala when defeated before Varāhamūla, A.D. 1111.

² See *Rājat.* v. 225 and note v. 214.

³ Compare *Rājat.* v. 217 note; CUNNINGHAM, *Anc. Geogr.*, p. 104, and DREW, *Jummoo*, p. 528.

Marching down the valley from Uṣkūr: Huṣkapura, we first cross the spur which bounds the gorge of Varāhamūla from the south. We then reach a fertile little plain, about two miles broad, charmingly situated in an amphitheatre of high pine-clad mountains and facing the Dyār²gul ridge. It is known as *Nārāvāv* and contains at the village of *S'ir* and *Fattegarh* considerable remains of ancient temples. On a small plateau which forms the western boundary of this plain by the river bank, lies the village of *Kits²hōm*. It marks the site of the ancient Buddhist convent of *Kṛtyāśrama*, the foundation of which a curious legend related by Kalhaṇa attributes to the son of Aśoka.¹ Ou-k'ong refers to it as the 'monastère du mont *Kitché*.'

At Būniār, near the end of the first day's march we pass the well-preserved ruins of an ancient temple which are of considerable antiquarian interest. Its name and date cannot be traced in our extant records. Another similar ruin, but far more decayed, flanks the road about midway between Būniār and Ūrī.

From near the latter place the Vitastā Valley is held on the left bank chiefly by the Khakha tribe, on the right by the closely related Bombas. In the former we recognize the ancient *Khaśas* whose settlements lower down the Valley, at Vīrānaka, are distinctly mentioned by Kalhaṇa.² The predatory habits and restless ways of the *Khaśas* form a frequent theme in the Chronicle. The modern Khakhas and Bombas have up to the middle of the present century done their best to maintain this ancient reputation, just as their seats have remained the old ones.

¹ See *Rājat.* i. 147 note; also my *Notes on Ou-k'ong*, pp. 13 sqq. *Kṛtyāśrama* is mentioned already by Kṣemendra, *Samayam.* ii. 61.

² *Rājat.* viii. 409.

SECTION IV.—NORTHERN MOUNTAIN RANGE.

55. The mountains which enclose the Kaśmīr Valley in the north-west and north, may be looked upon as one great range. Their chain nowhere shows any marked break though its direction changes considerably. The routes leading through these mountains have never been of such importance in the history of Kaśmīr as the routes towards India and the west. Hence our information regarding the old topography of this mountain range is also less detailed.

Range towards
Karnau and Śardi.

We are least informed about that portion of the range which joins on to the Kājnāg Peak north-west of Bārāmūla and then continues in the direction of south to north towards the upper Kiṣangaṅgā. The watershed of this portion forms the western boundary of Kaśmīr towards *Karnau*, the ancient KARṆĀHA.¹ This territory which may be roughly described as lying between the Kiṣangaṅgā and the Kājnāg Range, seems at times to have been tributary to Kaśmīr. Yet we hear of it only in the concluding portion of Kalhaṇa's Chronicle, and there too no details are given regarding the routes leading to it. These routes as the map shows, start from the ancient districts of *Samālā* (Hamal) and *Uttara* (Uttar).

At the point where the summit of the range comes nearest to the Kiṣangaṅgā, it takes a turn to the east and continues in this direction for more than 100 miles. The summit ridge keeps after this turn at a fairly uniform height of 12,000 to 13,000 feet for a long distance. From the northern parts of the Uttar and Lōlau Parganas several routes cross the range in the direction of the Kiṣangaṅgā.

Kalhaṇa has occasion to refer to these in connection with the expedition which took place in his own time against the *Sīraḥśilā* castle. This stood on the Kiṣangaṅgā close to the ancient Tīrtha of the goddess *Sāradā* still extant at the present Śardi.² One of these routes leads past the village of *Draṅg*, situated at 74° 18' 45" long. 34° 33' 30" lat. It is certain that the place took its name from an ancient watch-station here located and is identical with the *DRAṄGA* mentioned by Kalhaṇa in connection with the above expedition.³ I have not been able to visit the place in person but was informed in the neighbourhood that remains of

¹ Compare *Rājat.* viii. 2485 note.

² Compare regarding the *Sāradātīrtha* and the castle of *Sīraḥśilā*, notes i. 36 (B) and viii. 2492 (L), respectively; also below, § 127.

³ See *Rājat.* viii. 2507 note.

old watch-towers are still found on the path which leads up to the pass behind the village of Drang.

Besides the route marked by this old frontier-station there are others leading in the same direction. One is to the west over the Sitalvan Pass; the other lies in the west and passing through the valley of Krōras descends directly to Sardi along the *Madhumatī* stream. The portion of the Kiṣangaṅgā Valley into which these routes lead, can never have been of much importance itself though there are indications of gold-washing having been carried on in it.¹ But from Sardi starts a route leading very directly, by the Kankatōri (Sarasvatī) River and over a high pass, into Cilās on the Indus;² this line of communication may already in old times have brought some traffic to Sardi.

Owing to the inroads made by Cilāsīs and the restless Bomba chiefs of the Kiṣangaṅgā Valley, the Pathān Governors found it necessary to settle Afrīdis at Drang and the neighbouring villages to guard the passes. The presence of these Afghān colonies shows that the conditions which necessitated the maintenance of the old frontier watch-station at Draṅga, had altered little in the course of centuries.

56. Above Sardi the course of the Kiṣangaṅgā lies for a long distance through an almost inaccessible and uninhabited gorge. Hence for over 30 miles eastwards we find no proper route across the mountain range. Kalhaṇa gives us a vivid and interesting account of the difficulties offered by a winter-march along the latter when he describes the flight of the pretender Bhoja from Sīrahśilā castle to the Darads on the Upper Kiṣangaṅgā.³

Pass of Dugdha-
ghāta.

The line of communication we meet next is, however, an important one. It leads from the north shore of the Volur lake into that part of the Upper Kiṣangaṅgā Valley which is known as Gurēz, and connects with the routes leading to Astōr and the Baltī territory on the Indus. The road used in recent years, and now improved by British engineers into the 'Gilgit Transport Road,' crosses the range by the *Trāg^abal* or *Rāzdiangan* Pass, nearly 12,000 feet high. But the route frequented in ancient times lay some eight miles further to the east.

Kalhaṇa refers in several places to the hill fort of DUGDHAGHĀTA which guarded the mountain-route leading into Kaśmīr territory from inroads of the Darads. The latter can easily be shown to have held

¹ Compare Note B on Sāradā (*Rājat.* i. 36), §§ 2, 16. To this circumstance the of *Drang* owes probably the distinguishing designation of *Sun^a-Drang* 'the Gold Drang,' by which it is popularly known.

² See BATES, *Gazetteer*, p. 490.

³ See *Rājat.* viii. 2710 sqq.

then as now the Kiṣangaṅgā Valley about Gurēz and the neighbouring territories to the north. From Kalhaṇa's description it is evident that this frontier fort stood on, or close to, the summit of a pass. Thanks to the indications of the Chronicle I was able to identify its site on the top of the *Dudākhut* Pass.¹ The Pass (shown on the map by its ancient name *Dugdhaḡhāta*) is approached on the Kaśmīr side from the valley of the Baṇḍāpōr stream, still known to the Brahmans by its old name *Madhumatī*. At the small village of Ātavuṭh (map 'Atawat') a side valley is entered which is narrow and somewhat difficult below, but higher up widens. Its highest portion which forms the immediate approach to the pass, is an open alpine valley known to the mountain shepherds as *Vijje Marg*.

The term *Marg* which denotes any high alpine grazing ground frequented in the summer by herdsmen, is the modern Kaśmīrī equivalent, and direct derivative, of Skr. *maṭhikā*. It designated originally the small shelter-huts of stone or wood usually erected on such high plateaus or valleys by their summer occupants.² It is probably that *Vijje Marg* represents the *Prājimaṭhikā* which Kalhaṇa mentions as the position occupied by the Kaśmīr forces during their unsuccessful siege of the fort.

As a characteristic point it may be mentioned that the garrison depended for its water-supply on the storage of snow. This had become exhausted at the late summer season when the siege took place, but, luckily for the Darad defenders, was replaced by a fresh fall of snow. The latter is explained by the elevation of the pass which I estimated at about 11,500 feet. Snow-storms occur sometimes on the neighbouring *Trāḡabal* Pass so early as September.

From the *Dudākhut* Pass an easy track over the ridge marked 'Kiser' on the map leads down to Gurēz, the chief place of the Valley. The latter corresponds probably to the *DARATPURĪ* of the *Rājatarāṅgiṇī*. The route over the *Dudākhut*, being very direct and comparatively easy during the summer, was much frequented by Dard traders until the recent construction of the 'Gilgit Transport Road.' It was used by the Sikhs for military convoys until a disaster caused by an avalanche above Ātavuṭh induced them to change it for the *Trāḡabal* route. It also seems to have been mentioned to Baron HÜGEL.³ In Muhammadau

¹ For detailed evidence regarding this location and a description of the site, see *Rājat.* vii. 1171 note.

² Skr. *maṭhikā* is the diminutive of *maṭha* 'hut', 'Sarai.' The Kś. derivative of the latter term, *mar*, is still used regularly for the rude shelter-huts which are found on the higher passes particularly towards the north.

³ See *Kaschmir*, ii. p. 169.

times both routes were in charge of a 'Malik' who resided in the castle of *Band²kōth*, not far from the ancient *Mātrgrāma* shown on the map.

In ancient times there probably existed in the same neighbourhood a watch-station or *Draṅga*. *Ou-k'ong* when speaking of the 'gate to the north' through which the road led to *Poliu* or *Baltistān*, may have meant either this *Draṅga* or the fort of *Dugdaghāta*.

57. To the east of the *Dud²khut* Pass the summits of the range gradually get higher and higher until we reach **Mount Haramukuṭa.** the great mountain-mass of the *Haramukh* Peaks. Rising to close on 17,000 feet and surrounded by glaciers of considerable size, these Peaks dominate the view towards the north from a great part of the *Kaśmīr* Valley. Sacred legends have clustered around them from early times. The lakes below their glaciers belong still to the holiest of *Kaśmīrian* *Tirthas*. The ancient name of the Peaks is *HARAMUKUṬA*, 'Sīva's diadem.' This is explained by a legend which is related at length in the *Haracaritacintāmaṇi*.¹ Their height is supposed to be Sīva's favourite residence.² Hence *Kaśmīrian* tradition stoutly maintains that human feet cannot reach the Peaks' summit.³

The lake which lies at the foot of the north-eastern glacier, at a level of over 13,000 feet, is looked upon as the true source of the *Kaśmīr* *Gaṅgā* or *Sind* River. It is hence known as *UTTARAGAṅGĀ* or popularly *Gang^abal*.⁴ It is the final goal of the great 'Haramukuṭagaṅgā' pilgrimage which takes place annually in the month of *Bhādrapada* and is attended by thousands of pilgrims. The bones of those who have died during the year, are on that occasion deposited in the sacred waters. A short distance below this lake is another also fed by a glacier and now known as *Nundkōl*. Its old name *Kālodaka* or *Nandisarasa* is derived from a legend which makes the lake the joint habitation of *Kāla*, *i.e.*, Sīva, and of his faithful attendant *Nandin*. From the

¹ See *Haracar.* iv. 62 *sqq.*

² The legends relating to Sīva's residence on Mount Haramukuṭa and his connection with the several sacred sites of *Nandikṣetra*, are given at great length in the *Nilamata* 1049 *sqq.*

³ Owing to this superstition I had great difficulty in inducing any of my *Kaśmīri* Coolies (Muhammadans!) to accompany me on the ascent I made to the Peaks in September, 1894. My Brahman friends could not give credence to my having reached the summit. According to their opinion the very fact of my having reached the Peak was a sufficient proof of this not having been Haramukuṭa. An argument as simple as incontrovertible to the orthodox mind.

⁴ See my note *Rājat.* i. 57. Another name often used in the *Nilamata* and other texts is *Uttaramānasa*; see *Rājat.* iii. 448 note.

latter the whole collection of sacred sites takes the name of *Nandikṣetra* by which Kalhaṇa usually designates it.¹

In the valley of the Kānk^anai stream (Skr. KANAKAVĀHINĪ) which issues from these lakes, lies the sacred site of Śiva BHŪTEŚVARA (now Buthⁱśēr). It is closely connected with the legends of Mount Haramukuṭa and often mentioned in the Rājataranṅinī.² A series of interesting temple ruins marks the importance of this Tirtha and that of the ancient *Jyeṣṭheśvara* shrine which immediately adjoins it.³ Bhūteśvara is passed by the pilgrims on their way back from the sacred lakes, while on their way up they reach the latter by another route, passing the high ridge known as BHARATAGIRI and the smaller lake of BRAHMASARAS.

From the Gaṅgā lake a track passable for ponies leads over the *Satsaran* Pass to *Tilēl*, a Dard district on the Kiṣaṅgāṅā. It is probably the route by which King Harṣa's rebel brother Vijayamalla escaped from Lahara (Lār) to the Darad territory.⁴

58. Eastwards from the Haramukuṭa Peaks the range does not overlook on the south the main Valley of **North-eastern range.** Kaśmīr, but that of the Sind River. The general level of the summits rises, and glaciers of fair size become frequent on their northern slopes. Close to the head of the Sind Valley, the range we have been so far following joins on to the great chain of snowy mountains which stretches from Mount Nangā Parvat in a south-easterly direction to the Nankun Peaks in Sūru.⁵ A few miles south of this junction we arrive at a gap in the mountains which forms the lowest watershed between the Indus and the Vitastā basins. It is the Pass known generally by its Ladākhī name of *Zōjī-Lā*. It leads at an elevation of 11,300 feet from Baltal, on the headwaters of the Sind, to a high-level valley draining into the Drās River and hence into the Indus.

The route leading over the Zōjī-Lā undoubtedly has been already in ancient times a most important thoroughfare. It connects Kaśmīr with Ladākh and thence with Tibet and China. Here too the natural watershed has in old as in modern times been also the ethnic boundary. Beyond the Pass begins the land of the *Bhauttas* or *Bhuttas*, as the Tibetan inhabi-

¹ See *Rājat.* i. 36 note.

² See regarding the history and remains of *Bhūteśvara*, *Rājat.* i. 107 ; v. 55 notes. The Tirtha was rich enough to attract a special expedition of marauding hillmen in Kalhaṇa's time ; see viii. 2756.

³ See *Rājat.* i. 113 note.

⁴ See *Rājat.* vii. 911.

⁵ Compare regarding this great range which may fitly be called the main range of the mountain system around Kaśmīr, DREW, *Jummoo*, pp. 194 sqq.

tants of the Indus region are uniformly designated in our Kaśmīrian texts (modern Kś. *But^a*).¹

Ou-k'ong is the first who refers distinctly to this route when speaking of the road which leads through the gate in the east to Tou-fan or Tibet. Kalhaṇa has scarcely occasion to refer to it, as the regions beyond the Pass lay quite beyond the reach of the political power of the later Kaśmīrian kings. He probably means, however, the Zōjī-Lā when mentioning the route of the *Bhūtṭa*-land (*Bhūtṭarāṣṭrādhvan*) by which the Darads offered to pass the pretender Bhoja into Kaśmīr, while the more direct routes from their own territory were closed by the winter.² An easy pass connects Tilēl at the head of the Kiṣangaṅgā Valley with the Drās territory to the east. From there Bhoja could then have entered Kaśmīr *viā* the Zōjī-Lā.

This Pass, the ancient name of which is not known to us, has more than once witnessed successful invasions of Kaśmīr. Through it came early in the 14th century the Turk (?) *Dulca* and the Bhauṭṭa *Riñcana* whose usurpation led to the downfall of Hindu rule in the Valley.³ About two centuries later Mirzā Muḥammad Ḥaidar with his small Mughal force successfully fought here his entrance into Kaśmīr (A.D. 1532). The account he gives of this exploit in his *Tārīkh-i-Rāshidī*, is not without topographical interest.⁴

59. A high peak situated about 10 miles east-southeast of the Zōjī-Lā, marks the point where the range forming the eastern boundary of Kaśmīr branches off from the main chain. This range runs in an almost southerly direction until it reaches the southernmost headwaters of the Vitastā. It then turns to the north-west and at the Bān^ahāl Pass joins on to the Pīr Pantṣāl Range. Through this range there lead routes connecting Kaśmīr with the Maḍivāḍvan Valley (see § 84) which drains into the Cināb, and with Kaṣṭ^avār, the ancient Kāṣṭavāṭa, on the Cināb itself. Both these Valleys are confined, difficult of access, and scantily populated. They have hence never played an important part either in the foreign relations or trade of Kaśmīr. On this account our notices regarding the old topography of the dividing range are extremely meagre.

¹ Compare *Rājat.* i. 312-316 note.

² Compare *Rājat.* viii. 2887.

³ See *Jonar.* 142 *sqq.*, and for the stratagem by which Riñcana forced his way into Lahara (Lār), 165 *sqq.* The *Laharakoṭṭa* mentioned in the last passage probably represents the old watch-station of this route, but its position is uncertain.

⁴ See *Tārīkh-i-Rāshidī*, transl. by Messrs. Elias and Ross, pp. 423 *sqq.*, and below, § 131.

At its northern end and close to the great snowy peak already mentioned, is the Tīrtha of AMAREŚVARA or AMARANĀTHA, known by its Kaśmīrī name as *Amburnāth*. Together with the sacred Gaṅgā-lake on Mount Haramukūṭa, it is now the most popular of Kaśmīrian pilgrimage places. Its Yātrā in the month of Śrāvaṇa attracts many thousands of pilgrims not only from Kaśmīr but from all parts of India.¹ Their goal is a cave situated at a considerable altitude and formed by a huge fissure on the south side of a snowy peak, 17,300 feet high (marked 'Ambarnath' on map). In this cave there is a large block of transparent ice formed by the freezing of the water which oozes from the rock. It is worshipped as a self-created (*svayambhū*) Liṅga, and is considered the embodiment of Śiva-Amareśvara.

Judging from the scanty references made to this Tīrtha in the Rājatarāṅgiṇī and the Nilamata, it appears doubtful whether it could have enjoyed in old times quite such great celebrity as now. But Jonarāja already relates a visit to this sacred site paid by Sultān Zainu-l-'ābidīn,² and in the Māhātmya literature Amareśvara receives its due share of attention. The pilgrims' route described in great detail by the Amaranāthamāhātmya ascends the valley of the eastern branch of the Lidār or Ledarī.

There the lake of the Nāga SUŚRAVAS, now known as Suśramnāg or (with a popular etymology) Śeṣanāg, is visited at the north foot of a great glacier descending from the Kohenhār Peak. In this lake and a small rock-bound inlet of it called JĀMĀTRNĀGA (Zām²turī Nāg), the local legend, related by Kalhaṇa, i. 267 *sqq.*, and connected with the ancient site of Narapura, has placed the habitation of the Nāga Suśravas and of his son-in-law.³ The route then crosses a high pass, known as Vāv²jan (Skr. *Vāyuvarjana* in the Māhātmya), into a high-level valley drained by five streams which bear the joint designation of PAÑCATARAṅGIṆĪ. From there the pilgrims toil up a lofty spur to the north-east and descend into the narrow gloomy valley which lies at the foot of the Amburnāth Peak. It is watered by a stream (Amarāvati) which comes from the glacier of a still higher peak to the east. Joining the Pañcatarāṅgiṇī it flows through an inaccessible gorge down to the head of the Sind Valley near Baltal.

¹ See for the old notices of the Tīrtha, *Rājat.* i. 267 note ; for a description of the modern pilgrimage, VIGNE, *Travels*, ii. pp. 10 *sqq.*, and BATES, *Gazetteer*, pp. 121 *sq.*

² Compare *Jonar.* (Bombay ed.) 1233 *sqq.*

³ Compare *Rājat.* i. 267 note.

60. Connected with the eastern range is a mass of mountains which it will be convenient to mention here though it does not form part of the mountain-barriers of Kaśmīr. It fills the great triangular space which lies between the Sind Valley and the range in the east we have just noticed, the level ground along the right bank of the Vitastā forming as it were the base. This mass of mountains separates from the eastern ridge between the Kohenhār and Āmburnāth Peaks. Trending westwards it soon culminates in the conspicuous pinnacle of Mount *Gāś'abrār* (map 'Kolahoi'), close on 18,000 feet in height. From this conspicuous mountain numerous spurs radiate with glaciers in their topmost hollows.

The highest of these ridges runs for about thirty miles along the Sind Valley, of which it forms the southern side. A high cross-spur, now known as *Dūrūn Nār*, which descends to the north towards *Sun^amarg*, is probably identical with Mount *DHUPĀVANA*, the scene of a siege related in the *Rājataranṅinī*.¹ The extremity of this ridge in the west forms the amphitheatre of bold hills which encircle the *Ḍal* lake and *Śrīnagar* on the north. Here we have Mount *MAHĀDEVA* which is much frequented as a *Tīrtha*.²

Facing it from the south is the rocky spur which lines the eastern shores of the *Ḍal*. It bore in old days the name of *ŚRĪDVĀRA*,³ and is the site of a series of ancient pilgrimage places, such as *Sureśvarī*, *Tripureśvara*, *Harṣeśvara*, and *Jyeṣṭheśvara*, which will be discussed below. The extreme offshoot of this spur is the 'Hill of Gopa' (*Gopādrī*), the present *Takht-i Sulaimān*, which is so conspicuous a feature in the landscape of *Śrīnagar*. Other spurs descending into the vale further east form successively the semicircular side-valleys containing the *Pargaṇas* of *Vihī* and *Vular*.

We now return once more to the eastern range. South of the Kohenhār Peak which is still over 17,000 feet high, its summit ridge gets gradually lower. It is crossed by the *Margan* Pass into *Maḍivāḍvan*. Of the latter valley I can find no old mention. Still further south we come to the *Marbal* Pass, at an elevation of 11,500 feet, which forms the usual route towards *Kaṣṭ^avār*.

This territory which is now partially inhabited by Kaśmīrīs, is mentioned as an independent hill-state by *Kalhaṇa*.⁴ The valley into

¹ See *Rājat.* viii. 595 note and below, § 131.

² It is mentioned in the *Nīlamata*, 1324, and frequently in the *Śarvāvatāra*.

³ See *Rājat.* viii. 2422 note.

⁴ Compare regarding the old *Kāṣṭhavāṭa* note vii. 588-590, where also the references in the later Chronicles are given.

which the route descends immediately after crossing the Marbal Pass, is known now as *Khaiśāl*. It is once mentioned as *Khaśālī* by Kalhaṇa and more frequently referred to in the last Chronicle by the name of *KHAŚĀLAYA*.¹ From the latter source we learn that it was inhabited by Khaśas to whose occupation it may have owed also its name. So we note here once more in the east the coincidence of the ethnic boundary with the natural watershed.

SECTION V.—UPPER COURSE OF THE VITASTĀ.

61. We have now completed the circuit of the great mountain-barriers which enclose the Kaśmīr Valley, and can turn our attention to its interior. This is naturally divided into two great parts. One comprises the plain formed by the alluvium of the Vitastā and its main tributaries; the other consists of plateaus or Karēwas elevated above the river flats and largely caused by old lacustrine deposits. We shall first notice the alluvial plain and the river-system which has created it.

The great river which is the recipient of the whole drainage of the country, is now known to Kaśmīrīs by the name of *Vyath*. This modern designation is the direct phonetic derivative of the ancient Sanskrit VITASTĀ which we meet already among the river-names of the Rigveda.² The intermediary Prakrit form **Vidastā* underlies the *Hydaspes* of the Greeks in which we note, as so frequently in Greek renderings of foreign names, the modifying action of popular etymology.³ In Ptolemy's *Bidaspes* we have another rendering which though later in date yet approaches closer to the sound of the Indian original.⁴ The name *Jehlām* which is

Name of Vitastā.

¹ Compare *Rājat.* vii. 399 note.

² The line of phonetic development may be roughly represented as Skr. *Vitastā* > Pr. **Vidastā* > Ap. **Vi[h]ath* > Kś. *Vyath*.

The name Vitastā is still well-known to Kaśmīr Brahmins from the Māhātmyas and similar texts, and is currently used by them. The form 'Vedasta' which Drew and other writers indicate as the old name of the river "still used by those who follow Sanskrit literature," is due to some error of hearing. It is curious to meet a similar form **Vidastā* in the transcription of the Chinese Annals of the 8th century; see my *Notes on Ou-k'ong*, p. 31.

³ The ending in the form *Hydaspes* is undoubtedly due to the influence of the numerous Persian names known to the Greeks which end in *-ασπης* (Old Persian *aspa*). For the rendering of initial *Vi-* by 'Y' compare *Hystaspes*: *Vishtāspa*.

⁴ Ptolemy's *Bi* (for *Vi*) is the most exact phonetic reproduction possible in Greek characters. It is evident from Ptolemy's Panjāb river names that he did not take

now borne by the Vitastā in its course through the Panjāb, is wholly unknown to the genuine usage of Kaśmīr. It is apparently of Muhammadan origin and has been brought to Kaśmīr only by Europeans and other foreigners.¹

The river to which the name Vitastā or Vyath is properly applied, is first formed by the meeting of the several streams which drain the south-eastern portion of the Valley. This meeting takes place in the plain close to the present town of Anantnāg or Islāmābād. But sacred tradition has not failed to trace the holiest of Kaśmīr rivers to a more specific source.

An ancient legend, related at length in the *Nilamata* and reproduced by the author of the *Haracaritacintāmaṇi*,² represents the Vitastā as a manifestation of Śiva's consort Pārvatī. After Kaśmīr had been created, Śiva at the request of Kaśyapa, prevailed upon the goddess to show herself in the land in the shape of a river, in order to purify its inhabitants from the sinful contact with the Piśācas. The goddess thereupon assumed the form of a river in the underworld, and asked her consort to make an opening by which she might come to the surface. This he did by striking the ground near the habitation of the Nilanāga with the point of his trident (*śūla*). Through the fissure thus made which measured one *vitasti* or span, the river gushed forth, receiving on account of this origin the name *Vitastā*. The spring-basin where the goddess first appeared was known by the several designations of *Nīlakunḍa*, *Sūlaḡhāta* ('spear-thrust') or simply *Vitastā*.³ It is clear that the spring meant is the famous Nilanāga, near the village of Vērnāg in the *Shāhābād* Pargana. It is a magnificent fountain which amply deserves the honour of being thus represented as the traditional source of the great river.⁴

The legend makes Pārvatī-Vitastā subsequently disappear again from fear of defilement by the touch of sinful men. When brought to light a second time by Kaśyapa's prayer the goddess issued from the Nāga of *Pañcahasta*. In this locality we easily recognize the present

his nomenclature directly or indirectly from the historians of Alexander, but from independent sources. Bidaspes, Zaradros, Bibasis, Sandabal, these all represent unsophisticated attempts to reproduce in sound the genuine Indian forms. The same cannot be said of the names given by Arrian, Pliny, etc.

¹ Albērūnī already knows the name *Jailam*; see above, § 14. Śrīvara when relating an expedition of Sultān Haidar Shāh into the Panjāb, sanskritizes this name into *Jyalami*; see ii. 152.

² See *Nilamata*, 238 sqq.; *Haracar.* xii. 2-34.

³ See *Nilamata*, 1290; *Haracar.* xii. 17.

⁴ Compare for the Nilanāga and its round spring-basin (*kunḍa*), *Rājat.* i. 28 note

village of Pānzath, situated in the Div²sar Pargaṇa and boasting of a fine spring which is still visited by the pious of the neighbourhood.¹ After another disappearance for a reason similar to the above, the goddess came forth a third time at *Narasimhāśrama*. This place I am unable to trace with certainty. Finally the goddess was induced to abide permanently in the land when Kaśyapa had secured for her the company of other goddesses, who also embodied themselves in Kaśmīr streams, like Lakṣmī in the Viśokā, Gaṅgā in the Sindhu, etc.

Another version of the legend which, however, seems of less ancient date, seeks the place of the Vitastā's second appearance in the spring of the modern *Vith²vutur*, a small village situated about one mile to the N. W. of Vērnāg.² The place is known by the name of *Vitastātra* to Kalhaṇa who mentions Stūpas erected there by King Aśoka.³ This notice certainly seems to indicate some sacred character attaching to the spot. Yet Kalhaṇa's direct mention of the Nilakuṇḍa as the birth-place of the Vitastā leaves no doubt as to where the tradition prevalent in his own time placed the source of the sacred river.⁴

62. The streams which unite close to Anāt²nāg and there form the true Vitastā river, are the *Sāndraṇ*, the *Bring*, *Ār²path* and *Lid²r*. Of these the first and southernmost drains the *Shāhābād* (or Vēr)

Pargaṇa and receives the water of the sacred springs mentioned in the preceding paragraph. Its old name I am unable to trace with any certainty. The next affluent, the *Bring*, comes from the side-valley which forms the Pargaṇa of the same name. The ancient name of the stream is unknown, the modern *Vitastāmāhātmya* which gives it as *Bhr̥ṅgī*, being but a doubtful authority. The *Bring* too is fed by the water of some well-known Nāgas, among which the famous *Trisaṃdhyā* fountain and the springs of *Ardhanārīśvara* (Nār^u) may be specially mentioned.

The *Ār²path* which comes from the north-east, is mentioned repeatedly in the *Nilamata* by its ancient name of *Harṣapathā*.⁵ The

¹ Compare *Rājāt*. v. 24 note.

² This version is found in the *Vitastāmāhātmya*, ii. 37, *sqq.*, which calls the place *Vitastāvartikā*; see also VIGNE, i. p. 335.

³ See *Rājāt*. i. 102 note.

⁴ *Rājāt*. i. 28. I am unable to account for the mention made in the *Mahābh.* iii. lxxxii. 90 of the Takṣaka Nāga in Kaśmīr as the Vitastā, *i.e.*, its source. No such distinction is claimed for the well-known Takṣaka spring near Zevan (Jayavana); see *Rājāt*. i. 220. The author of the *Tīrthayātrū* in the *Mahābh.* shows no accurate knowledge of Kaśmīr and seems to have made a mistake here.

⁵ See *Nilamata*, 232, 1299, etc.

valley it drains is known as the Kōṭhēr Pargaṇa and takes its name from the sacred tank of *Kapaṭeśvara*. At the western end of the spur on the slope of which this Tīrtha is situated, issue the magnificent springs of Ach^abal (Akṣavāla). They form a small stream by themselves, which flows into the Harṣapathā. A short distance below the village of Khan^abal (map 'Kanbal') where the three streams hitherto mentioned unite, their waters are joined from the north by those of the Lid^ar.

This river, the ancient *Ledarī*,¹ receives a number of glacier-fed streams which drain the high range towards the Upper Sind Valley. It is hence in volume more considerable than any of the previously named affluents. The Ledarī spreads in several branches through the wide valley forming the Pargaṇas of Dachūnpōr and Khōvurpōr which take their names, 'Right Bank' and 'Left Bank,' respectively, from their position relative to this river. In old days a canal constructed on the hill-side to the east carried the water of the Ledarī, and with it fertility, to the barren plateau of Mārtāṇḍa or Maṭan.²

63. At Khan^abal the Vitastā becomes navigable and continues so on its whole course through the valley. There too the great flat plain begins which stretches on both sides of the river down to Bārāmūla in the north-west. In its course to the Volur lake, a direct distance of about 54 miles, the river falls only some 220 feet.³ The slope in the general level of the plain is equally gentle. The bed of the river lies everywhere in the alluvial soil, the result of the deposition of sediment at flood times when the river overflows its banks. Down to Śrinagar the river keeps in a single bed and its islands are but small, in fact mere temporary sandbanks. The course is in parts very winding. But as far we can judge from the position of the old sites along the river, no great changes are likely to have taken place in historical times in this portion of the river's course.

When the river is low as during the winter, the banks rise on an average about 15 feet above the water. But in the spring when the snow melts, the great volume of water brought down from the mountains rises to the top of the banks and often overflows it. Dangerous floods may also follow long and heavy summer-rains, and sometimes

¹ See *Rājat.* i. 87.

² The construction of this canal by Zainu-l-'ābidīn is described at length by *Jonar.* (Bo. ed.) 1232-60. It is probable that there existed earlier irrigation works on the same plateau. See below, § 111.

³ See DREW, *Jummoo*, p. 163.

cause immense damage to the crops over a great portion of the cultivated area of the Valley.¹

Such floods and the famines which are likely to follow, were a danger well-known in old times already and are more than once mentioned by Kalhana.² Against them the villages and riverside towns have always endeavoured to protect themselves by artificially raising the banks. The allusions found in the Chronicle suffice to show that the construction of embankments (*setu*, now *suth*), with the accompanying system of floodgates closing lateral drainage channels, has existed since ancient times.³ One great regulation scheme which was directly designed to diminish these risks, and of which we possess a detailed historical account, will be discussed below. The equally elaborate system by which water was secured for the irrigation of the otherwise dry alluvial flats along the river, will also be specially noticed.

The navigable waters of the Vitastā have from ancient times to the present day formed the most important highway of Kaśmīr. The value of the river and of the numerous canals, lakes, and streams which are also accessible to boats, for the development of internal trade and traffic can hardly be overestimated. Until a couple of years ago there were nowhere in Kaśmīr, not even in the flattest parts of the Valley, roads fit for wheeled traffic. Carriages were practically things unknown to the population bred in the Valley. As long as the communication with the outer world was restricted to difficult bridle-paths or tracks passable only for load-carrying Coolies, the construction of such roads would have been, in fact, of very slight advantage. The importance of river-traffic in Kaśmīr may be estimated from the fact that the number of boatmen engaged in it (and their families) amounted according to the census of 1891 to nearly 34,000.⁴ That boats were in old days, just as up to the present time, the ordinary means of travel in the Valley, is shown by the frequent references to river journeys in the Chronicles.⁵

Equally eloquent testimony to the historical importance of river navigation in Kaśmīr is borne by the position of the ancient sites. We

¹ Compare for data as to modern floods, LAWRENCE, *Valley*, pp. 205 *sqq.*

² See *Rājat.* vii. 1219; viii. 2449, 2786; also vii. 1624; viii. 1417, 1422; *Jonar.* 403 *sqq.*

³ See *Rājat.* i. 159; iii. 483; v. 91, 103, 120; viii. 2380, etc.; *Jonar.* 404, 887; *Śrīv.* iii. 191 *sq.*, etc.

⁴ Compare regarding the *Hānzī* of Kaśmīr, LAWRENCE, *Valley*, p. 313; also *Rājat.* v. 101 note.

⁵ See *Rājat.* v. 84; vii. 347, 714, 1628, etc.

shall see that all the towns which from time to time were the capitals of the country, were built on the banks of the Vitastā, and that the great majority of other important places of ancient date were similarly situated. It is certain that then as now all produce of the country was brought to the great centres by water. Villages even when situated at a great distance, had, no doubt, just as at the present day, their landing places (Kś. *yār^abal*) on the river or the nearest navigable waterway. Kalhaṇa's description of the semi-legendary city of *Narapura* shows how closely the busy "coming and going of ships" was connected in the Kaśmīrian mind with the splendour of a large town.¹

64. After these general remarks we may now proceed to follow the Vitastā's course through the Valley noticing its tributaries in due order as we reach the confluences. Below Khan^abal² the river receives in succession the several branches of the Ledarī and then passes the ancient town and Tirtha of Vijayeśvara, the present Vij^abrōr. About a mile lower down, its course lies between high alluvial plateaus or Karēwas. One on the left bank, the Tsak^adar Uḍar, will be noticed below as one of the most ancient sites of the Valley (Cakradhara).

About three miles further down and not far from the village of Marhōm (the old *Maḍavāśrama*), the Vitastā
The Gambhīrā. is joined by the Veśau and Rembyār^a Rivers which meet a short distance above their common confluence with the Vitastā. This river junction is known to the Māhātmyas by the name of GAMBHĪRASAMGAMA ('the deep confluence') and is still visited as a Tirtha.³ The short united course of the Veśau and Rembyār^a bears the old name of GAMBHĪRĀ and is referred to under this designation repeatedly by Kalhaṇa. The Gambhīrā is too deep to be forded at any time of the year, and being on the route from Vijayeśvara to Śrīnagar, is of military importance. It was twice the scene of decisive actions. King Sussala's army on its retreat over the Gambhīrā (A.D. 1122) suffered a complete rout. Six years later Sujji, his son's general, gained an equally signal victory by forcing the passage in the face of a rebel army.⁴

¹ See *Rājat.* i. 201 sq.

² According to a gloss on *Nīlamata* 1307, Khan^abal, the port, so to say, of Anantnāg corresponds to the Khaṇḍapuccha Nāga of that text. This Nāga is elsewhere mentioned, but I have no distinct evidence for its identification.

³ See *Rājat.* iv. 80 note. Junctions of rivers and streams (*saṃgamas*) are everywhere in India favourite places for Tīrthas.

⁴ See *Rājat.* viii. 1063 sqq., 1497 sqq.

The Veśau, frequently mentioned by its ancient name of Viśokā in the Chronicles, the Nilamata and other texts,¹ is a considerable river. It receives all the streams coming from the northern slope of the Pīr Pantṣāl Range between the Sidau and Bān^ahāl Passes. Its traditional source is placed in the Kramasaras or Kōns^ar Nāg Lake below the Peak of Naubandhana. The Nilamata, 271 sqq. relates a legend which identifies the Viśokā with Lakṣmī and accounts for its name ('free from pain'). The fine waterfall which is formed by the stream of the Kōns^ar Nāg not far from the village of Sidau, is now known as *Ahr^abal*. The Nilamata calls it *Ākhor bila* 'the mousehole,' which may possibly be the origin of the modern name.² As soon as the Viśokā emerges from the mountains, numerous irrigation canals are drawn from it which overspread the whole of the old Pargaṇas of *Karāla* (Āḍ^avin) and *Devusarasa* (Div^asar).

One of these canals is the *Sun^amaṇi Kul* which is mentioned in the *Rājatarāṅgiṇī* by its ancient name of SUVARṆAMAṆIKULYĀ.³ If the story of its construction by King Suvarṇa, reproduced from Padmamihira, could be trusted, we should have to ascribe to this canal a high antiquity. It leaves the Viśokā near the village shown as 'Largoo' on the map and rejoins it near the village of Āḍ^avin (map 'Arwin'). Another old canal, called *Nāndī* (not shown on the map), leaves the Viśokā near Kaimuh, the ancient Katimuṣa, and irrigates the land between the lower course of this river and the Vitastā. Its name is connected perhaps with that of the village *Nandaka* which is referred to in connection with Avantivarman's drainage operations.⁴ The Viśokā is navigable up to Kaimuh.

The *Rembyār^a* which joins the Viśokā a little above Gambhīrasaṅgama, we have met already before as the river uniting the streams from the Pīr Pantṣāl and Rūprī Passes. Kalhaṇa mentions it by its ancient name RAMAṆYĀṬAVĪ when relating the legend of the burned city of Narapura.⁵ The *Rembyār^a* after leaving the mountains below Hūr^apōr flows divided in many channels within a wide and mostly dry bed of rubble and boulders. This strip of stony waste along the river attains a width of over two miles near the village of Tṣūran (map 'Charran').

The local legend referred to attributes the creation of this waste to

¹ See *Rājat.* iv. 5 note.

² Compare *Nilamata*, 271 sqq., and for *Ākhor bila*, 283.

³ See *Rājat.* i. 97.

⁴ See *Rājat.* v. 85 note.

⁵ See *Rājat.* i. 263-265, note.

the Nāgī Ramaṇyā. She had come down from the mountains carrying masses of stone to assist her brother, the Suśravas Nāga, in the destruction of Narapura. When she learnt that he had already completed his task, she dropped the stones 'more than a Yojana' from the site of the doomed city. The distance indicated corresponds exactly to that of the village of Lit^ar where the Rembyār^a leaves behind its stony bed and passes into alluvial soil. The village land for five Yojanas above that place was buried by the mighty boulders which Ramaṇyā left along her trail. Similar tales regarding the origin of stone-wastes ("Murren") are well-known to European alpine folk-lore.

65. Below Gambhīrasaṅgama the Vitastā receives from the right the stream which drains the ancient district of Holadā, the present Vular. It then passes close to the foot of the Vastarvan spur, near the old town of Avantipura. No important stream joins the river from the right until we reach Śrīnagar. The affluents on the left like the Rāmuṣa are also of small volume. Some do not reach the river direct but end in low marshes, communicating with the latter only by gates made in the river embankments. Of the ancient sites situated along the river, the town of PADMAPURA, the present Pāmpar, is the most considerable. As we approach Śrīnagar we pass the site of the ancient capital, PURĀṆĀDHIṢṬHĀNA, marked by the present village of Pāndrēthan. It lies between the right river bank and the southern foot of the ridge which encircles the Ḍal. For the streams we have next to notice, a reference to the special map of Ancient Śrīnagara is necessary.

Just before we reach the area of the city proper, the Vitastā is joined by a stream which drains the lake to the east of the city. This lake, known as *Ḍal* (Skr. *Ḍala*), is fed by plentiful springs and by streams which reach it from the north. Its surplus waters flow out towards the Vitastā by a canal which is now called *Tsūṅṭh Kul*, but in ancient times bore the name of MAHĀSARIT.¹ This canal passes through an ancient embankment (*setu*) which protects the city as well as the low shores of the Ḍal from floods of the river, and already figures in the traditional account of the foundation of Śrīnagar. The position of the gate which closes the outflow of the Mahāsarit is marked on the map by the entry 'Durgāgalikā.'

A small channel from the river—whether artificial or natural cannot

¹ For the identification of the Tsūṅṭh Kul and the Mār canal in the city with the *Mahāsarit*, my note on Rājat. iii. 339-349 should be consulted. In addition to the evidence there recorded, it should be noted that the Mahāsarit is twice mentioned by its old name also in the *Sarvāvatāra* iii. 74; iv. 129 sq.

be ascertained now—joins the Mahāsarit at this very point and turns the ground between it and the river into an island. This is now known by the name of Māy³sum, derived from the ancient MĀKṢIKASVĀMIN. We shall have to refer to it again in our account of the topography of Śrīnagar. From Durgāgalikā downwards the Mahāsarit or Tsūṅṅh Kul was in old times the south-eastern boundary for that part of Śrīnagar which lies on the right bank of the Vitastā. Being a natural line of defence it is frequently referred to in the narrative of the various sieges of the capital.¹

The confluence of the Mahāsarit and Vitastā which is just opposite to the modern palace, the Shērgarhi, has been a Tīrtha from early times and is mentioned by its correct name in Maṅkha's description of Kaśmīr.² Śrīvara refers to it by a more modern name, *Mārīsaṅgama*, where *Mārī* is an evident adaptation from the Kś. form *Mār*.³ The latter name, itself a derivative of Mahāsarit, is applied at the present day to another branch of the Ḍal outflow. This turning to the west passes through the marsh known as Brāṇ¹nambal (*Bhattāranadvalā*) and then enters the city.

This canal is of considerable importance for the internal traffic of the city as it opens a convenient waterway to the Ḍal and greatly facilitates the transport of its manifold produce.⁴ After passing behind the whole of the city quarters on the right river-bank the Mār issues near the quarter of Narvor (Skr. *Naḍavana*) into the marshes of the Anchīār. Through the latter a connection is thus secured with the Sind river delta. This extension of the Mār to the west seems, however, of later date, as Śrīvara attributes the construction of a navigable channel towards the Sind to Zainu-l-'ābidīn.⁵

66. The lake which supplies the water of the Mahāsarit, is in some respects one of the most favoured spots of the whole Valley. Its limpid water, the imposing aspect of the mountain amphitheatre which encloses it on three sides, and the charming gardens and orchards around it have made the Ḍal justly famous.

¹ See *Rājat.* viii. 733, 753, 3131.

² See *Śrīkaṅṭhac.* iii. 24, *Mahāsaridvitastayoḥ ... saṅgamaḥ*. Here too as in former translations of the *Rājatarāṅgiṇī*, Mahāsarit has been wrongly taken as a common noun and explained as 'great river.'

³ The term *Mārī* is also elsewhere used in the later Chronicles and the *Māhātmyas*; comp., e.g., *Śrīv.* i. 442; iv. 298; Fourth Chron. 145, etc.

⁴ It is this narrow canal, more picturesque than sweet-smelling, which has led to the frequent comparisons of Śrīnagar with Venice. It has not received much attention in recent years and for want of dredging seems in danger of silting up.

⁵ See *Śrīv.* i. 440 sq.

The Dal measures about four miles in length and two and a half in width where it is broadest. Its depth nowhere exceeds 30 feet, and in most parts it is far more shallow. At its southern end it is fringed by lagoons, and a great portion of it is covered by the famous floating gardens. Notwithstanding the superabundance of water-plants and vegetable matter, the water everywhere retains an admirable clearness and freshness. This is, no doubt, due to the ampleness of the springs which rise within the lake. Though we find no direct mention of the lake in the Rājatarāṅgiṇī, and though it does not claim any particular sanctity, there is no want around its shores of ancient and holy sites.

The earliest reference to the lake itself occurs in the Chronicle of Śrīvara who describes at length how King Zainu-l-‘ābidīn diverted himself on the lake and adorned its vicinity.¹ Śrīvara calls the lake DALA, while the few Māhātmyas which condescend to mention it, use the form *Dala*.² He also mentions the two small artificial islands called *Laṅkā*, and now distinguished as *Rup^alāṅk* and *Sun^alāṅk* (‘the Silver Laṅkā,’ ‘Golden Laṅkā’). Different names are given to several distinct portions of the lake. But of these only HASTAVĀLIKA, the present Astāvöl, can be traced in the Chronicles.

The sacred sites of Gopādri, Jyeṣṭheśvara, Thedā, Sureśvari, etc., with their numerous Nāgas line the eastern shores of the Dal. They will be mentioned below in the description of the vicinity of the capital. The well-known gardens of Shālimār, Nishāt and Nasīm are creations of the Mughal Emperors who did much to enhance the natural beauties of the lake.

Besides the springs of the lake itself the latter is fed also by a stream which comes from the Mār Sar lake, high up in the mountains to the east. The old name of this stream, marked ‘Arrah’ on the map, is uncertain. The Śarvātāra seems to extend to it the name *Mahāsarit*.³ In its lower course where it approaches the north shore of the Dal, it now bears the name of Tēlbal Nāl (stream). An earlier form is furnished by Śrīvara who calls the stream at this point, by the name of TILAPRASTHĀ; the latter is also found in several Māhātmyas.⁴

67. From the junction with the Mahāsarit downwards the Vitastā flows for over three miles between almost unbroken lines of houses raised high above the water on stone embankments. The latter consist now-a-days chiefly of large blocks of stone which belonged to ancient

1 Śrīv. i. 418 sqq.

2 See, e.g., *Vitastāmāh*, xxi. 39.

3 See *Śarvāv*. iii. 75; iv. 129.

4 See *Śrīv*. i. 421; *Śarvāv*. iv. sqq., etc.

temples and other structures of pre-Muhammadan date. Judging from their size and careful carving we can well picture to our mind the splendid appearance which the river-banks must have here presented in bygone days.

The river within the city flows first in one long reach due north.

The Kṣiptikā.

Near the fourth bridge in the heart of the city, it makes a great bend and turns to the south-west. A canal which leaves the left bank of the river between the Shērgarhi palace and the quarter of Kāṭhūl (Kāṣṭhīla), and rejoins the river near the last bridge, allows boats to cut this great bend. It now bears the name Kuṭṣ²kul, derived from the ancient designation of KṢIPTIKĀKULYĀ.¹ The Kṣiptikā is often mentioned in the later portions of Kalhaṇa's Chronicle which relate the sieges of Srīnagar witnessed in his own time. It forms to this day the natural line of defence for that part of the city which occupies the left river-bank, and which could be successfully attacked only by crossing the Kṣiptikā.² No information is available to us as to the origin of this canal. Judging from its position it is likely to have been a natural side-channel of the river which was subsequently maintained or improved for the convenience of navigation.

A few hundred yards lower down the Vitastā is joined on its left

The Dugdhaṅgā.

bank by a considerable river now known as the Dūlgāṅgā, 'the milk Gāṅgā,' or Chats²kul, 'the white stream.' Its ancient name is given as Dugdhasindhu in Bilhaṇa's description of Srīnagar.³ The Māhātmyas know it by the name of Svetagāṅgā, 'the white Gāṅgā,' to which the alternative modern designation, Chats²kul, exactly corresponds.⁴ Its waters come from the central part of the Pir Pant²sāl Range round Mount Tatakūṭi, its chief sources being the mountain-streams marked as 'Sangsofed' (Sangsafēd) and 'Yechara' on the map. The confluence of the Vitastā and Dūdgāṅgā, opposite to the old quarter of Diddāmaṭha, is still a Tīrtha of some repute and is probably alluded to already by Bilhaṇa.⁵

¹ Kś. kul < Skr. kulyā is the ordinary term for small streams or canals.

² For detailed evidence of this identification, see Rājat. viii. 732 note.

³ Vikramāṅkac. xviii. 7.

⁴ See Vitastāmāh. xxii; Svetagāṅgāmāh., etc. Skr. śveta becomes in Kś. by regular phonetic conversion chuth, fem. chats².

The Nīlamata curiously enough does not mention the Dūdgāṅgā unless it is meant by Kṣīranadī, 1281. The latter name, meaning 'the river of milk,' is given to the Dūdgāṅgā by a passage of the modern Vitastāmāhātmya, xxii.

⁵ See Vikram. xviii. 22.

SECTION VI.—LOWER COURSE OF THE VITASTĀ.

68. Immediately below Śrīnagar we come to marshes which stretch along both sides of the river for a considerable distance. Those on the left bank, of which the Hukh^asar and Pañzⁱnōr Nambal are the nearest, are fed by mountain-streams of smaller volume. The marshes to the north of the river are more extensive and belong to the Delta of the Sind River, the greatest tributary of the Vitastā within the Valley.

Our survey of the northern range of mountains has already taken us to the true headwaters of the Sind near the **The Sindhu.** Zōji-Lā and the Ṃburnāth Peak. Its traditional source in the sacred Gaṅgā-lake on Mount Haramukh has also been noticed. This great river has a course of over sixty miles and drains the largest and highest portion of the mountain-chain in the north. Its ancient name, SINDHU, means simply 'the river' and is thus identical with the original designation of the Indus.¹ The Rājatarāṅgiṇī mentions the river repeatedly, and it figures largely in the Nilamata, Haracaritacintāmaṇi and the Māhātmyas.² Everywhere it is identified with the Gaṅgā, as already by Albērūnī's informants. The valley of the Sind forms the district of Lār, the ancient Lahara, one of the main subdivisions of Kaśmīr territory.

Where this valley debouches into the great Kaśmīr plain, near the village of Dud^arhōm, the old *Dugd^hāśrama*, the river spreads out in numerous branches. These form an extensive Delta, covered in its greatest portion by shallow marshes and known as *Anchⁱār*. Its eastern side extends along the strip of high ground which connects Śrīnagar with the foot of the spur at the mouth of the Sind Valley. The western

¹ It is customary in Kaśmīr to distinguish the two rivers by giving the designation of 'the Great Sind (Buḍ Sind),' to the Indus. This is found as '*Brhatsindhu*,' already in the Haracaritacintāmaṇi, xii. 45.

The identity of the two river names has led to a great deal of confusion in geographical works down to the beginning of the present century. The Sind River of Kaśmīr was elevated to the rank of one of the chief sources of the Indus, or else represented as a branch of the great river taking its way through Kaśmīr (!). This curious error is traceable, *e.g.*, in the map of 'L'Empire du Grand Mogol' reproduced in Bernier's *Travels*, ed. Constable, p. 238, from the Paris Edition of 1670, and in the map of Ancient India attached to TIEFFENTHALER, *Description de l'Inde*, 1786, p. 60. Compare HÜGEL, *Kaschmir*, i. p. 330. Even WILSON, writing in 1825, says of the Kaśmīr Sind that "it is not improbably a branch of the Indus."

² See *Rājat.* i. 57 note; also iv. 391; v. 97 sqq.; viii. 1129; *Jonar.* 982; *Śrīv.* iv. 110, 227, etc.

side of the delta is marked by an alluvial plateau which continues the right or western side of the lower Sind Valley down to the river's confluence with the Vitastā. The base of the triangle is the Vitastā itself which between Śrīnagar and this junction flows in a bed separated by artificial banks from the marshes on either side. The waters of the Sind after spreading over this wide Delta leave it in a single channel at its western extremity, opposite to the village of Shādīpūr.

The confluence of the Vitastā and Sindhu has from early times enjoyed exceptional sanctity as a Tīrtha. Kaśmīr tradition, as recorded already in the *Nilamata*, identifies the Vitastā and Sindhu, the largest and holiest rivers of the country, with the *Yamunā* and *Gaṅgā*, respectively. Their junction represents, therefore, the Kaśmīrian equivalent of the famous *Prayāga* at the confluence of the great Indian rivers. The *VITASTĀSINDHUSAMĠGAMA* is often referred to as an important Tīrtha in the *Rājatarāṅgiṇī*, the *Nilamata* and numerous other texts. It is actually known by the name of *PRAYĀGA* to the modern tradition and the *Māhātmyas*.¹ A small island built of solid masonry rises in the river-bed at the point where the waters of the two rivers mingle. It is the object of regular pilgrimages on particular Parvans throughout the year. On it stands an old Cinār tree which to the pious Kaśmīrian represents the far-famed *Ficus Indica* tree of the real *Prayāga*.

Notwithstanding the accumulated holiness of this Tīrtha there is most explicit evidence to show that its present position dates back only to about a thousand years. We owe the knowledge of this interesting fact to the detailed account which Kalhaṇa has given us of the great regulation of the Vitastā carried out under King Avantivarman (A.D. 855-883). As the change in the confluence of the Vitastā and Sindhu forms one of the most striking results of this regulation, Kalhaṇa's account of the latter may conveniently be noticed in the present place. I shall restrict myself to an indication of the main facts connected with these operations, referring for all detailed evidence to Note I (v. 97-100) of my translation.

69. Kalhaṇa tells us in his opening notice² that the produce of Kaśmīr had in earlier times been greatly restricted owing to disastrous floods, particularly from the Mahāpadma or Volur lake, and the general water-locked condition of the country. Drainage operations

¹ For a detailed account of the references to the Vitastā-Sindhusamṅama and the ancient remains near it, see Note I (*Rājat.* v. 97-100), §§ 14, 15; also note iv. 391.

² See *Rājat.* v. 68 sqq.

under King Lalitāditya had led to an increase of agricultural produce. But these works were apparently neglected under his feeble successors, and disastrous floods, followed by famines, became again frequent. In Avantivarman's time *Suyya*, a man of conspicuous talents but low origin, offered to remedy these troubles. Receiving the king's assent for his scheme and the necessary means, he set about regulating the course of the Vitastā with a view to a better drainage of the whole Valley. Omitting legendary details with which evidently popular tradition has embellished *Suyya's* story, the course adopted was briefly the following.

The operations commenced in Kramarājya at the locality called YAKṢADARA where large "rocks which had rolled down from the mountains lining both river banks," obstructed the Vitastā.¹ We have already when describing the Vitastā Valley route, referred to Yakṣadara, the present Dyār²gul, as a spur projecting into the river-bed some three miles below the commencement of the Bārāmūla gorge. Its rocky foot forms the first rapid of the river. By removing the obstructing rocks the level of the river was lowered. Then a stone-dam was constructed across the bed of the river, and the latter thus blocked up completely for seven days. During this time "the river-bed was cleared at the bottom, and stone walls constructed to protect it against rocks which might roll down."² The dam was then removed, and the river flowed forth with increased rapidity through the cleared passage.

I must leave it to competent engineering opinion to decide to what extent and at which point of the Bārāmūla gorge the operations so far described were practicable with the technical means of that age. What follows in Kalhaṇa's account is so matter-of-fact and so accurate in topographical points, that a presumption is raised as to the previous statements also resting, partially at least, on historical facts.

Wherever inundation breaches were known to occur in times of flood, new beds were constructed for the river. One of these changes in the river-bed affected the confluence of the Vitastā and Sindhu, and this is specially explained to us in v. 97-100. The topographical indications here given by Kalhaṇa are so detailed and exact that they enabled me to trace with great probability what I believe to have been the main course of the Vitastā before *Suyya's* regulation.

70. Kalhaṇa describes to us successively the position of the old and
Change of confluence the new confluence relative to certain temples
of Vitastā and situated at the village of Trigrāmī and other
Sindhu. points on the river-banks. Most of these struc-
 tures I have been able to identify, and a close examination of the

¹ See v. 87 sqq.

² Compare v. 92 sq.

general topographical features in their neighbourhood has fully borne out the correctness of Kālhaṇa's account. Without the help of a larger-scale map it would, however, be impossible to explain here accurately the topographical evidence collected.¹ I must, therefore, once more refer to the above-quoted detailed note in my forthcoming work, where a special map, on the scale of one inch to the mile, has been inserted for the illustration of this tract. In the present place I must restrict myself to indicating the main results of my enquiries.

These have shown that while the new confluence which Kālhaṇa knew in his own time, is identical with the present junction opposite Shāḍīpūr,² the old one lay about two miles to the south-east of it, between the village of Trigām and the Par^āspōr plateau. The latter is the site of the great ruins of *Parihāsapura*, first identified by me and shown on the map (see below, § 121.) Trigām marks the position of the ancient *Trigrāmī*, and a short distance south of it stands the temple ruin which I identify with the shrine of Viṣṇu *Vainyasvāmin*.

Kālhaṇa mentions this temple as the point near which "the two rivers, the Sindhu and Vitastā, formerly met flowing to the left and right of Trigrāmī, respectively." Standing on the raised ground before the ruin and turning towards Shāḍīpūr, we have on our left a narrow swamp about a quarter of a mile broad which runs north-east in the direction of Trigām. In this swamp and a shallow *Nāla* continuing it towards Shāḍīpūr, we can yet recognize the old bed of the Sindhu. On the right we have the *Badrihēl Nāla* which divides the alluvial plateau of Trigām and Par^āspōr. This *Nāla* is clearly marked as an old river-bed by the formation of its banks and is still known as such to the villagers of the neighbourhood.

The *Badrihēl Nāla* connects the great swamp to the east known as *Pañzīnōr Nambal* with the extensive marshes stretching west and north-west of Par^āspōr towards the Volur. This channel still serves regularly as an outflow for the *Pañzīnōr Nambal* whenever the latter is flooded from the Vitastā at times of high-water. Were it not for the great embankments which guard the bed of the Vitastā towards the low *Pañzīnōr Nambal*, the latter would still form a regular course of the

¹ In the copies of the map accompanying this memoir the faint outlines by which the engraved Atlas of India sheet marks the low alluvial plateaus, the marshes, and similar features of this tract, have become much effaced. A reference to the original groundmap or the larger Survey map (2 miles to the inch) is hence recommended.

² Shāḍīpūr is a modern contraction for *Shahābuddīnpūr*, the name given to the place by Sultān *Shahābu-d-dīn* (A.D. 1354-73) who founded it, as Jonarāja, 409, tells us, at the confluence of the Vitastā and Sindhu.

river. Even so it is still liable to be invaded by the Vitastā at times of flood. For the swamp as well as the fertile village lands reclaimed around it, lie below the level of the river-bed.¹

The old course of the rivers here briefly indicated explains the curious position of the Nōr (map 'Noroo'). This canal which is of importance for navigation leaves the Vitastā on the left bank just opposite to the present junction with the Sindhu and practically continues the southwesterly course of the latter for some distance. Only about $\frac{1}{3}$ mile of low ground divides the Nōr from the end of the swamp which marks the bed of the Sindhu at the point of its old junction opposite the Vainyasvāmin ruin.

Similarly the position of *Parihāsapura* which King Lalitāditya chose for his splendid capital, becomes now intelligible. The plateau or Karēwa of Par²spōr which still preserves its name is now flanked on the east by the Pa^znōr Nambal and on the west by the marshes of Hār^atrath. Neither of them affords in their present condition the convenient waterway we find invariably near all other Kaśmīr capitals. Before Suyya's regulation, however, the Vitastā flowed as we have seen, immediately to the north of the plateau and at the very foot of the great temples erected here by King Lalitāditya.

71. The object and result of the change of the confluence can, I think, also be traced yet. By forcing the Vitastā to pass north of Trigām instead of south of it, the reclamation of the marshes south of the Volur lake must have been greatly facilitated. The course thus given to the river carries its waters by the nearest way into that part of the Volur which by its depth and well-defined boundaries is naturally designed as a great reservoir to receive the surplus water of dangerous floods. The southern shores of the lake are still to this day the scene of a constant struggle between the cultivator and floods. The reclamation of land which has gone on for centuries in these low marshy tracts,² could never have been undertaken if the Vitastā had been allowed to spread itself over them from the south, the direction marked by its old course.

The change in the confluence of the Vitastā and Sindhu was a necessary condition for the subsequent course given to the united rivers. It

¹ See LAWRENCE, *Valley*, pp, 210 sq. Kālhāṇa's account shows that the huge embankments guarding the Pa^znōr tract must be far older than the times of the Mughals to which they are popularly attributed.

² Compare DREW, *Jummoo*, p. 116, for a description of these tracts and the amphibious ways of the inhabitants who get their living as much from the water as the land around.

was thus closely connected with the general scheme of regulation and drainage. Kalhaṇa indicates this by referring immediately after the above passage to stone-embankments constructed along the Vitastā for seven Yojanas (circ. 42 miles) and the damming-in of the Volur lake.¹

On the land reclaimed new populous villages were founded. From the circular dykes which were built around these villages, they are said to have received the popular designation of *kuṇḍala*, 'ring.' We actually still find two villages on the low ground near the Volur showing in their modern names the ending *kuṇḍal*, derived from Skr. *kuṇḍala*. *Uts^akuṇḍal* (map wrongly 'Watr koondl') and *Mar^akuṇḍal* are situated both close to the left bank of the Vitastā before it enters the marshes at the south-eastern end of the Volur. Their names and position seem to support the assumption that the present northerly course of the river above Trigrāmī and *Shādⁱpūr* is directly due to Suyya's operations.

Kalhaṇa adds that even in his own time, *i.e.*, two and a half centuries later, there were "seen, growing on the banks of the former river-beds, old trees which bore the marks of the boat ropes fastened to them."² Similarly the observant Chronicler noted the old pales securing the embankments "which the rivers displayed when low in the autumn."³ We must be grateful to him for the evident interest with which he ascertained and recorded the details of Avantivarman's operations. For he has thus enabled us even at the present day to trace some of the important changes then effected in the hydrography of the whole Valley.

72. Following the course of the Vitastā below its present confluence with the Sindhu we soon pass the village of *Sambal* where the route from *Srinagar* to the north of the Volur lake and thence to the *Trāg^abal* Pass, crosses the river. Here at some distance from the left bank is the site of the ancient *Jayapura*, the capital founded by King *Jayāpīḍa* in the second half of the eighth century.⁴ It is marked by the village of *And^arkōṭh* situated on an island between the *Sambal* marsh and a branch of the canal known as *Nōr*. An ancient causeway connects the island with the strip of land separating the marsh from the present course of the Vitastā.

¹ See v. 103 *sqq.*

² v. 101.

³ It is still the common belief in *Kaśmīr* that "no embankment on the riverside is sound unless it has a foundation of piles"; LAWRENCE, *Valley*, p. 211. Considering the peaty nature of the soil along the lower course of the river, this belief may be justified by old experience.

⁴ See for the identification of this site, *Rājat.* v. 506 note, and below, § 122.

We should have some difficulty in understanding the position chosen for a town which was intended to be a place of importance if we did not know the great change effected in the course of the river by the subsequent regulation of Avantivarman. In King Jayāpīḍa's time one of the main branches of the Vitastā probably followed the line of the Nōr in this neighbourhood. The island of And²rkōṭh which forms a small alluvial plateau, raised perhaps artificially in parts, was then a convenient site. This is no longer the case since the river flows to the east of And²rkōṭh and at a considerable distance. We can safely attribute to this change the fact that Jayapura like the similarly situated Parihāsapura had fallen into insignificance already before Kalhaṇa's time.

Close to Sāmbal the river passes the foot of an isolated hill known as *Āh²tyung*, rising about a thousand feet above the plain. Under its shelter on the north is the small lake of *Mānasbal* which is mentioned by the name of *Mānasa[saras]* in the *Nīlamata* and by *Jonarāja*.¹ It is about two miles long, and occupying a rock-basin is deeper than the other lakes of the Kāśmīr plains. It is connected with the river by a short channel and partially fed by an irrigation canal carried into it from the Sind River.² Its ancient name is derived from the sacred lake on Kailāsa, famous in the *Purāṇas* and *Epics* and usually located in the *Mansarōvar* of the Tibetan highlands.

A short distance lower down the villages of *U²ṣ²kuṇḍ²al* and *Mar²-kuṇḍ²al* already referred to above, are passed on the left bank. There are various indications which make it probable that in old times the Volur lake reached much closer to these villages than it does at present. *Kalhaṇa*'s reference seems to indicate that these villages enclosed by circular dykes were actually reclaimed from the lake, and *Jonarāja* still places them on the very shore of the lake.³ In the same way *Srīvara* speaking of the villages stretching from *Samudrakōṭa*,⁴ the present *Sud²rkōṭh*, to the vicinity of *Dvārikā*, near *And²rkōṭh*, seems to place them along the shore of the Volur.

A glance at the map shows that the land on the left bank of the river below the 'Kunḍala' villages projects like a peninsula into the lake.

¹ As *Jonarāja*, 864 sq., makes the ancient name quite certain, the latter could have safely been shown on the map. In some passages of the *Nīlamata* and *Māhātmyas* it might be doubted whether this lake or the *Uttaramānasa* on Mount *Haramukh* is intended; see however *Nīlamata*, 1338, where the *Mānasa* lake is mentioned after the *Vitastāsindhusaṅgama*.

² The construction of this canal is ascribed by *Jonarāja*, 864 sq., to *Zainu-l-ābidīn*.

³ See *Rājat.* v. 120, and *Jonar.* 1230, (Bo. ed.).

⁴ See *Srīv.* i. 400 sq.

It can be safely assumed that the creation of this strip of land which now accompanies the river-channel for some seven miles farther, is due to the continual deposits of silt. This silting-up process is still going on in this as in other portions of the Volur where streams enter it, and is likely to reduce the expanse of the lake still further in the future.¹

A striking proof for the gradual change thus effected is afforded by the position of the artificial island known now as Zain^alānk. It was constructed by King Zainu-l-‘ābidīn from whom it took its proper designation of *Jainalānkā*. It was then, according to Jonarāja’s description, in the middle of the Volur where the water was deep.² It is now situated in a shallow marsh close to the present embouchure of the river.

73. The great lake, with the southern shores of which we have already become acquainted, is a very important feature in the hydrographic system of Kaśmīr. It acts as a huge flood-reservoir for the greatest part of the drainage of Kaśmīr and gives to the western portion of the Valley its peculiar character. Its dimensions vary at different periods, owing to the low shores to the south being liable to inundation. In normal years the length of the lake may be reckoned at about 12 and its width at 6 miles, with an area of about 78 square miles. In years of flood the lake extends to about 13 miles in length and 8 miles in width.³ Its depth is nowhere more than about 15 feet and is continually lessening in those parts where the streams debouch into it. Notwithstanding this slight depth navigation on the lake often becomes dangerous when violent storms sweep over it from the mountains in the north. The boundaries of the lake are ill-defined in the south and partly in the east; the marshes and peaty meadows merge almost imperceptibly into the area of the lake. On the north the shores slope up towards an amphitheatre of mountains from which some rocky spurs run down to the water’s edge. The fertile tract at the foot of these mountains forms the ancient *Khūyāśrama*, the modern Pargaṇa of *Khuyāhōm*.

The ancient name of the lake is MAHĀPADMASARAS, derived from the Mahāpadma Nāga. Nāga *Mahāpadma*, who is located in the lake as its tutelary deity. This designation is by far the most common in the Chronicles, the Nīlamata, and other old

¹ Compare DREW, p. 166, and LAWRENCE, *Valley*, p. 20. The latter author is probably reproducing a popular tradition when mentioning that in King Zainu-l-‘ābidīn’s time the waters of the Volur stretched south to Aśam and Śambal.

² See *Jonar.* (Bo. ed.) 1227 sqq. The name Jainalānkā was mutilated in the Calcutta edition; else it would have been shown on the map.

³ See LAWRENCE, p. 20.

texts.¹ It is also used, as we have seen, in the description of Kaśmīr given by the T'ang annals.

The name *Ullola* from which the present Volur (*vulgo* 'Woolar') seems to be derived, is found only in one passage of Jonarāja's Chronicle and in a single modern Māhātmya.² Skr. *ullola* can be interpreted to mean 'turbulent' or '[the lake] with high-going waves.'³ Those who have experienced the sensation of crossing the lake with a strong wind, will readily allow the appropriateness of this designation. Yet it is impossible to dismiss altogether the suspicion that the name which seems wholly unknown to the older texts, may be only a clever adaptation of the Kaśmīrī name Volur or its earlier representative. It is certainly curious that in modern Māhātmyas we meet with Ullola as a name for the Vulgar Pargaṇa, the genuine ancient designation of which is Holadā.⁴ Jonarāja in his commentary on Śrīkaṅṭhacarita, iii. 9, uses Ullola as a paraphrase for Mahāpadma.

74. From an early date various legends seem to have clustered around this, the greatest of Kaśmīr lakes. The Nilamata relates at length how the lake became the habitation of the Mahāpadma Nāga.⁵

**Legends of Mahā-
padma Nāga.**

Originally it was occupied by the wicked Nāga Ṣaḍaṅgula who used to carry off the women of the country. Nīla, the lord of Kaśmīr Nāgas, banished Ṣaḍaṅgula to the land of the Dārvas. The site left dry on his departure was occupied by a town called *Candrapura* under King Viśvagaśva. The Muni Durvāsas not receiving hospitable reception in this town, cursed it and foretold its destruction by water. When subsequently the Nāga Mahāpadma sought a refuge in Kaśmīr and asked Nīla for the allotment of a suitable habitation, he was granted permission to occupy Candrapura. The Mahāpadma Nāga thereupon approached King Viśvagaśva in the disguise of an old Brahman and asked to be allowed to settle in the town with his family. When his prayer was agreed to he shewed himself in his true form and announced to the King the approaching submersion of his city. At the Nāga's direction the King with his people emigrated and founded two Yojanas further west the new town of *Viśvagaśvapura*. The Nāga then converted the city into a lake, henceforth his and his family's dwelling place. A recollection of this legend still lives in popular tradition, and the ruins of the doomed city are supposed to be sighted occasionally in the water.

¹ For detailed references see *Rājat.* iv. 593 note.

² See *Jonar.* (Bo. ed.) 1227-30; *Dhyāneśvaramāh.* 30, 33.

³ See BÜHLER, *Report*, p. 9.

⁴ See *Vitastāmāh.* v. 48; *Haridrāgaṇeśamāh.*

⁵ See *Nilamata*, 976-1008, and BÜHLER, *Report*, p. 10.

Another legend has found a lengthy record in Kalhaṇa's narrative of King Jayāpīḍa's reign, iv. 592 *sqq.* The Nāga Mahāpadma being threatened with desiccation by a Draviḍian sorcerer, appeared to the King in his dream and asked for protection. As a reward he promised to show a gold mine to the King. Jayāpīḍa agreed to the Nāga's prayer. Curiosity, however, induced him to let the Draviḍian first try his magic on the lake. When the waters had been dried up so far that the Nāga and his dependents were seen as human-faced snakes wriggling in the mud, the king interfered and caused the lake to be restored. The Nāga, however, resented the insult and showed to the king only a rich copper ore instead of the gold mine.

With reference to a Purāṇic legend the Mahāpadma is sometimes identified with the Nāga *Kāliya* who was vanquished by Kṛṣṇa. As the foot of the god when touching the Nāga's head made lotuses (*padma*) appear on it, Mahāpadma is treated by Kaśmīrian poets as another form of Kāliya.¹

75. Of the streams which fall into the Volur lake besides the Vitastā, the stream of the *Baṇḍāpōr* Nāla is the most considerable. It drains the range between Mount Haramukh and the Trāg^abal Pass and forms a small Delta of its own to the north of the lake. Its ancient name is *Madhumatī*.² It is repeatedly mentioned in the *Rājatarāṅgiṇī* in connection with the route leading to the Dard territory, but must be distinguished from another, smaller *Madhumatī* which flows into the *Kiṣaṅgaṅgā* near the *S'āradātīrtha*.

The outflow of the lake's waters is at its southwest corner about two miles above the town of *Sōpūr*. The latter is the ancient *Suyyapura*, founded by Suyya and commemorating his name.³ If we may judge from the position of the town and the words used by Kalhaṇa in another passage,⁴ it appears probable that the operations of Avanti-varman's great engineer extended also to the river's bed on this side of the lake.

About four miles below *Sōpūr* the Vitastā which now flows in a winding but well-defined bed, receives its last considerable tributary within Kaśmīr. It is the *Pohur* which before its junction has collected the various streams draining the extreme northwest of the Valley.

¹ Compare *S'rīkaṇṭhac.* iii. 9; *Jonar.* 933, and my note *Rājat.* v. 114.

² See *Rājat.* vii. 1179 and note 1171; also viii. 2883; *Nīlamata* 1259 *sqq.*, 1398, etc.

³ See *Rājat.* v. 118 note.

⁴ V. 104: "Trained by him, the Vitastā starts rapidly on her way from the basin of the Mahāpadma lake, like an arrow from the bow."

This portion of the country figures but little in Kalhaṇa's narrative ; hence we find in the Rājatarāṅgiṇī no reference to the Pohur or any of its affluents. The old name of the river is uncertain. Jonarāja in a passage which is found only in the Bombay edition, calls this river *Pahara* ; the Māhātmyas vary between *Prahara* and *Prahāra*.¹ Of the side-streams the Māv^{ur} (map 'Maur') flowing through the Maḥi^pōr Pargaṇa is named in the Nīlamata as *Māhurī*.² The name of the Hamal stream is identical with that of the Pargaṇa through which its course lies, the ancient *Samālā*.³

About 18 miles from the point where the Vitastā leaves the Volur, it reaches the entrance of the gorge of Bārāmūla. Through this defile we have already before followed the course of the river. At Bārāmūla navigation ceases. After passing with a violent current the ravine immediately below the town, the river, so placid within the Valley, turns into a large torrent rushing down in falls and rapids.

SECTION VII.—SOIL AND CLIMATE OF THE VALLEY.

76. Our survey of Kaśmīr rivers has taken us along that great flat of river alluvium which forms the lowest and most fertile part of the Valley. We must now turn to the higher ground of the Vale which consists of the peculiar plateaus already alluded to.

Alluvial Plateaus (Uḍar).

flat of river alluvium which forms the lowest and most fertile part of the Valley. We must now turn to the higher ground of the

The genuine Kaśmīrī term for these plateaus is *uḍar*, found in its Sanskrit form as *uḍḍāra* in the Chronicles. Another modern designation of Persian origin now often used, is *karēwa*. The word *uḍḍāra* is twice found as an ending of local names in the Rājatarāṅgiṇī⁴, while the latter Chronicles use it frequently in designations of well-known plateaus.⁵ An earlier Sanskrit term no longer surviving in use, is *sūda*, originally meaning 'barren waste ground.' Kalhaṇa employs it when speaking of the well-known Dām^adar Uḍar.⁶

The Uḍars of the Kaśmīr Valleys are usually considered by geologists to be due to lacustrine deposits. They appear either isolated by

¹ See *Jonar.* (Bo. ed.) 1150, 1152 ; *Vitastāmāh.* xxvii. 2 ; *Svayambhūmāh.*

² *Nīlamata*, 1322 sqq.

³ See *Rājat.* vii. 159 note.

⁴ *Locanodḍāra* and *Dhyānodḍāra*, *Rājat.* viii. 1427 note.

⁵ See *Gusikōḍḍāra*, the Uḍar of Gūs near Rāmuh, *Srīv.* iv. 465, 592, 596 ; *Dāmodarodḍāra*, the Dām^adar Uḍar, *Srīv.* iv. 618 ; *Laulapuroḍḍāra*, Fourth Chron. 175, etc.

⁶ See *Rājat.* i. 156 note.

lower ground around them or connected by very gentle slopes with spurs descending from the mountains. Often the tops of these plateaus seem almost perfectly flat, forming table lands of varying dimensions. They rise generally from 100 to 300 feet above the level of the ravines and valleys which intersect them, and through which the streams from the mountains and their own drainage find their way to the Vitastā. Most of the Uḍars are found on the south-western side of the Valley, stretching from S'upiyan to Bārāmūla. But they also occur across the river on the north-eastern side of the Valley, and at both extremities of the river-flat in the south-east and north-west.

Owing to the inferiority of the soil and the difficulty of irrigation, the Uḍars show a marked difference in point of fertility from other parts of the Valley. Those which slope down from the foot of the mountains have been brought under cultivation with the help of water-courses conducted over them from the higher ground behind. Most of these irrigation-channels are, no doubt, of ancient date, and some are specially mentioned in the Chronicles. To other Uḍars, particularly those which are entirely isolated, water could not be brought. These are either barren wastes covered with low jungle or if cultivated, yield only precarious crops owing to the uncertainty of the rainfall.

Some of the Uḍars, owing to their position near the Vitastā or for other reasons, are sites of importance in the ancient topography of Kaśmīr. Such are the plateaus of Mārtāṇḍa, Cakradhara, Padmapura, Parihāsapura. Another, the 'Uḍar of Dāmodara,' plays an interesting part in the legendary lore of the country. All these will be duly noticed in the next chapter.

77. Climatic conditions are so closely connected with a country's topography that the few old notices and references which we have regarding those of Kaśmīr, may fitly find mention here.

Kaśmīr climate.

The only distinct account of the Kaśmīr climate is given by Albērūnī.¹ He clearly indicates the reason why Kaśmīr is exempt from the heavy Monsoon rains of India proper. When the heavy clouds, he explains, reach the mountains which enclose Kaśmīr on the south, "the mountain-sides strike against them, and the clouds are pressed like olives or grapes." In consequence "the rain pours down and the rains never pass beyond the mountains. Therefore Kaśmīr has no *varṣakāla*, but continual snowfall during two and a half months, beginning with Māgha, and shortly after the middle of Caitra continual rain sets in for a few days, melting the snow and cleansing the earth. This rule has seldom an exception; however, a certain amount of extraordinary meteorological occurrences is peculiar to every province in India."

¹ See *India*, i. p. 211.

That this description is on the whole as accurate as Albērūnī's other data regarding Kaśmīr, will be easily seen by a reference to the detailed statements of Mr. LAWRENCE and Mr. ELIOT.¹ What chiefly characterizes the climate of Kaśmīr as against that of the Indian plains, is the absence of a rainy season and the equally marked absence of excessive heat. The moderate temperature of the Kaśmīr summer is ensured by the high elevation of the Valley, and has at all times been duly appreciated by its inhabitants as well as its visitors.

Kalhana already proudly claims this exemption from the torments of a fierce sun as one of the favours accorded to his country by the gods.² His enthusiastic description of a Kaśmīr summer passed "in the regions above the forests" shows that he was no stranger to the charms of that season in the alpine parts of the country.³ More than once he refers to the sufferings which the heat of an Indian summer outside the Valley inflicts on Kaśmīrian exiles. Even in the hill regions immediately to the south of Pīr Panṭsāl the hot season with its accompanying fevers has often proved disastrous to the Kaśmīrian troops employed there.⁴

On the other hand we find also the rigours of a Kaśmīr winter duly illustrated by the Chronicle's narrative. We may refer to the description of the heavy and continued snowfall which followed Sussala's murder in Phālguna of 1128 A.D., the freezing of the Vitastā in the winter of 1087-8 A.D., etc.⁵ The graphic account of Bhoja's flight to the Upper Kiṣangaṅgā Valley shows us in full detail the difficulties which attend a winter-march over the snow-covered mountains to the north of the Valley.⁶ Nor do we fail to be reminded otherwise of the great differences in climate which are implied by the varying altitudes of Kaśmīr localities.⁷

Exceptionally early snowfall in the autumn such as saved the garrison of the frontier fort on the Dugdhaghāta Pass, has always been known and dreaded even low down in the Valley. The danger it represents for the rice crops is illustrated by Kalhana's account of the famines resulting from such premature snowfalls.⁸

¹ See LAWRENCE, p. 24 *sqq.*

² See i. 41.

³ ii. 138.

⁴ Compare vii. 970; viii. 1634, 1830, 1836, 1865; regarding the fever-season of Rājapurī and neighbouring districts, my note viii. 1873.

⁵ *Rājat.* viii. 1376 *sqq.*; 1434 *sqq.*; vii. 592.

⁶ See viii. 2710 *sqq.* It must be remembered that as much as forty to sixty feet of snow falls in a severe winter on the higher ranges around Kaśmīr; see also viii. 411.

⁷ Compare vii. 916; viii. 2511; ii. 138.

⁸ See ii. 18 *sqq.*; viii. 2449.

In this as in other respects there is nothing to suggest any material change of the climatic conditions during historical times. Kalhaṇa, it is true, in describing the reign of Abhimanyu I., speaks of deep snow as "falling each year to cause distress to the Bauddhas" and obliging the king to pass six months of the cold season in Dārvābhisāra. But the whole story there related is nothing but a mere rechauffé of the ancient legend told in the Nīlamata of the annual migrations caused by the presence of the Piśācas. It therefore can claim no historical value whatever.¹

78. Cultivation such as appears to have been carried on in Kaśmīr since the earliest historical period, must necessarily leave its traces in the topography of a country and may hence claim a passing notice.

Rice has as far as we can go back, always been the largest and most important produce of the Valley. Its character as the main cereal is sufficiently emphasized by the fact that it is usually referred to in the Chronicles by the simple term of *dhānya* 'grain.'² The conditions of its cultivation presuppose an extensive system of irrigation, and for this the Kaśmīr Valley with its abundance of streams and springs is admirably adapted by nature. The elaborate arrangements which exist at present for taking water from the streams large and small and distributing it over all the ground capable of irrigation, will be found fully detailed in Mr. LAWRENCE'S valuable and exhaustive account of Kaśmīr agriculture.³ There is every reason to believe that they have come down with little, if any, change from a very early period.

Many of the larger irrigation channels which intersect the fertile alluvial flats, or skirt the terraced slopes of the Uḍars and mountain-sides, are shown on the map; see, *e.g.*, the tracts on the lower course of the Lidar, Veśau, Sind, and other rivers. In old times when the population was larger than now, much land which is at present allowed to lie waste on the hill-sides, on the Uḍars and in the low-lying tracts by the marshes, must have been under cultivation.⁴ I have often come across traces of old irrigation-cuts long ago abandoned, which brought down the water of the melting snows from alpine plateaus high above the forest zone. Their distance from any lands capable of rice-cultivation is so great

¹ See i. 180, and note i. 184.

² "The Kashmīris, so far, have considered no crop worthy of attention save rice;" LAWRENCE, *Valley*, p. 319.

³ See *Valley*, pp. 323 sq.

⁴ Compare *Valley*, pp. 239 and 356, as to the extensive areas which were once cultivated and are likely to be so again in future.

and the trouble of their construction must have been so considerable that only a far greater demand for irrigation than the present one can account for their existence.

In the earliest traditions recorded by Kalhana the construction of irrigation canals plays already a significant part. The *Suvarṇamanikulyā* which is ascribed to King Suvarṇa and which still brings water to a great part of the Āḍ²vin district, has already been noticed.¹ The reference to the aqueduct by which King Dāmodara is supposed to have attempted to bring water to the great Uḍar named after him, though legendary in the main, is also characteristic.² Lalitāditya is credited with having supplied villages near Cakradhara (Tṣak²dar) with the means of irrigation by the construction of a series of water-wheels (*araghaṭṭa*) which raised the water of the Vitastā.³

To Suyya, however, Avantivarman's engineer, is ascribed the merit of having on an extensive scale secured river-water for village-lands. From Kalhana's detailed description it is evident that Suyya's regulation of the Vitastā was accompanied by systematic arrangements for the construction of irrigation channels. For these the water of various hill-streams was utilized as well as that of the main-river. The size and distribution of the water-course for each village was fixed on a permanent basis. He is thus said "to have embellished all regions with an abundance of irrigated fields which were distinguished for excellent produce." The increase in produce consequent on these measures and the reclamation of new lands from the river and marshes is said to have lowered the average price of a Khāri of rice from two hundred to thirty-six Dinnāras.⁴

The importance of irrigation from a revenue point of view must have always been recognized by the rulers of the country. Hence even in later times we find every respite from internal troubles marked by repairs of ancient canals or the construction of new ones. The long and peaceful reign of Zainu-l-'ābidīn which in many respects revived the traditions of the earlier Hindu rule, seems in particular to have been productive of important irrigation works. Jonarāja's and Śrīvara's Chronicles give a considerable list of canals constructed under this king.⁵ Among these the canal which distributed the water of the Pohur River over the Zain²gīr Pargana, and the one by which the

¹ See above, § 64.

² See *Rājat.* i. 156 sq. note.

³ See *Rājat.* iv. 191 note.

⁴ See *Rājat.* v. 109-112 and note.

⁵ See *Jonar.* (Bo. ed.) 1141-55, 1257 sqq. ; *Śrīv.* i. 414 sqq. For repairs of old canals, see *Rājat.* viii. 2380.

water of the Lidar was conducted to the arid plateau of Mārtāṇḍa, deserve special mention. In the latter locality some work of this kind must have existed already at a far earlier period. Or else we could scarcely understand how it could have been chosen as the site for Lalitāditya's magnificent temple and the flourishing township which once surrounded it.¹

Of the other products of the Valley only two may be mentioned here, since they have from old times received special attention in all descriptions of the country. Already Kalhaṇa in his introduction designates saffron and grapes among "the things that even in heaven are difficult to find but are common there."² Saffron (*kuṅkuma*) has to the present day remained a famous product of Kaśmīr. Its cultivation has apparently from an early time specially flourished about Padmapura, the present Pāmpar, where the Uḍar lands are still chiefly utilized for it. The Fourth Chronicle describes at length the plant and its treatment. Abū-l-Faẓl mentions it also in the same locality and devotes to it a long notice.³

The grapes of Kaśmīr which Kalhaṇa mentions repeatedly,⁴ have not retained their area of cultivation with equal persistence. They must have enjoyed reputation outside Kaśmīr, because the name *Kaśmīrā* is given by Sanskrit Kośas as the designation of a special variety of grapes.⁵ They were once plentiful at Mārtāṇḍa where both Kalhaṇa and the Fourth Chronicle mention them, and at many other localities.⁶

In Akbar's time grapes were abundant in Kaśmīr and very cheap; but Abū-l-Faẓl notes that the finer qualities were rare.⁷ Since then, viticulture among the people generally has greatly declined. Though vines of remarkable size and age can still be found in many places, they are mostly wild. The produce of grapes is now restricted to a few old gardens at the mouth of the Sind Valley and to the new vineyards established on the Dal shores by the late Mahārāja for the cultivation of French vines.⁸

¹ See *Rājat.* iv. 192.

² i. 42.

³ See Fourth Chron. 926 sqq.; *Āin-i-Akb.*, i. pp. 357 sq.

⁴ *Rājat.* i. 42; iv. 192; vii. 498.

⁵ See *Böhtlingk-Roth*, s. v.

⁶ Fourth Chron. 851, 928.

⁷ *Āin-i-Akb.*, i. p. 349.

⁸ For a detailed account of Kaśmīr vineyards, see LAWRENCE, *Valley*, pp. 351 sq.

79. It will be useful to refer here briefly to the data we possess regarding the old ethnography of Kaśmīr and the adjacent hill regions.

As far as Kaśmīr itself is concerned our information does not allow us to connect any particular localities with ethnic divisions. Judging from Kalhana's Chronicle and what other sources of information are available to us, the population of Kaśmīr has shown already in old times the same homogeneity that it does at present. The physical and ethnic characteristics which so sharply mark off the Kaśmīrī from all surrounding races, have always struck observant visitors to the Valley and have hence often been described.¹ Hiuen Tsiang's brief sketch reproduced above is the earliest in date and yet applies closely to the modern inhabitants.

That the Kaśmīris form a branch of the race which brought the languages of the Indo-Aryan type into India, is a fact established by the evidence of their language and physical appearance. But when their settlement in the country took place, and from which direction they immigrated, are questions beyond the present range of historical research. The purity of race which has often been noted as distinguishing the great mass of the Kaśmīr population, may be admitted with a qualification. It is probably due not only to the country's natural isolation but also to a curious faculty for absorbing foreign elements. Colonies of Mughals, Paṭhāns, Panjābīs, and Pahārīs, settled within comparatively recent times in the Valley, are being amalgamated with remarkable rapidity through intermarriage and other means.

The complete absorption of these settlements which is going on under our own eyes as it were, furnishes a likely analogy for the ethnic history of earlier times. We have reason to assume that Kaśmīr has also in Hindu times been often under foreign rule. It is difficult to believe that the reign of foreign dynasties has not been accompanied also by settlements of immigrants of the same nationality. But it is not likely that these foreign colonies were ever extensive. In any case we find no trace of their having retained a distinct and independent existence.

Various tribal sections of the population are mentioned in Kalhana's narrative, but we have no means of deciding to what extent they were based on race or caste distinctions. The names of the *Lavanyas* and *Tantrins* survive in 'Krāms,' or tribal names, still borne by sections of

¹ For a general account of the Kaśmīrī population DREW's remarks, *Jummoo*, pp. 174 *sqq.*, may still be recommended. Fuller details regarding the various classes, castes, etc., will be found in Mr. LAWRENCE's work, pp. 302 *sqq.*

the Muhammadan rural population (*Lūnī* and *Tāntrī*).¹ But whatever distinctions of race or caste may have originally been indicated by these 'Krāms,' they have long ago disappeared.

It is equally certain from an examination of the Chronicle that these sections were never confined to particular territorial divisions, but spread all over the Valley. The humblest of these sections is probably the one which has least changed its character during the course of centuries. The modern *Ḍūmbs*, the descendants of the old *Dombas*,² are still the low-caste watchmen and village-menials as which they figure in Kalhana's narrative. They, like the still more despised *Vātals* or scavengers, cannot intermarry with other *Kaśmīris*. They have thus retained in their appearance a distinctive type of their own which points to relationship with the gipsy-tribes of India and Europe.

It is difficult to come to any definite conclusion as regards the *Ki-li-to* whom Hiuen Tsiang mentions as a low-born race settled in *Kaśmīr* from early times and opposed to the *Bauddhas*.³ Their name, usually transcribed *Kritiya*, cannot be traced in indigenous records. There is nothing to support their identification with the *Kīras*, as suggested by General Cunningham.⁴ The latter seems to have been a tribe settled somewhere in the vicinity of *Kaśmīr*.⁵

80. The ethnography of the territories immediately adjoining *Kaśmīr* can be traced quite clearly from the notices of the *Rājatāraṅgiṇī*.

Races on *Kaśmīr* borders.

In the south and west the adjacent hill-regions were occupied by *Khaśas*. Their settlements extended, as shown by numerous passages of the Chronicle, in a wide semi-circle from *Kaṣṭavār* in the south-east to the *Vitastā* Valley in the west.⁶ The hill-states of *Rājapurī* and *Lohara* were held by *Khaśa* families; the dynasty of the latter territory succeeded to the rule of *Kaśmīr* in the 11th century. I have shown elsewhere that the *Khaśas* are identical with the present *Khakha* tribe to which most of the petty chiefs in the *Vitastā* Valley below *Kaśmīr* and in the neighbouring hills belong. We have already seen that the

¹ Compare notes v. 248; vii. 1171.

² See *Rājat.* note iv. 475; also v. 353 *sqq.*, vi. 84, 182; vii. 964, 1133, viii. 94. These passages show that the *Ḍombas* also earned their bread as hunters, fishermen, buffoons, quacks, etc., and their daughters as singers and dancers. Their occupations thus closely resembled those of the gipsies whose name, *Rom*, is undoubtedly derived from Skr. *ḍomba*; see *P. W.* s. v.

³ See *Si-yu-ki*, transl. Beal, i. pp. 150, 156 *sqq.*

⁴ See *Anc. Geogr.*, p. 93.

⁵ Compare my note viii. 2767.

⁶ See *Rājat.* i. 317 note.

Khakhas have until very recent times worthily maintained the reputation which their forefathers enjoyed as marauders and turbulent hill-men.

North of the Vitastā Valley and as far as the Kiṣangaṅgā we now find the Bombas as the neighbours of the Khakhas to whom they are closely related. It is probable that the Karnāv district was held by them already in old times. Kalhaṇa seems to comprise them, viii. 3088, under the designation of Khaśa.

The upper Kiṣangaṅgā Valley above S'ardi was in old days already as at present inhabited by Dards (Skr. *Darad*, *Dārada*) who are often referred to by Kalhaṇa as the neighbours of Kaśmir on the north.¹ Their seats extended then too probably much further to the north-west, where they are now found in Citrāl, Yāsīn, Gilgit and the intervening regions towards Kaśmir. Megasthenes already knew them in the Upper Indus regions. Kalhaṇa relating events of his own time speaks of *Mlecchas* further to the north. These might have been Muhammadanized Dards on the Indus, and beyond.²

The regions immediately to the north-east and east of Kaśmir were held by the *Bhauttas*. We have already seen that these represent the people of Tibetan descent, the modern *Butza*, of Drās, Ladākh and the neighbouring mountain districts.³

¹ See *Rājat.* i. 317 note.

² See note viii. 2762-64.

³ See above, § 58.

CHAPTER IV.

POLITICAL TOPOGRAPHY.

SECTION I.—FRONTIERS OF ANCIENT KASMĪR.

81. Our account of the political topography of ancient Kasmīr may conveniently open with a survey of its frontiers. These agree so closely with the natural boundaries of the Valley that we have already had occasion to trace them when dealing with the mountain ranges enclosing the latter. It will however be useful to supplement our information regarding these frontiers by a brief notice of the territories which lay beyond them and formed the neighbours of the Kasmīr kingdom in Hindu times.

Beginning in the south-east we have first the Valley of KĀṢṬHAVĀṬA, the present Kaṣṭāvār ('Kishtwar' of the maps) on the upper Cināb. It is mentioned by Kalhaṇa as a separate hill state in the time of Kalaśa.¹ Its Rājās who were Hindus till Aurangzeb's time, practically retained their independence until the conquest of their territory by Mahārāja Gulāb Singh.

The hill-district of Bhadravāh lower down on the Cināb is once named in the Rājataranṅiṇī as *Bhadrāvakaśa*.² Its Rājās were tributary to Cambā in recent centuries. This was probably the case also in earlier times as we do not find a ruler of Bhadrāvakaśa referred to in Kalhaṇa's lists of hill Rājās.

¹ See *Rājat.* vii. 590 note.

² See *Rājat.* viii. 501 note.

The Rājās of Cambā, the ancient CAMPĀ, on the other hand figure often in the Kaśmīr Chronicle.¹ Their territory has since early times comprised the valleys of the sources of the Rāvī between Kāngra, the ancient Trigarta, and Kāṣṭhavāṭa. The ancient Rājput family which rules this hill state to the present day, often intermarried with the Lohara dynasty which reigned in Kaśmīr.

To the west of Campā and south of Bhadrāvakaśā lay the chiefship of VALLĀPURA, the modern Ballāvar.² Its rulers are repeatedly referred to in Kalhaṇa's narrative and retained their independence as petty hill-chiefs till the rise of the Jammu family early in this century. 'Ballāwar' was known also to Albērūnī.

Of the political organization of the hill-territories between Vallāpura in the south-east and Rājapurī in the north-west we have no distinct information. The Hindu inhabitants of this tract including Ballāvar call themselves now *Dogrās* and their country *Dugar*. This name is traditionally derived from Skr. **Dvigarta*,³ but this term is nowhere found in our historical texts and has probably been created for the sake of an etymology in analogy of the ancient Trigarta. The original of the name seems to be *Durgara*.⁴

It is very probable that the region of the lower and middle hills between the limits indicated was already in old times divided into a number of small chiefships. Of these some eleven seem to have existed up to the time of the extension of the Sikh power into the Panjāb Kōhistān.⁵ They were all absorbed in the growing state of Jammu which was originally one of them.

Among these small hill-chiefs of limited territory but ancient descent, we have probably to class the Ṭhakkura Deṅgapāla on the Cināb who gave his daughter to the pretender *Bhikṣācara* in marriage.⁶ Also the Rājā of KĀNDA must probably be located in this hill tract.⁷ Other Ṭhakkuras in this region are mentioned as levying blackmail on Prince Mallārjuna when on his march to Kaśmīr from the plains.⁸ Immediately at the foot of the Bān^ahāl Pass in the territory of VIṢALĀṬĀ we find the castle of a 'Khaśa lord,' who gave shelter to Bhikṣācara and at the time

¹ Compare *Rajāt.* vii. 218 note, and CUNNINGHAM, *Anc. Geogr.*, p. 141.

² See *Rajāt.* vii. 220 note, and CUNNINGHAM, *Anc. Geogr.* p. 135.

³ See DREW, *Jummoo*, pp. 43 sq.

⁴ Compare the Cambā copperplate, edited by Prof. KIELHORN, *Ind. Ant.*, 1888, p. 9.

⁵ See CUNNINGHAM, *Anc. Geogr.* pp. 133 sqq., where a useful synopsis of the hill-states in the central portion of the Panjāb Kōhistān is given.

⁶ See *Rajāt.* viii. 554 sqq.

⁷ See note vii. 590.

⁸ viii. 1989 sqq.

was evidently independent.¹ Temporarily the Khaśas of the hills immediately south of the Pir Pant̄sāl Range may have acknowledged the suzerainty of strong Kaśmīr rulers. But during the greatest part of the period which is known to us from historical sources, they appear to have held their own and rather to have levied subsidies, *i.e.*, blackmail from the Kaśmīr rulers.²

82. Some of the petty hill states here referred to must have been included in the region which by its ancient name was known as DĀRVĀBHISĀRA. I have elsewhere shown that this name, as a geographical term, was applied to the whole tract of the lower and middle hills between the Candrabhāgā and Vitastā.³ The combined names of the Dārvas and Abhisāras are found already in the ethnographical lists of the Mahābhārata and Brhatsamhitā. A chief of this region figures by the ethnic appellation of *Abisares* in the accounts of Alexander's Indian campaign.

The most important of the hill-states in this territory was certainly the ancient RĀJAPURĪ represented by the modern district of Rajaurī.⁴ It comprised the valleys drained by the Tohī of Rajaurī and its tributaries. Owing to its position on the most direct route to the Panjāb, Rājapurī was necessarily often brought into political relations with Kaśmīr. When Hiuen Tsiang passed through it, the 'kingdom of Rājapurī' was subject to Kaśmīr. From the 10th century onwards we find the chiefs of Rājapurī as practically independent rulers, though the Chronicle tells us of numerous expeditions undertaken into their territory by the later Kaśmīr kings. The upper valley of the Tohī of Prūnt̄s leading to the Pir Pant̄sāl Pass, was included in Rājapurī territory.⁵ Here lay probably the famous strong-hold of *Rājagiri* known also to Albērūnī.⁶

Rājapurī took its name from its capital which is repeatedly mentioned by Kalhaṇa and undoubtedly occupied the position of the present town of Rajaurī.⁷ The ruling family belonged to the Khaśa tribe. Its descendants were the Muhammadanized Rājput chiefs who retained this territory down to the present century.

On the north-west Rājapurī was adjoined by the territory of

¹ viii. 1665 *sqq.*

² See *Rājat.* viii. 2283 note.

³ See note i. 180.

⁴ For a detailed account, see *Rājat.* vi. 286 note.

⁵ See *Rājat.* viii. 959 note.

⁶ See vii. 1270 note.

⁷ See vii. 973 *sqq.*

LOHARA.¹ The chief valley belonging to this hill-state was the present Loharin which we have already visited when examining the Tōṣ²maidān route. Lohara became important for Kāsmīr from the end of the 11th century when a branch of its ruling family acquired the Kāsmīr throne. Subsequently this branch succeeded also to Lohara which thus became united to Kāsmīr under the same ruler. As the ancestral home and stronghold of the dynasty, the castle of Lohara has played a great part during the last reigns related by Kalhaṇa. The chiefs of Lohara are distinctly named as belonging to the Khaśa tribe.

Lohara seems to have included in those times also the town and district of PARṆOTSĀ corresponding to the present Pūnch or Prūntṣ (the Kāsmīrī form), in the lower valley of the Tohī (Tauṣī).³ In Hiuen Tsiang's time Parṇotsa gave its name to the whole hill-state which was then tributary to Kāsmīr. The Muhammadan Rājās of Prūntṣ, closely related to the Khakhas of the Vitastā Valley, remained more or less independent till the conquest of Mahārāja Gulāb Singh. Their territory forms now a separate small principality under a branch of the Jammu family. Parṇotsa being on the great route to the western Panjāb is often mentioned in the Kāsmīr Chronicles. The large percentage of the Kāsmīrī element in the population of Prūntṣ attests the closeness and ancient date of its relations to Kāsmīr.

The hills to the south-west of Prūntṣ were held till early in this century by petty chiefs, known as the Rājās of *Kōtlī*. It is possible that the small hill-state of KĀLIÑJARA repeatedly referred to by Kalhaṇa and known also to Ferishta, lay in this direction.³

Proceeding to the north-west of Parṇotsa we come to the valley of the Vitastā. This, as has already been shown above, was held in old times as an outlying frontier-district of Kāsmīr as far down as BOLYĀSAKA, the present Buliāsa. Beyond this point it was occupied by Khaśas. In Muhammadan times the valley was divided between several petty chiefs of the Khakha and Bomba clans who seem to have acknowledged as their nominal head the Khakha Rājā of Muẓaffarābād. The portion of the valley between Muẓaffarābād and Buliāsa bore the old name of DVĀRAVATĪ from which the modern designation of this tract, *Dvārbidī*, is derived (see above, § 53).

¹ Compare for the history of *Lohara* and its various localities, Note *E*, *Rājat.* iv. 177, reproduced in *Ind. Ant.*, 1897, pp. 225 sqq.

² See for details note iv. 18. Hiuen Tsiang's reference shows that the town of *Parṇotsa* must be older than the time of Lalitāditya to whom Kalhaṇa ascribes its foundation.

³ See note *Rājat.* vii, 1256.

83. Further to the west and beyond the course of the Vitastā after its great bend, lay the ancient kingdom of Uraśā-Hazāra. of Uraśā.¹ Its greatest part is comprised in the British district of Hazāra, between the Vitastā and Indus. It is the *Oṽapora* or *Apōra* of Ptolemy; its ruler figured as *Arsakes* in the accounts of Alexander's campaigns. Hiuen Tsiang mentions the territory by the name of *Wu-la-shi* and found it tributary to Kaśmīr. Though this dependence seems soon to have ceased we find Uraśā often referred to in the *Rājataranṅiṇī*. The account of Śaṁkaravarman's ill-fated expedition in this direction furnishes us with a clue as to the position of the old capital of Uraśā. It probably lay between the present Mansahra and Abbottabad.² Kalhaṇa's notice of an expedition undertaken in his own time mentions in Uraśā the town of *ATYUGRAPURA*.³ I have shown in my note on the passage that this locality is probably represented by the modern *Agrōr*, situated on the border of Hazāra towards the 'Black Mountains.' We have an intermediary form of the name in Ptolemy's *Ἰθάγouρος*, given as the designation of a town in Uarsa or Arsa north of Taxila.

In Muhammadan times Uraśā was included in the region known as Pakhli. This is defined by Abū-l-Faẓl as comprising the whole of the hill territory between Kaśmīr in the east and the Indus on the west.⁴ To Pakhli belonged also the lower valley of the Kiṣangaṅgā and the valleys of the streams which flow into the latter from the Kājnāg Range and the mountains to the north-west of Kaśmīr.

This tract which is now known as *Karnau*, bore the old name of **Kiṣangaṅgā Valley.** *KARṆĀHA*. It seems to have been held by small chiefs nominally tributary to Kaśmīr even in later Hindu times.⁵ It is but rarely mentioned in the Chronicle. The inhabitants were *Khaśas*,⁶ who are represented by the modern Bomba clans still holding Karnau. Their *Rājās* were practically independent till the Sikh conquest and often harried the north-western parts of Kaśmīr.⁷ The last irruption of the Karnau Bombas and their allies, the *Khakha* chiefs of the Vitastā Valley, occurred as late as 1846.

¹ For a detailed synopsis of the old notices, see *Rājat.* v. 217 note.

² See *Rājat.* v. 217 note and CUNNINGHAM, *Anc. Geogr.*, p. 104.

³ Compare note viii. 3402.

⁴ See *Āīn-i-Akb.*, ii. pp. 390 sq.

⁵ Compare *Rājat.* viii. 2485 note.

⁶ See viii. 2756, 3006, 3088.

⁷ Compare for the modern Karnau, BATES, *Gazetteer*, p. 228.

The valley of the Kiṣangaṅgā above its junction with the Karnau river and as far as S'ardi, forms a separate tract known as *Drāva*. This is possibly the DURĀṆḌA mentioned in a passage of Kalhaṇa's Chronicle.¹ The northernmost portion of the tract seems to have been a dependency of Kaśmīr even during the later Hindu reigns. At S'ardi we find the shrine of S'aradā, one of the most sacred Tīrthas of old Kaśmīr. To this as well as an old feudal stronghold in its neighbourhood we shall have occasion to refer thereafter (§ 127).

Through S'ardi leads a route to Cilās on the Indus. But this territory as well as the other portions of the Upper Indus Valley lay apparently quite beyond the sphere of Kaśmīr political influence. Hence we meet nowhere in the Chronicles with their ancient names.

84. Immediately above S'ardi the valley of the Kiṣangaṅgā turns, as we have seen, into a narrow uninhabited gorge. At the other end of this gorge we reach the territory of the Darads. Their settlements on the Upper Kiṣangaṅgā and its tributaries seem to have formed a separate little kingdom, called by a general name DARADDEŚA in the Chronicle.² Its inhabitants who bore Hindu names, more than once attempted invasions of Kaśmīr. DARATPURĪ, 'the town of the Darads,' which was the capital of their chiefs, may have occupied the position of the modern Gurēz (map 'Goorais').³ The latter is the chief place of the valley where the Nawābs governing it till the Sikh conquest resided. The 'Mleccha' chiefs who on two occasions figure as the Darad Rājās' allies from the north, were perhaps rulers of other Darad tribes further towards the Indus who had early been converted to Islām.⁴

Crossing from the head-waters of the Kiṣangaṅgā to those of the Drās River we arrive in high-level valleys inhabited by people of Tibetan race and language, the *Bhauṭṭas* of the Chronicles. The Rājatarāṅgiṇī tells us nothing of the political organization or topography of the Bhauṭṭa territories. It is, however, possible that we have a reference to *Leh*, the capital of Ladākh, in the "foreign country called LOḤ," which Kalhaṇa names in iii. 10.

Nor do the later Chronicles supply us with any details in this direction, though the several invasions which Kaśmīr suffered from this side give Jonarāja and S'rīvara occasion to refer more frequently to the Bhauṭṭas and their rulers. It may, however be noted that S'rīvara

¹ See viii. 2709 note.

² Compare *Rājat.* vii. 911 ; for other references to the Darads, i. 312 note.

³ See vii. 911 note.

⁴ See viii. 2762 note.

already knows the terms 'Little and Great Bhūṭṭa-land.'¹ They refer to Baltistān (Skardo) and Ladākh which have continued to be known to the present day as 'Little and Great Tibet,' or among Kāsmīrīs as *Lukh Buṭun* and *Buḍ Buṭun*.² These terms are in fact of a far older date, as they are found already in the Chinese Annals as *Little and Great Poliu*.³

The eastern frontier of Kāsmīr is, as we have seen, formed by a mountain range which runs from the Zōjī-Lā almost due south towards Kaṣṭāvār. Along this range on the east lies a long narrow valley marked as Maru-Wardwan on the map (in Kāsmīrī *Maḍivāḍvan*). It is drained by a large river which joins the Cināb near the town of Kaṣṭāvār. Owing to its high elevation and the rigours of its climate it is inhabited only by a scanty population. According to Mr. Drew's race map and other authorities, this consists now chiefly of Kāsmīrīs. Whether this was already the case in old times, is uncertain. The Valley is nowhere mentioned in our old Kāsmīrian texts.⁴ It is hence doubtful whether it belonged to Kāsmīr territory in Hindu times. Yet Abū-l-Faḍl counts it among the Pargaṇas of Kāsmīr.⁵ Beyond it to the east stretches an uninhabited belt of high mountains and glaciers, dividing Maḍivāḍvan from the Tibetan tracts of Sūru and Zanskar. To the south we reach once more the territory of Kāṣṭhavāṭa from which our present survey has started.

¹ See *S'riv.* iii. 445 (*Sūksmabrhadbhūṭṭadeśau*).

² *Buṭun* (connected with the ethnic term *Buṭa* < *Bhauṭṭa*; see above, § 58), is the Kāsmīrī term for Tibet in general.

³ Compare A. RÉMUSAT, *Nouveaux mélanges asiatiques*, i. p. 194; and SIR H. YULE, *Cathay*, p. lxx.

⁴ The *Trisaṃdhyāmāhātmya* which refers to the Valley as *Maḍavātīra*, cannot claim any particular antiquity.

⁵ See *Āin-i-Akb.*, ii. p. 369.

SECTION II.—ANCIENT POLITICAL DIVISIONS.

85. The Valley of Kaśmīr to which we may now return has from early times been divided into two great parts, known by their modern names as *Kamrāz* and *Marāz*. These terms are derived from Skr. *KRAMARĀJYA* and *MAḌAVARĀJYA*, which are found very frequently in the *Rājatarāṅginī* as well as the later Chronicles.¹ The original form of the modern *Kamrāz* was known to the tradition of the Śrīnagar Paṇḍits generally. With the old name *Maḍavarājya*, however, I found only those few acquainted who, like the late Paṇḍit Dāmodara and Paṇḍit Govind Kaul, had specially studied Kalhaṇa's Chronicle.

According to the generally prevailing notion *Marāz* comprises the districts on both sides of the *Vitastā* above Śrīnagar, and *Kamrāz* those below. The present tradition places the boundary of the two great divisions more accurately at the *Shērgarhi* palace. That the boundary was already in old times indicated by a line drawn through the capital is easily proved by an examination of all passages in the *Rājatarāṅginī* and other Chronicles naming *Maḍavarājya* and *Kramarājya*. They invariably show localities situated above Śrīnagar in the former and those below in the latter division.

We arrive at the same result on a reference to the *Āin-i Akbarī*. *Abū-l-Faẓl* distinctly informs us that "the whole kingdom was divided under its ancient rulers into two divisions, *Marāj* on the east and *Kamrāj* on the west."² He then proceeds to tabulate the thirty-eight *Pargaṇas* into which Kaśmīr was divided under Akbar's administration, separately under the two main-heads of *Marāj* and *Kamrāj*. The city of Śrīnagar is counted with the former, and so are also all *Pargaṇas* above the capital, while those below are shown in *Kamrāj*.

The term of *Kamrāz* has in modern times occasionally been used also in a more restricted sense, for the designation of the *Pargaṇas* to the west and north-west of the *Volur* lake. This usage probably arose from the fact that at various periods several of the small *Pargaṇas* in this portion of the Valley were for administrative purposes grouped together in one *Pargaṇa*, to which the name *Kamrāz* was given.³ This

¹ See my note on *Rājat.* ii. 15.

² Compare *Āin-i Akb.*, ii. p. 368.

³ Thus *Abū-l-Faẓl's* table seems to show that in Akbar's time the old *Pargaṇas* of *Uttar*, *Lolau*, *Hamal* and *Maḥīpūr* were embodied in the large *Pargaṇa* of 'Kamrāj'; see *Āin-i Akb.*, ii. p. 371. In *Moorcroft's* and *Baron Hügel's* list the *Pargaṇa* *Kamrāj* includes *Uttar*, *Hamal* and *Maḥīpūr*. Owing to the frequent changes

circumstance explains the different accounts referred to by Prof. Bühler in his note on the term Kramarājya.¹

Though the terms Maḍavarājya and Kramarājya are so often employed in the Chronicles, we have no distinct evidence of the two divisions having in Hindu times formed separate administrative units or provinces. It is possible that this was the case at one or the other period. But Abū-l-Faḍl's account as well as the usage traceable from his time to the present day show that the terms in their popular geographical significance could maintain themselves quite independently of actual administrative divisions.²

Administrative Districts. 86. The whole of the Valley has from an early date been subdivided for administrative purposes into a considerable number of small districts known in recent times as 'Pargaṇas.' Their ancient designation was *viṣaya*.³ The number, names and limits of these subdivisions have been subject to considerable variations during the period over which our documents extend.

The great majority of the Pargaṇas known in recent times can be safely assumed to have existed already during the Hindu rule. This is proved by the fact that the names of numerous Pargaṇas are found in their ancient forms already in the Rājatarāṅgiṇī and the other Chronicles. But these texts do not furnish us anywhere with a complete list of the Pargaṇas. It is hence impossible for us to restore in full detail the map of the administrative sub-divisions for any particular epoch

of the Pargaṇa divisions (see below) the extent of the 'Pargaṇa Kamrāj' has also varied from time to time.

¹ See *Report*, p. 11.

² The only trace I can find of a general division of Kaśmīr other than that into Maḍavarājya and Kramarājya, is contained in an unfortunately corrupt and fragmentary passage of the Lokaparakāśa, iv. It seems to divide the twenty-seven Viṣayas or Pargaṇas of Kaśmīr (see below) into three tracts, viz. (i) *Kramarājya* from Khōyāśrāmika onwards (Khuyāhōm, the old Khūyāśrama is meant); (ii) *Madhyamarājya* from the Cānūlā [river ?] to Lahara or Lār; (iii) *Maḍavarājya* from *Srīvantaka* (?).

The text is in a deplorable condition and the explanation of Cānūlā and Srīvantaka quite uncertain. The former may be the river of doubtful name and identity referred to in Rājat. note v. 109. It appears as if at the time to which the Lokaparakāśa's notice goes back, an intermediate slice of territory had been formed between Kramarājya and Maḍavarājya and dubbed *Madhyamarājya* 'the middle province.' Five thousand villages out of the 66,063 with which the text credits Kaśmīr, are attributed to this intermediate division.

³ Compare for the term *viṣaya* *Rājat.* v. 51; viii. 1260, 1413, 2697.

The expression Pargaṇa may have been introduced by the Mughal administration. Its Skr. original **puragaṇa* is not found in the Chronicles.

during Hindu times. The Lokaparakāśa, it is true, tells us of the division of Kāśmīr into twenty-seven Viṣayas and enumerates some nineteen of the latter. But several of the names are so corrupt as to be beyond recognition, while others bear a distinctly modern look. In any case it is impossible to fix the date to which this notice may belong or to judge of its authenticity.¹

Abū-l-Faẓl's account is the first which presents us with a systematic statement of Kasmīr Pargaṇas. It is of special interest because it shows us how their list could be increased or re-adjusted within certain limits according to fiscal requirements or administrative fancies. The return of Āsaf Khān reproduced by Abū-l-Faẓl shows thirty-eight Pargaṇas, while the earlier one of Qāzī 'Alī contained forty-one. The difference is accounted for by the amalgamation of some and the splitting-up of other Pargaṇas. The Pargaṇas varied greatly in size, as shown by the striking contrasts in the revenue-assessments. Thus, *e.g.*, Paṭan was assessed at circ. 5300 Kharwārs, while the revenue from 'Kamrāj' amounted to 446,500 Kharwārs.

The number of Pargaṇas had changed but little during Mughal and Paṭhān times. For the Sikhs on their conquest of the Valley seem to have found thirty-six as the accepted traditional number. But there had been various changes in the names and extent of these Pargaṇas. These changes became still more frequent under the Sikh administration, as is seen by a comparison of the lists given by Moorecroft (1823), Baron Hügel (1835) and Vigne (circ. 1840). They all show a total of thirty-six Pargaṇas but vary among themselves in the names of individual Pargaṇas.

These frequent changes and redistributions of the Pargaṇas continued during Dogrā Rule. The most accurate list I am able to refer to for this most recent period, is that given by Major Bates. It shows a total of forty-three Pargaṇas for the year 1865.² Subsequent reforms introduced Tahsīls after the fashion of British provinces with a view to reducing the number of sub-divisions. The latest list shows eleven Tahsīls.³ In their constitution little regard was paid to the historical divisions of the country. Fortunately, however, Kāśmīris are as con-

¹ Of the Lokaparakāśa's Viṣayas *Khoyāśramī*, *S'amālā*, *Laharī*, *Aulaḍīya*, *Nīlāśa*, *Khaḍūvīya* correspond clearly to the *Khūyāśrama*, *S'amālā*, *Labara*, *Holaḍā*, *Nīlāśva*, *Khaḍūvī* of the *Rājatarāṅgiṇī*. *Ekena*, *Devasūvī* may possibly be corruptions for *Evenaka* and *Devasarasa*. *Krodhana*, *Dvāvimśati*, *Bhr̥ṅga*, *Phāgvā* probably represent the modern Pargaṇas of *Kruhīn*, *Dūnṭs*, *Bring*, *Phākh*. *Cālana*, *Vitasthā*, *Satrava*, *Svanavāri*, *Nīlā*, *Hārī*, *Jalahāḍīya*, are quite uncertain.

² See *Gazetteer*, p. 2 sqq.

³ Compare the sketch-map attached to MR. LAWRENCE'S *Valley*.

servative in their topographical nomenclature as in many other matters. The old Pargaṇa names are hence still in ordinary use and likely to remain so for some time to come.¹

The absence of a complete list of Pargaṇas for an earlier period and the changes in their constitution during more recent times make a systematic exposition of the ancient territorial divisions impracticable. In a separate note I have given a comparative table of the Pargaṇa lists we possess since Akbar's time. There too I have indicated the ancient equivalents of the Pargaṇa names, as far as they can be traced in the Sanskrit Chronicles.² We shall have occasion to refer to these names and their history in the course of our detailed survey of ancient localities in the Valley.

87. The large number of administrative sub-divisions which as we have seen goes back to an early date, may be taken as an indication of the dense population then occupying the Valley. We have no means of forming any accurate estimate as to the number of the population which the country contained in Hindu times. But there is every reason to believe that even at a later period it was far larger than at the present day. The existence of a very great number of deserted village-sites, in all parts of the country, the remains already alluded to of a far more extended system of irrigation, the number of great temple ruins, and the uniform tradition of the people,—all point to the same conclusion.

The present century has witnessed in Kaśmīr a series of appalling famines and epidemics, which wrought terrible havoc in the mass of the rural population particularly. The last famine, 1878–79, alone is supposed to have removed three-fifth of the population from the Valley.³ The political vicissitudes of the first half of the century had a baneful influence on the economical condition of Kaśmīr and brought about an extensive emigration both among the industrial and agriculturist classes. Notwithstanding all these trials the population which in 1835 was estimated at about 200,000 souls, had risen to 814,000 according to the census of 1891.

These figures indicate great powers of recuperation. Yet it is held by competent judges that the present agricultural population is by no means sufficient even for the land actually under cultivation. It would hence manifestly be hazardous to make any guess as to the numbers

¹ The Survey of India maps indicates the approximate extent of the Pargaṇas recognized in the fifties.

² See Supplementary Note *BB*.

³ Compare for this and other statistical details Mr. LAWRENCE'S *Valley*, p. 223 *sqq.*

which the country might have supported in the most prosperous times of Hindu rule.

The fact of Kaśmīr having possessed a far greater population in ancient times helps to explain the curious traditional verse which puts the number of villages of Kaśmīr at 66,063. The verse is found twice in the Lokaparakāśa and still lives in the oral tradition of the Brahmans throughout the Valley. It has been reproduced from the latter in Paṇḍit Sāhibrām's Tirthasaṁgraha.¹ That it can claim some antiquity is evident from the allusion made to the number in Jonarāja's Chronicle.²

Though that figure must have at all times implied a considerable exaggeration, it is nevertheless characteristic of the popular notion on the subject. Even Sharīfu-d-dīn whose information, collected about A.D. 1400, is generally accurate and matter-of-fact, records: "It is popularly believed that in the whole of the province—plains and mountains together—are comprised 100,000 villages. The land is thickly inhabited."³ It is curious that Mirzā Ḥaidar who had ruled Kaśmīr himself copies this statement without modification or dissent.

SECTION III.—THE OLD AND NEW CAPITALS.

88. The ancient divisions of Kramarājya and Maḍavarājya are separated by a line drawn through Śrīnagar. This fact as well as the great historical interest attaching to Śrīnagar as the capital of the country make it the convenient starting-point for our survey. The history of Kaśmīr has always been reflected as it were in that of its capital. The site of the latter has not changed for more than thirteen centuries. It is thus easy to account for the ample historical data which enable us to restore in great part the ancient topography of Śrīnagar and to trace back the city's history to the time of its foundation.

Hiuen Tsiang who visited the Kaśmīr capital about A.D. 631, and whose record is the earliest we possess, found it already in the position of the present Śrīnagar. He describes it as situated along the

Śrīnagara in the
Hiuen Tsiang's time.

¹ *Ṣaṣṭir grāmasahasrāṇi ṣaṣṭir grāmasatāni ca | ṣaṣṭir grāmās trayo grāmā hyetat Kaśmīramanḍalam* ||; comp. Lokaparakāśa, *Ind. Studien*, xviii. p. 375.

² See *Jonar.* (Bo. ed.), 153.

³ See *Tārīkh-i-Rashīdī*, p. 430. RITTER who reproduces the passage of the *Zafarnāma* from De la Croix's translation, shows the number of villages as 10,000; see *Asien*, ii. p. 1123. It may be noted in passing that according to the Census of 1891 the number of villages in Kaśmīr was then reckoned at 2870.

east bank of a great river, *i.e.* the Vitastā, 12 or 13 *li* long from north to south and 4 or 5 *li* broad from east to west. About 10 *li* to the south-east of this, "the new city," the pilgrim notices a Buddhist convent which lay between a high mountain on the north and the site of 'the old city' on the south.

It is the merit of General Cunningham to have first recognized that the situation here indicated for the new capital of Hiuen Tsiang's time corresponds exactly to that of the modern Śrīnagar.¹ A glance at the map shows that the position and dimensions ascribed by Hiuen Tsiang to the new city apply closely to that part of Śrīnagar which occupies the right or eastern riverbank, and which, as we shall see, forms the older portion of the city. The two and a half miles represented by the 12 or 13 *li* of the Chinese measurement, agree accurately with the length of the city within its ancient limits along the eastern bank of the Vitastā. The estimate of its breadth at somewhat less than one mile (4 or 5 *li*) is equally correct.

89. The position of 'the old city' is marked by the present village of *Pāndrēṭhan* which derives its name from the appellation PURĀṆĀDHIṢṬHĀNA, meaning 'the Old Capital.' It lies to the south-east of Śrīnagar just as Hiuen Tsiang says, at the south foot of a mountain spur which rises with bold slopes to a height of about 3000 feet above the village. Measured from the nearest point of old Śrīnagar, the distance to the presumptive site of the monastery between Pāndrēṭhan and the steep hill-side is exactly two miles or 10 *li*.

The history of 'the Old Capital' is so closely connected with that of Śrīnagara that it will be useful to acquaint ourselves first with the data bearing upon it. The name of PURĀṆĀDHIṢṬHĀNA meets us first in Kalhaṇa's account of the reign of King Pravarasena I. (or Śreṣṭhasena) who is said to have erected there a shrine known as that of Śiva *Pravareśvara*.² At the beginning of the tenth century the minister Meruwardhana built at Purāṇādhiṣṭhāna a Viṣṇu temple called after his own name. This has been rightly identified by General Cunningham with the well-preserved little temple which still stands in the village of Pāndrēṭhan and has often been described by European travellers.³

¹ Gen. CUNNINGHAM's identification was first indicated in his paper on the architecture of Kaśmīr temples, *J. A. S. B.*, 1848, p. 283. For a fuller account, see *Anc. Geogr.*, pp. 93 *sqq.*

² See *Rājat.* iii. 99 note, where detailed references have been given regarding the site

³ See v. 267 note, also for descriptions of the temple.

Even in Kalhana's own time pious foundations are recorded at this ancient site.

The identity of Pāndrēṭhan with the site named in the Chronicle as 'the Old Capital' is proved by ample evidence. It is indicated in the old gloss on Rājat. v. 267 and is still known to Paṇḍit tradition. Śrīvara in describing the flight of some troops which had been defeated in Śrīnagar and were retiring along the Vitastā to the east, speaks of the road from the Samudrāmaṭha (Sud^armā on the right bank of the river near the second bridge) to *Pūrvādhiṣṭhāna* as covered with the corpses of the slain.¹ It is clear that by the latter designation which also means 'the Old Capital,' he refers to our present Pāndrēṭhan. This name itself is the direct phonetic derivative of *Purānādhiṣṭhāna*.²

90. General Cunningham has assumed that 'the Old Capital' marked by the site of Pāndrēṭhan was in reality the ancient ŚRĪNAGARĪ which Kalhana mentions as the capital founded by the great Aśoka.³ His assumption was based on another passage of the Chronicle which mentions the foundation of the shrine of Jyeṣṭharudra at Śrīnagarī by Jalauka, the son of Aśoka. General Cunningham thought he could recognize this shrine in the extant temple on the top of the Takht-i Sulaimān hill, below which at a distance of about one and a half miles Pāndrēṭhan is situated.

I have shown in my note on the passage that no reliance can be placed on the alleged tradition which General Cunningham had adduced as the sole proof of his location of the shrine. Yet at the same time the evidence recorded by me proves that Jyeṣṭharudra must have been worshipped either on the hill itself or in its close vicinity. Accordingly Aśoka's Śrīnagarī may safely be looked for in the same neighbourhood. Our present data do not allow us to decide with absolute certainty whether its site was at Pāndrēṭhan or elsewhere. But there are at least sufficient indications to make General Cunningham's view appear very tempting and probable.

¹ See *Śrīv.* iv. 290.

² The Kś. derivative of Skr. *Purāṇa* is *prānī* 'old'; this forms, with assimilation of the initial double consonant, the first part, *Pān-*, of the modern name. The elision of the second *ā* in the assumed intermediary form *P[*u*]rān[*ā*]dēṭhan is accounted for by the influence of the stress accent which lies on the second syllable of the modern name. The development of the combination *nd* into *ndr* is paralleled by similar cases in other Indo-Aryan Vernaculars; comp. DR. GRIERSON, *Phonology of Indo-Aryan Vernaculars*, *Z.D.M.G.*, i. p. 37, § 115. The nazalisation of *ē* may be of recent date, as the old gloss of A₂ on Rājat. v. 267 shows the name as *Pāmydrēṭhan*, i. e. *Pānīdreṭhan*.

³ See Note C, i. 124.

There is in the first place the significant name *Purāṇādhiṣṭhāna*, 'the Old Capital,' which shows that the site of Pāndrēṭhan must have once been occupied by an important city. Next it is to be noted that Kalhaṇa's narrative knows nothing of any other capital which might have been founded in this vicinity previous to the new capital built by Pravarasena II. on the site of the present Śrīnagar. Lastly we have an indication in the very name *Śrīnagara* which Pravarasena's city has come to bear in general usage instead of its proper and official designation *Pravarapura*.

If Aśoka's Śrīnagarī actually lay at or near the present Pāndrēṭhan the transfer of its name to the new capital is most readily accounted for. General Cunningham already has rightly pointed out the numerous analogies for such a transfer furnished by the history of other Indian capitals.¹ Pravarasena's city was practically contiguous to the older Śrīnagarī and existed for centuries side by side with it. We can hence easily understand that popular usage retained for the new capital the old familiar designation.² Exactly in the same way the several new cities founded by successive kings in the vicinity of Delhi all continued to be known simply by the name "Delhi," though each of them was originally intended to bear the distinctive name of its founder.

Though *Purāṇādhiṣṭhāna* had sunk to small importance already in Hindu times, extensive remains of ancient buildings can still be traced on the terraced slopes rising immediately to the north and north-east of Pāndrēṭhan. Foundations of old walls, carved slabs, and architectural fragments cover the foot of the hill-side for about one and a half miles. Broken Liṅgas of colossal dimensions are scattered among them. All the remains above-ground, however, are far too much decayed to permit of a distinction of individual structures.³

The advantages of Pāndrēṭhan as the site for a great city cannot be compared with those offered by the position of Śrīnagar. Yet the close vicinity of the Vitastā, coupled with the security from floods which the near hill-slopes afford, must have been appreciated in an earlier

¹ See *Anc. Geogr.*, pp. 97 sq.

² The feminine form *Śrīnagarī* is used also for the new capital; comp. *Rājat.* i. 104 note. There is thus no difference in the name as applied to both Aśoka's and Pravarasena's cities. *Śrīnagara* or *Śrīnagarī* means the "City of Śrī", i.e. of Lakṣmī, the Goddess of Fortune. For a whimsical etymology of European growth, which has turned Śrīnagar into the "City of the Sun", see above § 4, note.

³ Compare for an account of these ruins, CUNNINGHAM, *J. A. S. B.*, 1848, pp. 283 sq., *Anc. Geogr.* 95 sq. [The remarks made in the latter place as to the supposed cause of the desertion of *Purāṇādhiṣṭhāna* rest on a misinterpretation of certain *Rājatarāṅgiṇī* passages. The reconstruction of an alleged 'Pravareśvara symbol' at Pāndrēṭhan, *J. A. S. B.*, 1848, pp. 324 sq., is also unsupported by evidence.]

period when probably the riveraine flats of the valley were less drained. The small semi-circular glens which are formed between projecting spurs both north and east of the present village, with their gentle slopes offer convenient building sites. The fertile shores of the *Ḍal* are also within easy reach of *Pāndrēṭhan* through the gap in the hill-range which separates the *Takht-i Sulaimān* hill from the greater heights to the east. It is probably in this direction that we have to look for the *Saṅghārāma* mentioned by *Hiuen Tsiang* in connection with 'the old city.'

91. *Kalhaṇa's Chronicle* furnishes us with a full account of the origin of the new city which was the capital of the *Kaśmīr* in his time and destined to remain so to the present day.¹ *Kalhaṇa* attributes the foundation of this capital to King *Pravarasena II*. The topographical details of his description make it clear beyond all doubt that its site was that of the present *Srīnagar*.

**Pravarasena's
capital.**

The identity of the latter with *Pravarasena's* town was duly recognized by General *Cunningham* who referred to the close agreement between the general features of *Kalhaṇa's* description and the situation of the present capital. He also pointed out that *Kalhaṇa* distinctly mentions as one of the pious buildings founded in *Pravarasena's* city that very *Jayendravihāra* in which *Hiuen Tsiang* resided during his long stay in the *Kaśmīr* capital.² Subsequently Professor *Bühler* noticed the survival of several old local names for parts of the modern city which also prove its identity with *Pravarasena's* capital.³ The most convincing evidence, however, is contained in the long list of ancient buildings and localities which *Kalhaṇa* mentions in *Pravarasena's* town. In the course of our survey we shall be able to identify many of them within the modern *Srīnagar* and its environs.

The attribution of this new capital to King *Pravarasena* rests on equally strong proof. Through a chain of references extending over nearly twelve centuries we can trace the use of the name *PRAVARAPURA*, shortened (*bhīmavat*) for *Pravarasenapura*, as the official and correct designation of the city occupying the site of the present *Srīnagar*. We have found this appellation already in the record of the *T'ang Annals* going back to the commencement of the eighth century. It is also found in the works of *Kṣemendra*, *Bilhaṇa*, and numerous other *Kaśmirian* authors. It has continued to be used to the present day in colophons of *Sanskrit Manuscripts*, in horoscopes and similar documents.⁴

¹ See *Rājat.* iii. 336-363.

² See *Anc. Geogr.*, p. 97; also *Rājat.* iii. 355 note.

³ Compare *Report*, p. 16.

⁴ For detailed references see my note *Rājat.* iii. 339-349. *Srī-Pravarapura* for

The date of King Pravarasena II. whose name the above designation of the new capital was intended to preserve, cannot be fixed with accuracy. Various historical and numismatic indications, however, make it probable that he ruled at some period of the 6th century. Thus we can easily understand that at the time of Hiuen Tsiang's visit (A.D. 631) Śrīnagara or Pravarapura was still the 'new city.'

92. The traditional account of the foundation of Pravarapura as recorded by Kalhaṇa is of considerable interest. **Legend of foundation of Pravarapura.** Though largely interwoven with legendary matter it preserves for us a series of exact topographical data. Kalhaṇa's story is contained in verses 336-349 of the Third Book, and runs briefly as follows.¹

When King Pravarasena II. had returned from his victorious expeditions abroad, he desired to found a new capital which was to bear his name. He was then residing in the city of his grandfather Pravarasena I., *i.e.*, in Purāṇādhiṣṭhāna.² From there the king went forth at night in order, as the text says, "to ascertain in a supernatural way the proper site and the auspicious time for the foundation of the new city." On his way he reached a stream which skirted a burning ground, and was illuminated by the glow of funeral pyres. Then on the other bank of the stream there appeared to him a demon of terrible form. Promising him fulfilment of his desire, the demon invited the king to cross over to his own side by the embankment he was preparing for him. Thereupon "the Rākṣasa stretched out his own knee from the other bank, and thus caused the water of the Mahāsarit to be parted by an embankment (Setu)." The courageous Pravarasena drew out his dagger (*kṣurikā*), cut with it steps into the flesh of the Rākṣasa, and thus crossed over to the place which has since been known as *Kṣurikābala*. The demon then indicated to him the auspicious time and disappeared, after telling him to build his town where he would see the measuring line laid down in the morning. This line (*sūtra*) of the Vetāla the king eventually discovered "at the village of *Sārītaka* at which the goddess *Sārikā* and the demon *Aṭṭa* resided." There he built his city in which the first shrine erected was the famous one of Śiva *Pravareśvara*.

Srīpravarasenapure is often written in the abbreviated form *Srīpre* in the formulas of the Lokaprakāśa, almanacs, etc. Kalhaṇa often uses the simple *Pura* for Pravarapura and *Nagara* for Śrīnagara.

¹ For all detailed references in connection with this story, note iii. 339-349 should be consulted.

² That *Purāṇādhiṣṭhāna* is meant is proved by iii. 99. There Kalhaṇa, speaking of a foundation of Pravarasena I. in his capital, by a kind of anachronism uses the designation of Purāṇādhiṣṭhāna.

Keeping in view the details of the ancient topography of Srinagar, we can still follow up step by step the localities by which the legend here related leads King Pravarasena to the site of his new city. We have already seen that the *Mahāsarit* is the stream now known as Tsūṅṅh Kul which flows from the Ḍal into the Vitastā. Near its confluence with the Vitastā which we have also found already mentioned as a Tirtha, there existed, until the times of Mahārāja Raṅbir Singh, a much frequented Hindu burning Ghāṭ. It was undoubtedly of ancient date. Kalhaṇa relates how the body of King Uccala, murdered in his palace at Srinagar, was hurriedly cremated at the burning place situated on the island at the confluence of the *Mahāsarit* and *Vitastā*.¹ It is certain that the island of Māy^asum (Skr. Mākṣika-svāmin) is meant here, at the western end of which the *Mahāsarit* or Tsūṅṅh Kul falls into the Vitastā.

The stream flowing from the Ḍal is bounded on its northern bank by an old embankment which stretches from the west foot of the Takht-i Sulaimān close to the high bank of the Vitastā near the Second Bridge. This embankment which is the most substantial at or around Srinagar and known only by the general designation of *Suth* (from Skr. *setu*), 'dyke,' is undoubtedly of very early date. It protects the whole of the low-lying portions of the city on the right river-bank as well as the floating gardens and shores of the Ḍal which would otherwise be exposed to annual inundations from the Vitastā. A tradition still heard by Mr. Vigne ascribed the construction of this embankment to King Pravarasena.² It is indeed evident that its construction was a necessary condition for the safety of the newly founded city.

Several topographical indications warrant the conclusion that it was this old dyke in which the popular legend recorded by Kalhaṇa recognized the leg and knee of the demon. A glance at the map shows that the eastern portion of the 'Suth' turns sharply at a right angle and thus curiously resembles a bent knee. *Kṣurikābala* was the name of the place where Pravarasena according to the legend was supposed to have reached firm ground after crossing the stream. I have shown that this name in the form of its Kaśmīrī derivative *Khud^abal* still attaches to the city quarter which lies at the western end of the Suth.³

Finally it will be seen from the map that Kalhaṇa's words regarding the 'Setu' dividing the waters of the *Mahāsarit*, describe exactly the present embankment which has on one side the Tsūṅṅh Kul and on the other side the various marshes and canals fed by the Mār. It

¹ See viii. 339.

² See VIGNE, *Travels*, ii. p. 69.

³ See note iii. 339-349.

has been shown above that this second outflow of the Dal also shared the old name of Mahāsarit.¹

93. The name of the village *Sārītaka* where the demon showed to the king the proper site for his city, has long ago disappeared. Its position, however, is sufficiently marked by the mention of the goddess *Sārikā*. The latter, a form of *Durgā*, has since ancient times been worshipped on the hill which rises to the north of the central part of *Srīnagar* and is still called after her. The modern name of the hill, *Hār^aparvat*, is the regular phonetic derivative of Skr. *Sārikāparvata*. By this name it is designated in the latter Chronicles and *Māhātmyas*.²

Another passage of the *Rājatarāṅgiṇī* shows that the term *Vetālasūtrapāta*, 'the demon's measuring line,' clearly connected with the above legend, was also in later times applied to the limits of the oldest part of *Pravarapura*³. But our materials do not enable us to ascertain these limits in detail. *Kalhaṇa* it is true, has not failed to specify them, as he mentions the temples of *Vardhanasvāmin* and *Viśvakarman* as marking the extreme ends of *Pravarasena's* city⁴. Unfortunately the position of neither of these structures can now be traced.

So much, however, is clear that the new city was at first confined to the right bank of the river. *Kalhaṇa* tells this distinctly,⁵ and those sites and structures which he particularly mentions in his description of *Pravarasena's* capital, are all found as far as they can be identified, on the right bank. The account of *Hiuen Tsiang* and the *T'ang Annals* show that even in the 7th century *Pravarapura* extended mainly along the eastern bank of the river.⁶

Kalhaṇa follows up his account of the foundation of the city with a brief description of its splendours⁷. He notes the extravagant story of its having once counted thirty-six lakhs of houses, and

Kalhaṇa's description of Pravarapura.

¹ Compare § 65.

² See note iii. 339-349. *Hār^a* is the *Kaśmīrī* name of the goddess *Sārikā* as well as of the *Sārikā* bird (*Maina*); comp. *BÜHLER, Report*, pp. 16 sq.

Panjābīs and other foreign visitors from India have by a popular etymology turned the 'Hill of *Sārikā*' into the 'Hill of *Hari* (*Viṣṇu*)' or the 'Verdant Hill.' The latter interpretation could be justified only on the principle of *lucus a non lucendo*; for verdure is scarce indeed on the rocky faces of the *Sārikāparvata*. *DR. BERNIER* already, *Travels*, p. 398, was told this popular etymology, probably by his friends from Delhi.

³ See vi. 191 note.

⁴ iii. 357.

⁵ iii. 358.

⁶ See above, §§ 8, 10.

⁷ iii. 357-363.

refers to the regularly arranged markets with which its founder had provided it. The city of his own time still boasted of "mansions which reached to the clouds" built, no doubt, mostly of wood just as the mass of private houses in modern Śrīnagar.¹

When he mentions "the streams meeting, pure and lovely, at pleasure-residences and near market streets," he means evidently the numerous canals from the Ḍal and Anch¹ār lakes which intersect the suburbs and also pass through the heart of the city. They and the river still serve as the main thoroughfares for the market traffic, and all principal Bazars are built along their banks.² The Śārikāparvata receives due mention as "the pleasure-hill from which the splendour of all the houses is visible as if from the sky." Nor does he forget to praise the cool water of the Vitastā which the citizens find before their very houses on hot summer-days.

Finally he refers to the abundance of magnificent temples with which successive kings had adorned Pravarapura, and of which so many are particularly mentioned in his narrative. Of the number and imposing appearance of these structures we can even at the present day form some idea if we examine their massive remains which meet us in every part of modern Śrīnagar. The high embankments which now line the river's course within the city, are mainly composed of carved slabs, columns and other ancient stone materials. Their profusion and imposing dimensions must even to a superficial observer suggest an idea of the architectural splendour of ancient Śrīnagar.

94. It can scarcely be the result of chance that Pravarasena's city has escaped the fate of so many Indian capitals, of being superseded by later foundations.

Advantages of the site of Śrīnagar.

There had indeed not been wanting attempts on the part of later rulers to transfer the capital to other sites which they had chosen for their own cities. The great Lalitāditya, then Jayāpīḍa, Avantivarman,

¹ Both Mirzā Haidar and Abū-l-Faẓl speak with admiration of the many lofty houses of Śrīnagar, built of pine wood. This material was used, then as now, as being cheap and more secure against earthquakes. According to Mirzā Haidar "most of these houses are at least five stories high and each story contains apartments, halls, galleries and towers" (*Tārīkh-i-Rashīdī*, p. 425). That the mass of private dwellings in Śrīnagar were already in Hindu times constructed of wood, is shown by *Rājat*. viii. 2390. The many disastrous fires recorded point to the same conclusion.

² Useful and convenient as these canals undoubtedly are, it is rather difficult to concede to them now the epithets of 'pure and lovely.' They add, however, greatly to the picturesqueness of the city and certainly make the want of carriage roads less felt.

and Śaṃkaravarman, had successively endeavoured to effect this object. The great ruins of Parihāsapura, Jayapura and Avantipura show sufficiently that the failure of the first three kings was not due in any way to deficient means or want of purpose.

Of Lalitāditya the Chronicle distinctly records that he proposed, Nero-like, to burn down the ancient capital to assure the predominance of his own creation, Parihāsapura. And the long list of splendid edifices erected at the latter place during his own reign shows plainly that for a time at least that monarch's pleasure had succeeded. Yet each one of these temporary capitals speedily sank into insignificance, while Pravarapura continued to be the political and cultural centre of Kaśmīr down to the present day.

We can safely attribute this exceptional position of Śrīnagar to the great natural advantages of its site. Occupying a place close to the true centre of the Valley, Śrīnagar enjoys facilities of communication which no other site could offer. The river along which the city is built provides at all seasons the most convenient route for trade and traffic, both up and down the Valley. The two lakes which flank Śrīnagar, offer the same facilities for the fertile tracts which lie immediately to the north. The lakes themselves furnish an abundant supply of products which materially facilitate the maintenance of a large city population. The great trade route from Central Asia debouches through the Sind Valley only one short march from the capital.

Nor can we underrate the security which the position of Śrīnagar assures both against floods and armed attack. The neck of high ground which from the north stretches towards the Vitastā and separates the two lakes, is safe from all possible risk of flood. It is on this ground, round the foot of the Śārikā hill, that the greatest part of the old Pravarapura was originally built. The ancient embankment which connects this high level ground with the foot of the Takht-i-Sulaimān hill sufficed to secure also the low-lying wards fringing the marshes of the Dal. A considerable area, including the present quarters of Khān^ayār and Rānⁱvōr (Skr. *Rājānavātikā*), was thus added to the available building ground on the right bank and protected against all ordinary floods.

The frequent sieges which Śrīnagar underwent during the last reigns related by Kalhaṇa, give us ample opportunity to appreciate also the military advantages which the city's position assured to its defenders. With the exception of a comparatively narrow neck of dry ground in the north, the Śrīnagar of the right river-bank is guarded on all sides by water. On the south the river forms an impassable line of defence.

The east is secured by the Dal and the stream which flows from it. On the west there stretch the broad marches of the Anchīār divided from the Vitastā by a narrow strip of firm ground.

From the north, it is true, the city can be approached without passing such natural obstacles. But the map shows that just to the north of the Śārikā hill inlets from the two lakes approach each other within a few thousand feet. The narrow passage left between them could at all times easily be guarded. It is curious to note that the successful attacks on the city of which the Chronicle tells us, were delivered from the north, treachery or the defenders' weakness having opened this passage.¹

The later and smaller portion of Śrīnagar occupying the left river-bank, does not share the same natural advantages as the old one. The present level of the ground on which it stands appears to have been raised gradually by the accumulated débris of centuries. We do not know exactly when the extension of the city in this direction began. The number of ancient sites on this side is comparatively small. The royal residence was transferred to it only in the reign of Ananta (A.D. 1028-63). There too we find a natural line of defence. It is the Kṣiptikā or Kuṭ^akul which flows round the western edge of this part of the city and is also often mentioned in the accounts of the later sieges.

SECTION IV.—ANCIENT SITES OF ŚRĪNAGARA.

95. Having thus reviewed the origin and the general position of the Kaśmīr capital, we may proceed to a brief survey of the more important ancient sites which our available materials permit us to trace in it. We can conveniently start on our circuit from the Hill of ŚĀRIKĀ to which the legendary account of the city's foundation had taken us.

The goddess Śārikā which has given to the hill its name, has been worshipped since ancient times on the north-west side of the hill. Certain natural markings on a large perpendicular rock are taken by the pious to represent that kind of mystical diagram which in the Tantraśāstra is known as *Śrīcakra*.² This 'Svayambhū' Tīrtha is still a much frequented pilgrimage place for the Brahmans of the city and has been so probably since early times.³ The Śārikāmāhātmya now in use relates

¹ Compare for Uccala's entry into Śrīnagar, vii. 1539 *sqq.*; that of Sussala, viii. 944 *sqq.*; compare also note viii. 1104-1110.

² Compare *Rājat.* note i. 122, regarding the worship of such diagrams.

³ Compare *Jonar.* (Bo. ed.) 472, 767.

that the hill was carried to its present position by Durgā who had taken the shape of a Sārikā bird. The goddess is supposed to have thus closed a gate of the Daityas dwelling in hell. This legend is alluded to already in the Kathāsaritsāgara.¹

Another ancient designation of the Hār^aparvat is 'Hill of Pradyumna' (*Pradyumnapīṭha,-giri,-śikhara*, etc.), often found in the Chronicles and elsewhere.² The Kathāsaritsāgara accounts for the origin of this name by a story which connects the hill with the love of Uṣā and Aniruddha, the son of Pradyumna. Kalhaṇa mentions a Maṭha for Pāśupata mendicants which King Raṇāditya built on the hill. The eastern slopes of the latter are now occupied by extensive buildings connected with the famous Ziārats of Muqaddam Ṣāhib and Ākhūn Mullā Shāh. It is probable that these Muhammadan shrines have taken the place of Hindu religious buildings, as at so many old sites of Kaśmīr.

Close to the foot of the southern extremity of the hill lies a rock which has from ancient times received worship as an embodiment of Gaṇeśa, under the name of BHĪMASVĀMIN. A legend related by Kalhaṇa connects this 'Svayambhū' image with Pravarasena's foundation of Srinagar.³ From regard for the pious king the god is there said to have turned his face from west to east so as to behold the new city. The rock is covered by the worshippers with so thick a layer of red lead that it is not possible to trace now any resemblance to the head of the elephant-faced god, still less to see whether it is turned to the west or east. In fact, if we are to believe Jonarāja, the rock image has subsequently changed its position yet a second time. This Chronicler relates that Bhīmasvāmin from disgust at the iconoclasm of Sikandar Būṭshikast has finally turned his back on the city.⁴ This last turn would, no doubt, most satisfactorily account for the present amorphous look of the sacred rock.

There is nothing in the Chronicles that would lead us to assume that the hill of Sārikā was ever fortified in Hindu times. The great bastioned stone-wall which now encloses the hill and the ground around its foot (Nāgar-nagar), was built by Akbar as an inscription still extant over the main-gate proclaims.⁵ The fort which now crowns the summit of the hill, is of even more modern origin.

¹ See lxxiii. 107 sqq.

² See *Rājat.* iii. 460 note.

³ See iii. 352 note.

⁴ See *Jonar.* (Bo. ed.), 766.

⁵ Compare Fourth Chron. 939 sqq.

96. A short distance to the south-east of the Bhimasvāmin rock, and outside Akbar's fortress, lies the Ziārat of Bahāu-d-dīn Ṣāhib, built undoubtedly with the materials of an ancient temple. The cemetery which surrounds it contains also many ancient remains in its tombs and walls. At the south-west corner of this cemetery rises a ruined gateway built of stone-blocks of remarkable size, and still of considerable height. This structure is traditionally believed by the Śrīnagar Paṇḍits to have belonged to the temple of Śiva PRAVAREŚVARA which Kalhaṇa mentions as the first shrine erected by Pravaraṣena in his new capital.¹

An old legend related by Kalhaṇa and before him already by Bilhaṇa, makes the king ascend bodily to heaven from the temple of Pravareśvara. Bilhaṇa speaks of the temple as "showing to this day a gap above, resembling the gate of heaven through which King Pravara bodily ascended to heaven."² Kalhaṇa, writing a century later, also saw at the temple of Pravareśvara "a gate resembling the gate of heaven." Its broken stone roof was supposed to mark the king's passage on his way to Śiva's abode.

This tradition still attaches to the roofless stone-gate above described, which may indeed be the very structure seen by Bilhaṇa and the Chronicler. As far as its architecture is concerned, it might well belong to the earliest monuments of Śrīnagar. It owes its preservation perhaps to the exceptional solidity of its construction and the massiveness of its stones. Stone-blocks measuring up to sixteen feet in length with a width and thickness equally imposing were no convenient materials for the builders of Muhammadan Ziārats, Ḥammāms, etc., who have otherwise done so much to efface the remains of ancient structures in Śrīnagar. The position of the ruin is very central and might well have been chosen by the founder of Pravaraṣena for a prominent shrine in his new city.

Not far from Bahāu-d-dīn Ṣāhib's Ziārat to the south-west stands the Jāmi' Masjīd, the greatest Mosque of Śrīnagar. Around it numerous ancient remains attest the former existence of Hindu temples. Proceeding still further to the south-west in the midst of a thickly built city quarter, we reach an ancient shrine which has remained in a comparatively fair state of preservation probably owing to its early conversion into a Ziārat. It is now supposed to mark the resting place of the saint styled Pir Ḥājī Muḥammad. It consists of an octa-

¹ See *Rajāt.* iii. 350 note.

² See *Vikram.* xviii. 23.

gonal cella of which the high basement and the side walls are still well-preserved. The quadrangular court in which it stands is enclosed by ancient walls and approached by ornamented gateways.

The position of this shrine has suggested to me its possible identity with the ancient temple of Viṣṇu RAṆASVĀMIN which Kalhaṇa mentions as founded by King Raṇāditya.¹ This temple must have enjoyed considerable celebrity till a comparatively late period. Maṅkha refers to it as an object of his father's devotion and Jonarāja in his comments on the passage speaks of Viṣṇu Raṇasvāmin as one of the chief shrines of Pravarapura.²

In his own Chronicle Jonarāja indicates this temple as the furthest point up to which Zainu-l-'ābidin carried the canal flowing through *Jainanagarī*.³ The latter locality corresponds to the S'rinagar quarters of Sangīn Darwāza and Naushahr, and the canal itself is the one now known as *Lach^am Kul*.⁴ It brings the waters of the Sind River *viā* *Am-burhēr* to the northern suburbs of S'rinagar, and after flowing past the Jāmi' Masjid empties itself into the Mār canal near the bridge called *Kādⁱ Kad^al*. In the corner formed by the two canals stands the ruined temple above described. If it could be shown that the present termination of the *Lach^am Kul* is the same which Jonarāja knew in the middle of the fifteenth century, the identity of those remains with the Raṇasvāmin temple might be considered as certain.

97. Crossing the Mār to the south we reach the city quarter known as *Brāḍⁱmar*, occupying the right bank of the river between the Fourth and Fifth Bridge. It derives its name from the ancient BHAṬṬĀRAKAMAṬHA which is repeatedly referred to in the *Rājatarāṅgiṇī* as a building of considerable size and strength.⁵ Bilhaṇa too notices it specially in his description of S'rinagar. Like other Maṭhas built originally to serve the purposes of a Sarai, it was used on occasion as a place of defence. Queen Diddā sent her infant son there at the time of a dangerous rising.

¹ *Rājat.* iii. 453 sq. note.

² See *S'rikanṭhacar.* iii. 68.

³ See *Jonar.* 872.

⁴ Compare *Rājat.* iii. 453-454 note. The *Lach^am Kul* is mentioned by Abū-l-Faẓl, ii. p. 355. It probably took its name (equivalent to *Lakṣmīkulyā) from Lakṣmī, the queen of *Shahābū-d-dīn*, in whose honour the quarter of *Lakṣmīnagarī* was found in the vicinity of the present Sangīn Darwāza; see *Jonar.* 407 sq.

⁵ See *Rājat.* vi. 240 note; viii. 2426; *Vikram.* xviii. 11. For the derivation of *Brāḍⁱ* from *Bhaṭṭāraka* comp. *Brāṇⁱnambal* < *Bhaṭṭāranadvalā*, below. That *Bhaṭṭārakamaṭha* was the old name of this locality, is known to the tradition of the Paṇḍits; see BÜHLER, *Report*, p. 16.

The Chronicle shows us often the Mathas of Srinagar utilized as places of refuge in the times of internal troubles, occasionally also turned into prisons.¹ We may hence conclude that they were substantially built, probably like modern Sarais in the form of detached quadrangles, and thus better adapted for defence than other city-buildings.

That Mathas more than once left their names to the city-quarters in which they stood, is shown by the designation of other wards. Thus the large quarter of *Didamar* which forms the western end of the city on the right river-bank, retains the name of the DIDDĀMAṬHA.² It was built by Queen Diddā for the accommodation of travellers from various parts of India. As a local name Diddāmaṭha meets us often in the later Chronicles. Above Didamar we find near the Sixth Bridge the quarter of *Balaṇḍimar*.³ It represents in all probability the *Balāḍhyamaṭha* of the later Chronicles which Jonarāja mentions as having been built by Balāḍhyacandra under King Rājadeva in the 13th century.⁴

A little to the north of the Sixth Bridge lies the Mahalla known by the name of *Khandabavan*. It has received its appellation from the ancient Vihāra of SKANDABHAVANA, a foundation of Skandagupta whom Kalhaṇa mentions among the ministers of Pravarasena II.'s successor Yudhiṣṭhira.⁵ The site of the Vihāra has been traced by me in the close vicinity of the Ziārat of Pīr Muḥammad Bāsūr. Certain ancient remains there were locally known and worshipped till the middle of the present century as a Tirtha sacred to Skanda.⁶

The ground immediately to the north-east of Khandabavan is now an open waste space used partly for Muhammadan graveyards. It seems to have been unoccupied already in old times. For it was chosen as the burning place for the widows of the murdered king Sussala when a rebel force hovering around the capital rendered the usual burning ground on the island of Mākṣikasvāmin inaccessible.⁷

The quarter of *Narvor* still further to the north is probably identical with the old NAḌAVANA, mentioned by Kalhaṇa as the site of a Vihāra built by one of King Meghavāhana's queens. I have shown in my note on the passage that the modern name goes back to a form

¹ Compare *Rājat.* vi. 223; viii. 374, 1052, 2309.

² See *Rājat.* vi. 300 note.

³ Its old name could not be shown on the map owing to want of room.

⁴ See *Jonar.* 82.

⁵ See iii. 380.

⁶ Compare Note *K*, vi. 137, also for the temple of *Parvagupteśvara* which stood close by.

⁷ *Rājat.* viii. 1441 sq.

**Naḍavāṭa*.¹ The termination *vāṭa* 'garden,' frequent in Kaśmīr local names, may safely be taken as the equivalent of *vana* in Kalhaṇa's form of the name.

98. Before we continue our survey further up the river, it will be useful to make a brief reference to the bridges which connect the two river-banks within the city. Śrīnagar has now seven bridges across the Vitastā. Their number has remained unchanged for at least five hundred years.

Already *Sharīfu-d-dīn* had heard that of the thirty boat-bridges constructed across the great river of Kaśmīr, there were seven in the town of Śrīnagar. The boats were bound together by chains, and through the bridges a way could be opened for the river traffic.² *Sharīfu-d-dīn*'s notice is of interest because it shows clearly that down to the end of the Hindu period permanent bridges across the Vitastā were unknown in Kaśmīr.

I had been led to the same conclusion by an examination of the *Rājatarāṅgiṇī* passages bearing on the subject.³ Kalhaṇa distinctly says of the two bridges the construction of which he specially records, that they were built with boats. Elsewhere this inference may be drawn from the rapidity with which the bridges are broken at the approach of the enemy or in danger of fire.⁴

The first bridge of this kind is ascribed by Kalhaṇa to *Pravarasena II.* who built the 'Great Bridge' (*Bṛhatsetu*) in his new capital. "Only since then is such construction of boat-bridges known."⁵ This 'Great Bridge' is subsequently mentioned in connection with a great conflagration which destroyed the city in the time of *Sussala* (A.D. 1123). This fire arose at the southern end of Śrīnagar, and Kalhaṇa mentions that the smoke first rising from *Mākṣikasvāmin*: *Māy²sum* had scarcely been noticed from the 'Bṛhatsetu' when the fire was already spreading over the whole city.⁶ Kalhaṇa evidently refers to the 'Great Bridge' as a comparatively distant point from *Mākṣikasvāmin*. Considering that the river forms an almost straight reach from this locality to the present Fourth Bridge, it appears to me likely that *Pravarasena*'s bridge was somewhere in the vicinity of the latter. The position is in the

¹ Compare *Rājat.* iii. 11 note.

² See *Tārīkh-i-Rashīdī*, p. 431.

³ See note iii. 354.

⁴ See *Rājat.* vii. 909, 1539; viii. 1182; *Śrīv.* i. 308, 720; ii. 70, 122.

⁵ *Rājat.* iii. 354.

⁶ Compare *Rājat.* viii. 1171-72 note.

very heart of the city. It is just here that Zainu-l-'ābidīn subsequently constructed the first permanent bridge over the Vitastā named after him Zaina Kad^{al} (*Jainakadali*).¹

Another old boat-bridge had been established by Harṣa just opposite to his palace.² The latter as we shall see was situated on the left bank somewhere near the present Second Bridge (Haba Kad^{al}). The bridge proved fatal to Harṣa's fortunes, because it enabled the rebels to make their final and successful assault on the palace.

There can be little doubt that the first permanent bridge across the Vitastā was of wood and showed the same peculiar cantilever construction which the Kaśmīr bridges have preserved to this day. The latter have attracted the attention of all modern travellers and have often been described.³ But it is curious that none of them can be traced back beyond the time of Zainu-l-'ābidīn. The explanation may lie in the fact that that stone-architecture in which the engineers of the Hindu period were so proficient, did not permit of the construction of bridges with a sufficient span. For their Muhammadan successors working chiefly in wood it was easier to overcome this difficulty.

Among the most characteristic features of the river-scene as it now presents itself within Śrīnagar, are the numerous wooden bathing cells moored before all city Ghāṭs. They have been there already in Hindu times. For Kalhaṇa mentions more than once the *snāna-koṣṭhas* of the river.⁴ From a humorous sketch of city-life which Kalhaṇa draws for us, we can see that they formed, then as now, the favourite meeting-place of the idle and curious.⁵

99. Resuming our walk up the river-bank we pass the remains of more than one old temple near the present Eastern quarters of Śrīnagara. Ziārats of Baḍ Shāh (Zainu-l-'ābidīn), Shāh Hamadān and elsewhere. But we have no data for their identification. An old site is marked by the present Ghāṭ Sōm^ayār, below the Second Bridge, which represents the SOMATĪRTHA of the Rājatarāṅgīnī.⁶ The place is still visited as a Tirtha, and some old Lingas are found by the river-side. The quarter in which the Somatīrtha lies, is known as *Sud^armā*. It owes its name to the SAMUDRĀMATHA built by Samudrā, the queen of Rāmadeva, in

¹ See *Śrīv.* i. 231 sq., 296.

² *Rājat.* vii. 1549.

³ See, e.g., VIGNE, *Travels*, ii. 23; LAWRENCE, *Valley*, p. 37.

⁴ Compare *Rājat.* viii. 706, 1182, 2423. Also Kṣemendra, *Samay.* ii. 38, know the term *snānakoṣṭhaka* which lives in the present Kś. *śrān^akuṭh.*

⁵ See *Rājat.* viii. 706-710.

⁶ See *Rājat.* viii. 3360 note.

the 13th century. The numerous passages in which the Samudrāmāṭha is mentioned by the later Chronicles, makes this identification quite certain.¹

A little higher up, if we can trust local tradition, stood the ancient temple of VARDHAMĀNEŚA mentioned already in King Saṁdhi-mat's reign. The site so designated by the Purohitas of the adjoining Mahalla is close to the Malāyār Ghāt. I have referred already in a previous note to the curious manner in which an ancient Linga supposed to be that of Vardhamāneśa was recovered a few years ago from a neighbouring Mosque and a Māhātmya composed for the newly established shrine.²

The confluence of the Tsūṅṅh Kul or Mahāsarit with the Vitastā we have also had occasion to notice.³ It is the Tirtha now known as MĀRĪSAMĠGAMA. Beyond it lies the great island of *Māy^asum*, the ancient MĀKṢIKASVĀMIN, now chiefly occupied by the houses and camps of European residents and visitors. From the way it is referred to by Kalhaṇa, it appears that it was already partly inhabited in old times.⁴ Following up the right bank of the Mahāsarit above the junction we reach the quarter of *Khud^abal* already identified with the *Kṣurikābala* of King Pravarasena's story.

Here begins the old embankment or *Setu*, noticed in connection with the latter.⁵ To the north of this embankment stretches an extensive marsh fed by canals coming from the Ḍal and known as *Brārⁱnambal*. It is the *Bhaṭṭāranadvalā* of the Chronicle into which the body of one of Harṣa's ministers was thrown after his execution.⁶

At the eastern end of the *Setu* where it joins the rocky foot of the Takht-i Sulaimān hill, there has been for at least a century a gate through which the Tsūṅṅh Kul flows out from the lake. It is closed at times of flood when the Vitastā rises higher than the level of the Ḍal. It is highly probable that this gate is very old and contemporary with the construction of the embankment itself. Beyond it lies the suburb of *Drug^ajan*. This is identified in an old gloss of the Rājatarāṅgiṇī with DURGĀGALIKĀ, where according to tradition the blind King Yudhiṣṭhira I. was imprisoned after his abdication.⁷

¹ See *Jonar.* 111 ; *Srīv.* iv. 121, 169, 290 ; Fourth Chron. 504, 618.

² See above, § 31 note 2.

³ See above, § 65.

⁴ See *Rājat.* iv. 88 note.

⁵ Compare § 92.

⁶ See *Rājat.* vii. 1038. *Nambal*, from Skr. *naḍvalā*, is the regular Kś. word for 'marsh.' *Brārⁱ* is a direct phonetic derivative of Skr. *bhaṭṭāra* 'god.'

⁷ See *Rājat.* ii. 4.

Leaving the Setu where it makes its great bend and going north across low ground flanked by marshes, we reach the quarter of *Nāvapūr*. The bridge which leads here over the Mār or Mahāsarit, is repeatedly mentioned as NAUPURASETU by Śrīvara, in connection with later sieges of Śrīnagar.¹ By breaking it, the south-eastern parts of the city were rendered more secure. Continuing our route to the north we come to the great suburb of *Rānīvōr*. It is traversed by numerous canals coming from the Dal. Kalhaṇa mentions it repeatedly by its ancient name of RĀJĀNAVĀṬIKĀ as a place largely inhabited by Brahmans. Their solemn fasts (*prāyopaveśu*) gave no small trouble to King Sussala in his worst straights.² Rānīvōr has continued to the present day a favourite place of residence for city Brahmans.

100. We have now completed our circuit of the ancient city as far as it lay on the right bank of the river
Left river bank. and may proceed to the smaller and later portion which occupies the left bank. Just opposite to the 'Mārīsaṅgama' stands the *Shērgarhi*, the modern palace of the Dogrā rulers. Its site was apparently first chosen by the Paṭhān governors for their fortified residence.

Immediately below the palace the Kuṭākul or *Kṣiptikā* branches off from the river. We have already noticed its value as a line of defence for this part of the city.³ The quarter of *Kāṭhūl* which lies next between the Kuṭākul and the river is of ancient date. It is mentioned as *Kāṣṭhīla* by Kalhaṇa and other writers, Bilhaṇa speaking of it particularly as a locality inhabited by Brahmans.⁴

At the northern end of the *Kāṭhūl* quarter and close to the present Second Bridge, we must assume the palace
Site of Royal Palace. of the later Hindu kings to have stood. Its position is indicated by an interesting passage of the *Rājatarāṅgiṇī* which informs us that King Ananta (A. D. 1028-63) abandoned the palace of the former dynasties and transferred the royal residence to the vicinity of the shrine of SADĀŚIVA.⁵ The new site was adhered to by subsequent kings probably till long after Kalhaṇa's time. The mention of the Sadāśiva shrine and the fre-

¹ See *Śrīv.* iv. 122, 243.

² See *Rājat.* viii. 756, 768, 899. For the phonetic relation of *Rānī* < Skr. *Rājāna*, see viii. 756 note; *vōr* is common in Kś. local names and derived from Skr. *vāṭikā* 'garden.'

³ See above, § 67.

⁴ See *Rājat.* viii. 1169 note, and *Vikram.* xviii. 25.

⁵ Compare *Rājat.* viii. 186-187, and for detailed proof of the identification, the note thereon.

quent references to the Kṣiptikā as flowing near to the royal palace (*rājadhānī*) enable us to fix the position of the latter with fair accuracy. In the note on the above passage I have shown that the Sadāśiva temple stood opposite to the Samudrāmaṭha which occupies the right river bank just below the Second Bridge. Exactly in the position thus indicated we find now an ancient Liṅga, on the river Ghāṭ of Puruṣ^ayār, which the tradition of the local Purohitās knows by the name of *Sadāśiva*.

It is in this neighbourhood, then, that the palace stood which had witnessed so many tragic scenes related in the last two Books of Kalhaṇa's Chronicle. Its great height is specially referred to by Bilhaṇa. This suggests that it was in part at least built of wood, just like a later palace described by Mirzā Haidar.¹ "Sultān Zainu-l-'ābidīn built himself a palace in the town which in the dialect of Kashmīr is called *Rājdhān* [i.e., Skr. *rājadhānī*]. It has twelve stories, some of which contain fifty rooms, halls and corridors. The whole of this lofty structure is built of wood." This construction of the palace would well explain the rapidity with which it was burned down by the pretender Uccala on his final attack upon Harṣa.² We can thus also understand why there are no particularly striking remains at the site which could be attributed to the ruins of this royal residence.

The last-named incident gives Kalhaṇa occasion to mention also some other data regarding the royal palace. Close to it was a garden in which Harṣa and his ill-fated son Bhoja enjoyed a deceptive rest before the rebels' last assault.³ The gardens near the palace are also elsewhere mentioned. Harṣa had their trees cut down because they obstructed the view, and at a later time the besieging Dāmaras fed their camp-fires with wood brought from the same gardens.⁴ Even at the present day there are numerous old gardens across the Kṣiptikā close to the site where the palace once stood. In front of the palace was the boat-bridge already mentioned which the king had himself constructed, and which was the scene of his last desperate struggle.⁵

Where the old palace stood which was abandoned by King Ananta, we cannot say with accuracy. It is, however, probable that its site was in the old part of Pravarapura on the right bank. Kalhaṇa mentions it twice as *purāṇarājadhānī* ('the old palace'), but gives no particulars.⁶ Its deserted ground was built over with a Maṭha in Kalhaṇa's own time.

¹ See *Tārīkh-i-Rashīdī*, p. 429.

² See *Rājat.* vii. 1565 sq., 1583.

³ *Rājat.* vii. 1538 sqq.

⁴ *Rājat.* vii. 1223; viii. 1056.

⁵ See *Rājat.* vii. 1539, 1549.

⁶ See *Rājat.* viii. 837, 2417.

The embankments on the left side of the river as well as the walls of Ziārats show ample remains of ancient buildings. But we have no means of identifying any particular sites. At the western extremity of this part of the city, however, we may locate with some probability the temple of *Kṣemagaurīśvara*, built by Queen Diddā's weak husband Kṣemagupta. Bilhaṇa in his description of Srinagar mentions it as an imposing building, the 'Maṇḍapas' of which extended to a 'Saṁgama' of the Vitastā.¹ I have shown elsewhere that the confluence meant is probably that of the Vitastā with the Dugdhasindhu or Chats³kul which lies opposite to the quarter of Diddāmaṭha.²

SECTION V. THE ENVIRONS OF SRINAGARA.

101. Having completed our survey of old Srinagara we may now proceed to examine the ancient sites of its environs. They are almost all situated to the north of the Vitastā within the Pargaṇa now known as *Phākh*, and designated as *Phākhuvā* in Srinvara's Chronicle.³ It comprises the tract lying between the east shore of the Anchiār, the range towards the Sind Valley and the hills which enclose the Dal on the east and south. Owing to the facility of communication across the lake and the manifold attractions of its shores, Phākh seems to have always been a favourite resort for the inhabitants of the capital. This fact is fully illustrated by the numerous places of ancient date which we find dotted around the lake.

Starting from its southernmost corner in the immediate vicinity of the city we come first to the hill popularly known as *Takht-i-Sulaimān*. Its bold pyramidal form and the old temple which crowns its summit, make this hill a most conspicuous object in the land-scape of Srinagar. The present name of the hill, meaning 'Solomon's throne,' is undoubtedly of Muhammadan origin. Its alleged derivation from *Saṁdhimat*, the saintly hero of a well-known legend recorded in the *Rājatarāṅgiṇī*, is nothing but an invention of the Bāchbatṭas of Srinagar.⁴

¹ *Vikram.* xviii. 23.

² Compare *Rājat.* vi. 172-173 note.

³ *Sriv.* iv. 306. The *Lokaprakāśa* writes *Phāgvā* while the modern *Māhātmyas* of *Iśālaya* or *Iś³bar* and *Sureśvarī* affect the form *Phālaka*.

⁴ The name *Takht-i-Sulaimān* is common enough in the local nomenclature of Muhammadan countries; compare, *e.g.*, the peak of this name in the *Sulaimān*

That the ancient designation of the hill was Gopādri is shown beyond all doubt by an interesting passage of Kalhaṇa's Chronicle. It relates how the troops of the pretender Bhikṣācara when thrown back from the city which they had endeavoured to enter after crossing the Mahāsarit, *i.e.*, from the south-east, took refuge on the 'Gopa hill' or *Gopādri*.¹ There they were besieged by the royal troops until a diversion made by Bhikṣācara enable them to retreat to the higher hills in the east by the low neck which connects these with the Takht-i Sulaimān.

Kalhaṇa in the First Book of his Chronicle informs us that King Gopāditya built a shrine of Śiva Jyeṣṭheśvara on the Gopādri.² It is difficult not to connect this notice in some way with the extant temple which occupies so prominent a position on the summit of the hill. General Cunningham, it is true, on the strength of an alleged tradition had proposed to identify this temple with the Jyeṣṭharudra shrine which Kalhaṇa mentions as a foundation of Jalauka, Aśoka's son, in the ancient Śrīnagarī.³ But Prof. Bühler has already shown that there is no genuine tradition regarding the temple among the Śrīnagar Brahmins.⁴

It is certain that the superstructures of the present temple belong to a late period.⁵ But the massive and high base on which this temple is raised, and certain parts of the structure are no doubt of a far earlier date. These may well have formed part of a building which in Kalhaṇa's time,—rightly or wrongly, we have no means to judge,—was looked upon as a shrine of Jyeṣṭheśvara erected by King Gopāditya. There is no other ancient ruin on the hill. Nor would the configuration of the latter have admitted at any other point but the summit, of the construction of a shrine of any dimensions. It is of interest to note that the tradition of Abū-l-Faẓl's time distinctly attributed the temple standing on 'Solomon's hill' to the time of Gopāditya.⁶

Kōh, S. of the Gumal Pass. The derivation from Saṁdhimat, referred to by Prof. BÜHLER, *Report*, p. 17, is not supported by any evidence whatever and unknown even to the most modern Māhātmyas.

¹ See *Rājat.* viii. 1104–10 note. That the Takht-i-Sulaimān was called by its ancient name Gopādri, had been surmised already by Pt. Govind Kaul at the time of Prof. Bühler's visit; see *Report*, p. 17. But the decisive evidence of this passage was not known to him.

² See i. 341 and note.

³ *Rājat.* i. 124; *Anc. Geogr.*, p. 95; also above, § 90.

⁴ See *Report*, p. 17.

⁵ See the remarks of FERGUSSON, *History of Indian Archit.*, p. 282, against Gen. Cunningham's and Major Cole's assumptions who represented the extant temple as one of the earliest buildings in Kaśmīr.

⁶ *Ain-i-Akb.*, ii. p. 383.

102. In my note on Rājat. i. 124 I have shown that an old tradition which can be traced back to at least the sixteenth century, connected the Takht hill with the worship of Śiva Jyeṣṭharudra or, by another form of the name, JYEṢṬHEŚVARA (Jyeṣṭheśa).¹ And we find in fact a Liṅga known by this name worshipped even at the present day at the Tirtha of Jyēṭhēr, scarcely more than one mile from the east foot of the hill.

This Tirtha which undoubtedly derives its name from Jyeṣṭheśvara, lies in a glen of the hill-side, a short distance from the east shore of the Gaḡri Bal portion of the Dal.² Its sacred spring, designated in the comparatively modern Māhātmya as *Jyeṣṭhānāga*, forms a favorite object of pilgrimage for the Brahmans of Śrinagar. Fragments of colossal Liṅgas are found in the vicinity of Jyēṭhēr and show with some other ancient remains now built into the Ziārats of Jyēṭhēr and Gup³kār, that the site had been held sacred from an early time.

It is in this vicinity that we may look for the ancient shrine of Jyeṣṭharudra, which Jalauka is said to have erected at Śrinagarī. But in the absence of distinct archæological evidence its exact position cannot be determined. It is highly probable that whatever the origin and the date of the temple on the Takht hill may be, it was connected with the worship of Jyeṣṭharudra at Jyēṭhēr. No other Tirtha is known in the immediate neighbourhood.

The distance of the shrine from the Tirtha is scarcely greater than that of Lalitāditya's temple at Mārtaṇḍ from the sacred spring in honour of which it was erected. And in both places the distance of the temple is easily accounted for by the more prominent position which was thus secured for it. There is yet another analogy in the case of the two shrines. Both have long ago ceased to be places of popular worship. But the sacred springs, to the presiding deity of which they were dedicated, continue to attract pilgrims though shorn of all splendour of temples and images.

Kalhaṇa in the same passage which mentions the erection of King Gopāditya's shrine on the 'Gopa hill' makes that prince bestow the 'Gopa Agrahāras' on Brahman settlers from Āryadeśa.³ The combination of the two local names suggests that by the Gopā-

¹ Compare Fourth Chron. 592, 853, 806.

² For *Jyeṣṭheśvara* > *Jyēṭhēr* we have exact analogies in *Kapaṭeśvara* > *Kōṭhēr*, *Amareśvara* > *Amburhēr*, etc.

³ See i. 341. *Agrahāra* is the regular term designating a Jāgīr or piece of land bestowed on individuals or religious corporations, etc.; see note i. 87.

GRAHĀRAS are meant the fertile lands of the present *Gup^akār*, between the north foot of the Takht hill and the Dal. The name *Gup^akār* may be, in fact, the direct phonetic derivative of the term used by Kalhaṇa.¹

Our surmise is supported by the reference which Kalhaṇa in the verse immediately following makes to the village BHŪKṢĪRAVĀṬĪKĀ. This place is identified by the old glossator A₂ with *Buchⁱvōr*, a small hamlet situated on the narrow strip of land at the rocky north-west foot of the Takht hill. The modern name is clearly derived from Kalhaṇa's form. Gopāditya is said to have removed to this confined and secluded spot Brahmans who had given offence by eating garlic.

The combined mention of Gopādri, Gopāgrahāra and Bhūkṣīravāṭikā in Rājat. i. 341 sq. suggests that Kalhaṇa has reproduced here local traditions collected from the sites immediately adjoining the hill. Whether the connection of these localities with King Gopāditya's reign was based on historical fact, or only an old popular etymology working upon the word *Gopa* found in the first two names, can no longer be decided.

Continuing our route along the eastern shore of the Dal we come, at a distance of about one mile from *Gup^akār*, to the large village of *Thīd*, prettily situated amid vineyards and orchards. It is the THEDĀ of the Rājatarāṅgiṇī, mentioned as one of the places which the pious King Saṁdhimat or Āryarāja adorned with Maṭhas, divine images, and Liṅgas.² Abū-l-Faẓl speaks of *Thīd* as "a delightful spot where seven springs unite; around them are stone buildings, memorials of by-gone times."³ The remains here alluded to can no longer be traced, but the seven springs (*Saptapuṣkarīṇī*) which are also referred to in the Haracaritacintāmaṇi (iv. 40 sqq.), are still pointed out.

The cluster of villages which we reach about one and a half miles beyond *Thīd*, and which jointly bear the name *Brān*, can be safely identified with BHĪMĀDEVĪ which Kalhaṇa notices along with *Theḍā*. The Nilamata knows the sacred site of *Bhīmādevī* in conjunction with the Sureśvarī Tīrtha which we shall next visit, and in the Haracaritacintāmaṇi it is named with the seven springs of *Theḍā*. The Tīrtha of *Bhīmādevī* is no longer known, but may be located with some probability at the fine spring near *Dāmpōr* marked now by a Muhammadan shrine.

¹ *Gup^akār* may go back to a form **Gup^agār*, with assimilation of *g* to the preceding tenuis. In Kś. the hardening of *g* to *k* is by no means unknown, see Dr. Grierson's remarks, *Z.D.M.G.*, 1., p. 3. **Gup^agār* could easily be traced back to *Gopāgrahāra* through Pr. forms like **Gupagrār*.

² See *Rājat.* ii. 135 note.

³ *Ām-i-Akb.*, ii. p. 361.

103. A sacred site of far greater fame and importance is that of the present village of *Is̄ḅar* which lies about two miles further north on the Dal shore and a little beyond the Mughal garden of *Niṣhāt*. The site was known in ancient times as *Sureśvarīkṣetra* ('the field of *Sureśvarī*').¹ It was sacred to *Durgā-Sureśvarī* who is still worshipped on a high crag rising from the mountain range to the east of *Is̄ḅar* village. The seat of the goddess is on a rugged rock some 3000 feet above the village, offering no possible room for any building. The numerous shrines erected in her honour were hence built on the gently sloping shore of the lake below.

The Tirtha of *Sureśvarī* is often referred to in *Kalhaṇa's Chronicle* and other *Kaśmīrian* texts as a spot of exceptional holiness. It was particularly sought by the pious as a place to die at. The pilgrimage to *Sureśvarī* is connected with visits to several sacred springs in and about *Is̄ḅar*. One of them, *S'atadhārā*, is already mentioned by *Kṣemendra*.² It is passed in a narrow gorge some 1500 feet below the rock of *Sureśvarī*.

Is̄ḅar derives its present name from the shrine of *Īśeśvara* which King *Samdhitmat-Āryarāja* according to the *Rājatarāṅgiṇī* erected in honour of his *Guru Īsāna*.³ An earlier form, *Is̄ḅrōr*, which is found in an old gloss of the *Chronicle* and evidently was heard also by *Abū-l-Faẓl*, helps to connect *Is̄ḅar* and *Īśeśvara*.⁴

Is̄ḅar is still much frequented as a pilgrimage place. The chief attraction is a sacred spring known as *Guptagaṅgā* which fills an ancient stone-lined tank in the centre of the village. This conveniently accessible Tirtha is the scene of a very popular pilgrimage on the *Vaiśākhi* day and has fairly obscured the importance of the mountain seat of *Sureśvarī*. A ruined mound immediately behind the tank is popularly believed to mark the site of the *Īśeśvara* shrine. Numerous remains of ancient buildings are found around the sacred springs and elsewhere in the village. They probably belong to the various other temples the erection of which is mentioned by *Kalhaṇa* at the site of *Sureśvarī*.⁵

Passing round the foot of the ridge on which *Sureśvarī* is worshipped, we come to the small village of *Ṣaḍarhadvana*; *Hārvan* which the old glossator of the *Rājatarāṅgiṇī* identifies with *Ṣaḍarhadvana* ('the *Tripureśvara*).

¹ Compare for *Sureśvarī* and the site of *Is̄ḅar*, note v. 37.

² See *Samay*, ii. 29.

³ See *Rājat*, ii. 134 note.

⁴ *-ḅar* is a modern contraction for *-brōr*, from *Skr. bhāṭṭāraka*, which in *Kaśmīr* local names has often taken the place of its synonym *-īśvara*; comp. e.g., *Skr. Vijayeśvara* > *Kś. Vijḅrōr*.

⁵ See *Rājat*, v. 37, 40 sq.; viii. 3365.

wood of the six Arhats'). This place is mentioned by Kalhaṇa as the residence of the great Buddhist teacher Nāgārjuna.¹ The name Hārvan may well be derived from Ṣaḍarhadvana, but in the absence of other evidence the identification cannot be considered as certain. On the hill-side south of the village I observed already in 1888 fragments of ornamented bricks. Since then remarkable remains of ancient brick-pavements have come to light on occasion of excavations made for the new Śrīnagar waterworks.

Proceeding further up the valley of the stream which comes from the Mār Sar lake, we reach, at a distance of about three miles from the Ḍal, the village of *Triphar*. Evidence I have discussed elsewhere, makes it quite certain that it is the ancient TRIPUREŚVARA (Tripureśa).² The latter is repeatedly mentioned as a site of great sanctity by Kalhaṇa as well as in the Nilamata and some Māhātmyas. But it has long ago ceased to be a separate pilgrimage place. A little stream known as the *Tripuragaṅgā* near Triphar is, however, still visited as one of the stations on the Mahādeva pilgrimage.

Kṣemendra in the colophon of his *Daśāvatāracarita* refers to the hill above Tripureśa as the place where he was wont to find repose and where he composed his work. In Zain-ul-'ābidin's time Tripureśvara seems yet to have been a Tīrtha much frequented by mendicants.³ Tripureśvara too possessed its shrine of Jyeṣṭheśvara, and to this King Avantivarman retired on the approach of death.⁴ A legend related by the Śarvāvatāra connected the site of Tripureśvara with the defeat of the demon Tripura by Śiva and with the latter's worship on the neighbouring peak of Mahādeva. I have not been able to examine the site and am hence unable to state whether there are any ancient ruins near it.

The whole mountain-ridge which stretches to the south of Triphar and along the Ḍal, bore in ancient times the name of ŚRĪDVĀRA.⁵ On the opposite side of the Valley rises the great peak of MAHĀDEVA to a height of over 13,000 feet. Numerous references to it in the Nilamata, Śarvāvatāra, and other texts, show that it was in old times just as now frequented as a Tīrtha.

We may now again descend the valley towards the north shore of the Ḍal. On our way we pass close to Hārvan the village of Tsatsa where the convenience of modern worshippers has located a substitute for the

¹ See *Rājat.* i. 173 note.

² Compare *Rājat.* v. 46 note.

³ See *Śrīv.* i. 402.

⁴ See *Rājat.* v. 123 note.

⁵ See *Rājat.* viii. 2422.

ancient Tirtha of the goddess S'āradā (see below § 127). Leaving aside the famous garden of Shālimār of which our old texts know nothing,¹ we come to a marshy extension of the Ḍal known as Tēl^abal. The stream which flows through it and which forms a branch of the river coming from the Mār Sar, bore the old name of *Tilaprasthā*.²

104. The road which takes us from Tēl^abal to the mouth of the Sind Valley is the same which was followed by the pretender Bhikṣācara and his rebel allies on a march to Sureśvari described in the Rājatarāṅgiṇī.³ The narrow embankment on which they fought and defeated the royal troops, leads across the Tēl^abal marshes.

At the south foot of the ridge which runs down to the opening of the Sind Valley, we find the village of *Raṇyil*, the ancient HIRAṆYAPURA.⁴ The place is said by Kalhaṇa to have been founded by King Hiraṇyākṣa. As it lies on the high-road from the Sind Valley to S'rīnagar it is repeatedly mentioned also in connection with military operations directed from that side against the capital. The victorious Uccala when marching upon S'rīnagar, had the Abhiṣeka ceremony performed *en route* by the Brahmans of Hiraṇyapura. It seems to have been a place of importance, since it figures in a fairy-tale related in the Kathāsaritsāgara as the capital of Kaśmīr.⁵ A spring a little to the south of the village is visited by the pilgrims to the Haramukutaṅgā and bears in Māhātmyas the name of *Hiraṇyākṣanāga*.

From near Raṇyil several old water-courses radiate which carry the water of the Sind River to the village lying between the Anchⁱār and the Ḍal lakes. One of these canals passes the village of *Zukur*. A tradition recorded already by General Cunningham identifies this place with the ancient JUṢKAPURA. Kalhaṇa names the place as a foundation of the Turuṣka (*i.e.* Kuṣana) King Juṣka who also built a Vihāra there.⁶ The Muhammadan shrines and tombs of the village contain considerable remains of ancient buildings.

¹ The first reference to this somewhat over-praised locality which I can find, is in Abū-l-Faẓl who mentions the waterfall or rather the cascades of 'Shālahmār'; see ii. p. 361. The Vitastā-, Iśālaya-, and Mahādeva-Māhātmyas which are of very modern origin, show this fact also by their references to 'S'ālamāra' and the whimsical etymologies which they give for the name (*Māraśālā*, etc.). We might reasonably expect that Jonarāja and S'rīvara in their detailed accounts of the Ḍal would have mentioned the place if it had then claimed any importance.

² See *Rājat.* v. 46 note; *S'rīv.* i. 421.

³ See *Rājat.* viii. 744 note.

⁴ For detailed references see *Rājat.* i. 287 note.

⁵ See *Kathāsar.* lxxv. 215 sqq.

⁶ See *Rājat.* i. 168 note; *Anc. Geogr.* p. 101.

To the west of Juṣkapura and on the shore of the Anch¹ār lies the large village of Āmburhēr. It is the ancient AMAREŚVARA often mentioned in the Rājatarāṅgiṇī in connection with military operations to the north of Śrīnagar.¹ This is easily accounted for by the fact that the place lay then as now on the high road connecting the Sind Valley with the capital. It took its name from a temple of Śiva Amareśvara which Sūryamatī, Ananta's queen, endowed with Agrahāras and a Maṭha. The ancient slabs and sculptured fragments which I found in 1895 in and around the Ziārat of Farrukh²zād Šāhib, may possibly have belonged to this temple.

Continuing on the road towards Śrīnagar for about two miles further we come to the large village of Vicār Nāg prettily situated in extensive walnut groves. A fine Nāga near the village forms the object of a popular Yātrā in the month of Caitra. It is supposed to be an epiphany of the Ailāpattra Nāga who is mentioned also in the Nilamata. An earlier designation seems to be MUKTĀMŪLAKANĀGA which is given to the locality by Śrīvara and in the Tirthasamgraha.² To the west of the village and near an inlet of the Anch¹ār are the ruins of three ancient temples now converted into Ziārats and tombs.³

Only a quarter of a mile to the east of Vicār Nāg and on the other side of the old canal called Lach^am Kul
Amṛtabhavana. (*Lakṣmīkulyā) stands the hamlet of Ānt^a-
bavan. In my "Notes on Ou-k'ong's account of Kaśmīr" I have proved that Ānt^abavan derives its name from the ancient Vihāra of AMṚTABHAVANA which Amṛtaprabhā, a queen of Meghavāhana, is said to have erected.⁴ Ou-k'ong mentions the Vihāra by the name of *Ngo-mi-t'o-po-wan* which represents a transcribed Prakrit form *Amitabhavana or Āmitabhavana. An ancient mound with traces of a square enclosure around it, which is found between the canal and the hamlet, may possibly belong to the remains of this Vihāra.

Proceeding to the east of Ānt^abavan for about a mile we come to
Tīrtha of Sodara. the large village of *Sudar^abal* situated on a
 deep inlet of the Dal, known as *Sudar^akhun*.
 The name of the village and the neighbouring portion of the lake make it very probable that we have to place here the sacred spring of SODARA.⁵ It formed the subject of an ancient legend related by

¹ See *Rājat.* vii. 183 note.

² See *Śrīv.* iv. 65. On his authority the name Muktāmūlakanāga ought to have been shown on the map.

³ Compare for a view of these remains, COLE, *Ancient Buildings*, p. 31.

⁴ See *Rājat.* iii. 9 note, and *Notes on Ou-k'ong*, pp. 9 sqq.

⁵ See *Rājat.* i. 125-126 note. Kś. *-bal* in *Sudar^abal* means merely 'place.'

Kalhaṇa. King Jalauka had built at Śrīnagarī his shrine of Jyeṣṭha-rudra whose original place of worship was at Bhūteśvara, below Mount Haramukūṭa. He then wished to have by the side of the new shrine also the Sodara spring which adjoins the site of Bhūteśvara.¹ To fulfil the king's pious desire "there broke forth from a waterless spot a spring which was alike to Sodara in colour, taste and other respects." A golden cup thrown into the original Sodara spring appeared after two and half days in its Avatāra near Śrīnagarī. This miracle removed all doubts as to their identity.

Close to the mosque of Sudar^abal and by the lake shore are two pools fed by perennial springs. These according to a local tradition were in old times visited by numerous pilgrims. Now all recollection of this Tīrtha has been lost among the Brahmans of Śrīnagar. But the name of a portion of the village area, *Baṭṭapōr*, points to a former settlement of Baṭṭas or Purohitas. It is curious, too, that we find only half a mile from the village the Ziārat of Ḥazrat Bal, perhaps the most popular of all Muhammadan shrines in the Valley. It is supposed to be built over the remains of the miracle-working Pīr Dastagīr Ṣāhib. Is it possible that the presence of this rather ubiquitous saint at this particular spot had something to do with the earlier Hindu Tīrtha?

SECTION VI.—NORTHERN DISTRICTS OF MAḌAVARĀJYA.

105. Our circuit through the Phākh Pargaṇa has brought us back to the purlieus of the capital. We must leave them now once more and start on our tour through the outlying districts. We may direct it first to the upper half of the Valley, the ancient Maḍavarājya. This again is divided by the Vitastā into two portions, one to the north and east, the other to the south and west of the river. We shall begin with the Pargaṇas on the right bank, starting from Śrīnagar.

The Pargaṇa which adjoins Śrīnagar from the south-east, is now known as Vihi. It extends from near Purāṇā-dhiṣṭhāna to the spur of Vast^arvan, near Vāntipōr (Avantipura), and comprises a wide semi-circular tract of fertile Karēwa lands. In ancient times the district took its name from the village of KHADŪVĪ, the present *Khruv*.² The Ḍāmaras of the *Khadūvī* district are repeatedly mentioned by Kalhaṇa along with those of Holadā, the modern Vular Pargaṇa.

¹ For *Sodara*, the present Nārān Nāg, see notes i. 123; v. 55-59.

² Compare *Rājat*. viii. 733 note.

The site of Pāndrēthan or Purānādhiṣṭhāna has already been fully noticed. About two miles higher up the river lies Pānd²chuk village, with some ancient remains and the traces of a stone bridge-head, probably of late date. The old name of the place is unknown. We pass next by the river the village of Simpōr. This may retain the name of SIMHAPURA, founded by King Jayasimha in Kalhaṇa's time.¹

Less than two miles to the north-west of Simpōr lies the village of Zevan, the ancient JAYAVANA. It was correctly identified already by Prof. Bühler on the basis of the happy and exact description given of it by Bilhaṇa.² The poet mentions in this "place of high-rising monuments" the "pool filled with pure water, sacred to *Takṣaka*, lord of snakes." This pool still exists in the *Takṣaka Nāga* which is visited annually by the pilgrims to Harṣeśvara.³

The mention made by Kalhaṇa in his history of Narapura of the pilgrimage to the Takṣaka spring proves that in old times it must have enjoyed great reputation as a separate Tirtha. It is in fact the only Kaśmīr Nāga which is distinctly mentioned in the Tirtha list of the Mahābhārata (iii. lxxxii. 90). Abū-l-Faẓl records the interesting fact that this spring was popularly held to be the place whence the cultivation of saffron flourishing in this neighbourhood originated.⁴ In Akbar's time the cultivators, undoubtedly Muhammadans, still worshipped at this fountain at spring time. It was customary to pour cow's milk into it to secure a good omen for the success of the crop. We see that the Takṣaka Nāga long retained his importance with the cultivators as a local divinity.

About two miles to the north-east of Zevan we come on gently rising ground to the village of *Khun²moh*. It is, as already stated above, the ancient KHONAMUṢA, famous as the birthplace of Bilhaṇa. The latter in the *Vikramāṅkadevacarita* gives an enthusiastic description of the charms of his rural home.⁵ The saffron fields which Bilhana mentions extend close to the lower of the two separate hamlets which form the village. In the upper hamlet is a sacred spring called *Dāmodaranāga* with some sculptured funeral Stêlê and a few fragmentary inscriptions.

On the hill-side above the village issues another Nāga which under

¹ See *Rājat.* viii. 2443 note.

² Compare *Report*, pp. 5 sq.; *Rājat.* vii. 607 note; *Vikram.* xviii. 70.

³ See *Rājat.* i. 220 note.

⁴ See *Āīn-i-Akb.*, ii. p. 358.

⁵ For a detailed and accurate account of the position and remains of Khonamuṣa, see Prof. BÜLLER's *Report*, pp. 5 sq. The identity of Khun²moh with the Khonamuṣa of *Rājat.* i. 90, was first pointed out by Gen. CUNNINGHAM, *Anc. Geogr.*, p. 98.

the name of *Bhuvaneśvarī* is visited on the pilgrimage to HARṢEŚVARA. The latter Tirtha lies on the summit of the high ridge which rises to the north of the village. It consists of a 'Svayambhū' Liṅga situated in a small cave and enjoys considerable popularity. I have not been able to trace its name except in the local Māhātmya and the Tirthasaṅgraha.

The chief place of the Vihī Pargaṇa is now the town of *Pāmpar*, the ancient PADMAPURA, about four miles south-west of Khun²moh.¹ It was founded in the beginning of the 9th century by Padma, the powerful uncle of the puppet king Cippaṭa-Jayāpīḍa. Padma is said by the Chronicle to have also built a temple of Viṣṇu *Padmasvāmin*. To this may possibly belong the scanty remains of an ancient temple which have been described by General Cunningham.² Close by is the Ziārat of Mir Muḥammad Hamadānī, with some fine ancient columns and ornamented slabs which are likely to have been taken from this temple. Also the other Ziārats of the town show similar remains. Padmapura, owing to its central position in a fertile tract, seems to have always been a place of importance and is often mentioned by Kalhaṇa and the later Chroniclers.

Proceeding north-eastwards of Padmapura we pass first *Bāl³hōm*, a large village, which in the Lokaprakāśa and Tirthasaṅgraha figures as *Bālāśrama*. Under a large Deodar near it Bālādevī is now worshipped in the form of an old stone-image. Numerous ancient Stêlês, showing miniature reproductions of temples, are found in the neighbouring rivulets and canals; they were apparently used in recent times as stepping-stones which would account for their preservation. At the foot of a rocky spur which descends from the mountain-range to the north, lies the picturesque village of *Uyan*, once mentioned by Kalhaṇa under the name of OVANĀ.³ It has a large sulphurous spring visited by the sick.

About two miles further east we reach the large village of *Khruv*, the ancient KHAPŪVĪ which, as we have seen, gave to the district its former name. There is an abundance of fine springs in and about Khruv; Abū-l-Faḍl mentions them as objects of worship and estimates their number at 360.⁴ Above the village a so-called Svayambhū-cakra or mystical diagram is shown on a rock.⁵ It is held sacred to Jvālā-

¹ For a detailed notice see *Rājat.* iv. 695 note. The old name of the place is well-known to Śrīnagar Paṇḍits; VIGNE too, *Travels*, ii. p. 31, recognized it correctly.

² See *J. A. S. B.*, 1848, p. 274.

³ See *Rājat.* vii. 295.

⁴ *Āin-i-Akb.*, ii. p. 358.

⁵ Compare for such diagrams, also designated *Devīcakra* or *Mātṛcakra*, *Rājat.* i. 122 note.

mukhi-Durgā and largely visited by pilgrims. I am, however, unable to trace any old reference to this Tīrtha.

Only a mile to the south-east of Khruv is the village of *Sār*, until recently the seat of a flourishing iron-industry. **Sanāra.** Kalhaṇa mentions it by the name of *S'ANĀRA* as an Agrahāra founded by King *S'acīnara*.¹ Whatever the historical value of this notice may be, which Kalhaṇa took from Padmamihira, the evidence detailed in my note on the passage proves that the present *Sār* is intended. An intermediate form of the name is preserved in the *S'nār* of an old gloss. The Ziārat of *Khwāja Khizr* which stands here near several small springs, is built with remains of a Hindu temple; among them is a Liṅga-base some six feet square.

About two miles south-west of *Sār* are found the well-preserved ruins of a temple near the village of *Ladu* (not marked on Survey map). They have been described by Bishop Cowie,² but I am unable to trace any old reference to this shrine in the texts I have examined. It is remarkable for having a circular cella, the only one known to me in Kaśmīr. A small square cella to the east of this temple has been annexed to a neighbouring Ziārat.

Near the south end of the *Vihī Pargaṇa* and on the river lies the village of *Lat^apōr*. An old gloss of the *Rājatarāṅgiṇī* identifies it with *LALITAPURA*, a place founded in honour of King *Lalitāditya* by his architect.³ The King according to the Chronicle was not pleased with the attention; in any case no importance seems to have attached to this place. There are no old remains above ground, but the local tradition still tells of King 'Lalitāditi' as the founder of a large town on the neighbouring *Uḍar*.

106. Passing round the foot of Mount *Vast^arvan* we enter the **District of Holadā;** Pargaṇa of *Vular*, the ancient *HOLADĀ*. This **Avantipura.** identification is supported, apart from the clear phonetic evidence, by all passages of the *Rājatarāṅgiṇī* which mention *Holadā*.⁴ Its feudal barons played a great part in the troubled times of the later Hindu reigns.

Its most important place in old times was undoubtedly the town of *AVANTIPURA*, founded by King *Avantivarman* (A.D. 855-883).⁵ Its position is marked by the present village of *Vāntⁱpōr* on the *Vitastā*. The

¹ See note i. 100.

² See *J. A. S. B.*, 1866, pp. 97 sqq.

³ See *Rājat.* iv. 186.

⁴ See *Rājat.* i. 306 note.

⁵ See *Rājat.* v. 45 sq. note. Its identity with *Vāntⁱpōr* was first pointed out by Dr. WILSON in his note on Moorcroft, *Travels*, ii. p. 244.

conspicuous ruins of this place attracted already the attention of the early European visitors. General Cunningham did not fail to recognize in them the remains of the two great temples of *Avantisvāmin* and *Avantīśvara* which Avantivarman had built here.¹ Of the two great ruins one is at Vāntīpōr itself, the other and larger one half a mile further down the river close to the hamlet of Jaubrār (map 'Jabair.') Owing to the complete destruction of the central shrines it is impossible to ascertain now which was dedicated to Viṣṇu and which to Śiva. The fine enclosing quadrangles of the temples have also suffered badly. That of Avantisvāmin was used as a temporary fortification in Kalhaṇa's own time and underwent a severe siege.²

The site on which Avantivarman's town was built, had apparently enjoyed some sanctity before these temples were founded, and bore the old name *Viśvaikasāra*. The great extent of the town is indicated by the traces of ruined buildings which cover the foot of the hills east of Vāntīpōr for a considerable distance. The frequent references to Avantipura in the Chronicles show that the town retained some importance long after the death of its founder.

We hear but little of other old sites in Holadā. The great town of *Mihirapura* which King Mihirakula is said to have founded in it, can no longer be traced.³ *Khuli*, a village situated a short distance to the south-west of Trāl, the modern headquarters of the district, may possibly be the *Khola* of the Chronicle, one of Gopāditya's Agraḥāras.⁴ Of *Trāl* I am unable to trace any old notice.

The identification of the village of *Būts*, about two miles south of Khuli, with the old BHAVACCHEDA is also uncertain.⁵ It is based on a gloss of Rājānaka Ratnakaṇṭha, the writer of the Codex Archetypus of the Rājatarāṅgiṇī. Still further south lies the village of *Kai*, probably the old KATIKA named by Kalhaṇa as a foundation of Tuñjina I.⁶ This identification is made in the old gloss on the passage and supported by the phonetic evidence of the modern name.

Of old remains in Vular the interesting temple of *Nārastān* at the northern extremity of the district (34° 3' lat. 75° 10' long.) deserves notice.⁷ Unfortunately I am unable to find any clue as to its old name

¹ See for a full description *J. A. S. B.*, 1848, pp. 275 sqq. ; also *ib.*, 1866, 121 sqq.

² See *Rājat.* viii. 1429 sq., 1474 sqq.

³ See *Rājat.* i. 306.

⁴ See *Rājat.* i. 340.

⁵ Compare iii. 381 note.

⁶ *Rājat.* ii. 14.

⁷ See Mr. LAWRENCE'S notice, *Valley*, p. 172. The attached photograph shows the site after my excavations. Regarding the result of the latter, see *Vienna Oriental Journal*, 1891, p. 345 sqq.

or history. Excavations made by me at the site in 1891 brought to light interesting sculptures, but no evidence as to its name. The large village of *Sutur* (map 'Sootoor') to the south-west of Nārastān may possibly account for the entry of *Satrava* in the Lokaparakāśa's list of Pargaṇas.

107. The eastern boundary of Vular is marked by the high spur which descends from the north towards the confluence of the Vitastā and Gambhirā. The District of Dakṣiṇa-pāra. The adjoining district to the east is one of considerable extent. It comprises besides the whole right or western side of the Lid^{ar} Valley also the low-lying tract between the Vitastā and the lower course of the Viśokā. The modern name of this great Pargaṇa is *Dachūnpōr* which appears in Śrīvara's Chronicle as DAKṢIṆAPĀRA. This clearly means 'the right bank' [of the Ledari or Lid^{ar}]. Another form, of the same significance, is *Dakṣiṇapārśva* found in the Lokaparakāśa and Mārtāṇḍamāhātmya. To this designation corresponds the term *Vāmapārśva*, now Khōvurpōr, which as we shall see, is applied to the left side of the Lid^{ar} Valley.¹

The junction of the Vitastā with the Gambhirā, *i.e.*, the united Viśokā and Ramaṇyāṭavi, has already been mentioned above as a Tirtha.² Not far from it lies the village of *Marhōm*, on the Vitastā, mentioned by Jonarāja under its old name of MAḌAVĀŚRAMA.³ The first part of the name is identical with that of *Maḍavarājya*.

About two miles south-east of Marhōm and not far from the Vitastā, we find the village *Vāg^ahōm*, with a sacred spring known by the name of HASTIKARṆA. This name seems to have applied formerly to the place itself which we find twice thus referred to by Kalhaṇa.⁴ It is possibly the Hastikarṇa, where Bhoja, Harṣa's son, was treacherously murdered.

About one mile to the south of Hastikarṇa the Vitastā makes a great bend. The peninsula thus formed is occupied by a small *Uḍar* or alluvial plateau which owing to its height and isolated position is a very conspicuous object in the landscape. It was once the site of

Temple of
Cakradhara.

¹ General Cunningham, *Anc. Geogr.*, p. 94, assumes that Kś. *dachūn* 'right' is 'now used to denote the "north," and *kāwar*, (*recte khōvur*) or "left," to denote the "south." This assumption, however, as well as the explanation given for the alleged change of meaning are based on some misunderstanding.

² See § 64.

³ See *Jonar.* (Bo. ed.), 132.

⁴ See *Rājat.* v. 23 note; also vii. 1650. Another *Hastikarṇa*, mentioned by Śrīvara, i. 441, seems to have been near Śrīnagar on the west.

one of the oldest and most famous shrines of the Valley, the temple of Viṣṇu CAKRADHARA.

The plateau is still known as *Tsak^adar Uḍar*.¹ Brahman tradition is aware of the derivation of this name from *Cakradhara*. It was first brought to the notice of European scholars by Prof. BÜHLER who had duly recognized the antiquarian importance of the site.² The shrine of Cakradhara is often mentioned as a Tirtha of great sanctity.³ It was also closely connected with the legends regarding the burned city of *Narapura*, localized as we shall see in its close vicinity. But the only detailed notice of the temple we owe to a historical incident which occurred there during the civil wars of Sussala's reign.⁴

The royal troops having been forced to evacuate the neighbouring town of Vijayeśvara or Vij^abrōr, the inhabitants of the latter place and the neighbouring villages took refuge in the temple of Cakradhara. This, by its position on the high and steep Uḍar, was naturally well-adapted for defence. The temple filled by the crowd of fugitives and routed soldiers, was soon besieged by the rebel troops of Bhikṣācara. The temple courtyard was protected by massive wooden ramparts and gates. When these had been set on fire by the assailants a mighty conflagration ensued in which the whole mass of people inside perished. Kalhana vividly describes this great catastrophe which he believes to have provoked divine vengeance and thus to have brought about the downfall of the pretender.

The account here given is of topographical interest. It shows that the temple actually stood on the flat top of the Uḍar, and also explains the scarcity of stone-remains in this locality. The absence of conspicuous ruins had already been noticed by Prof. Bühler. When visiting in 1895 the *Tsak^adar Uḍar*, I found only traces of a quadrangular enclosure, about forty yards square. They are marked by hollows at the northern end of the Uḍar which is separated from the rest by a dip in the ground. These hollows may possibly be the last indications of the wooden ramparts which enclosed the shrine.

The temple seems to have been subsequently restored, and Jonarāja mentions the statue of Cakradhara among those chief divine images which Sikandar Butshikast destroyed.⁵ Jayadratha in his

¹ See *Rājat.* i. 38, 201 notes.

² See *Report*, p. 18.

³ See *Rājat.* vii. 258, 261, 269; *Jonar.* (Bo. ed.), 763; *Srīkaṇṭhac.* iii. 12; *Nīlamata*, 1170.

⁴ See *Rājat.* viii. 971-995. The date of the burning of Cakradhara seems to have been the 12th Śrāvaṇa śudi, A.D. 1121.

⁵ See *Jonar.* (Bo. ed.), 763.

Haracaritacintāmaṇi devotes a separate canto, vii., to the relation of the legend which localized the disc-wielding god at the Tirtha of Cakradhara. The latter is still referred to in a general way in the old Vijayeśvaramāhātmya (No. 87, Poona MSS.). Now, however, Cakradhara is no longer visited by the pilgrims to Vijayeśvara though the Purohitas of the latter place still retain a recollection of the former sanctity of the site.

108. There can be no doubt that at the foot of the Cakradhara **Legend of Narapura.** Uḍar there stood once an ancient town of considerable importance. From the low ground towards the river on the east and from the river-bed itself, ancient coins going back to Greek and Indo-Scythian rule are annually extracted in considerable quantities. Popular tradition still asserts that this site was once occupied by a great town. This tradition existed already in the time of Kalhaṇa who records it in the interesting legend of the burned city of Narapura.¹ This is told at great length in a poetic episode of the First Book.

King *Nara* is said to have founded a splendid capital, called after himself NARAPURA, on the sandy bank of the Vitastā close to the shrine of Cakradhara. "There in a grove was a pond of limpid water, the habitation of the Nāga Suśravas." A young Brahman who had found occasion to assist the Nāga and his two daughters when in distress, was allowed to marry in reward one of the latter. He lived in happiness at Narapura until the beauty of the Nāga lady excited the passion of the wicked king. When Nara found his advances rejected with scorn, he endeavoured to seize the beautiful Candralekhā by force. The couple fled for protection to their father's habitation.

The Nāga then rose in fury from his pool and "burned the king with his town in a rain of fearful thunderbolts." Thousands of people were burned before the image of Viṣṇu Cakradhara to which they had fled for protection. Ramaṇyā, the Nāga's sister, came down from the mountains carrying along masses of rocks and boulders. These she dropped, as we have seen, along the bed of the Ramaṇyāṭavī or Rembyār², when she found that Suśravas had already wreaked his vengeance. The Nāga himself feeling remorse at the carnage he had caused, removed to a lake on a far-off mountain. There "he is to the present day seen by the people on the pilgrimage to Amareśvara."² "To this day," thus closes Kalhaṇa's narration, "that tale is remembered by the people when they behold close to Cakradhara that town destroyed by fire and that pond which has become a dry hollow."

¹ See *Rājat.* i. 201-274.

² Compare regarding the lake of the Nāga *Suśravas* on the route to *Amburnāth*, above, § 59.

Whatever the origin of the legend here told may have been, it is clear that popular tradition in Kalhaṇa's time looked upon the barren ground which stretches along the river between Tsak^adar and the present Vij^abrōr as the site of an ancient city. The ruins which in the 12th century were pointed out as the remains of the burned Narapura, may have supplied the immediate starting point of the legend.

What these remains were we cannot say. As the ground referred to is subject to annual inundation it is possible that the remains meant have since disappeared under alluvial deposits. The habitation of the 'Suśram' Nāga was still shown to me in a hollow, generally dry, close to the south-east foot of the Udar. The name of Narapura and its king are no longer remembered. But the main features of the legend as heard by Kalhaṇa, still live in the local tradition.

109. The ancient town which once stood in the position indicated, was evidently succeeded by VIJAYEŚVARA, the present Vij^abrōr. The latter place, situated less than two miles above Cakradhara, received its name from the ancient shrine of Śiva *Vijayeśvara* (Vijayeśa, Vijayeśāna).¹ This deity is worshipped to the present day at Vij^abrōr. The site has evidently from early times been one of the most famous Tīrthas of Kaśmīr. It is mentioned as such in the Rājataranṅiṇī and many old Kaśmīrian texts.² The tradition regarding Aśoka's connection with it supplies historical proof for its antiquity. According to Kalhaṇa's account which may well have been based on genuine local tradition or even inscriptional evidence, Aśoka had replaced the old stuccoed enclosure of the temple by one of stone. The great king was also credited with having erected within this enclosure two temples called *Aśokeśvara*.

This old temple which is often mentioned by Kalhaṇa and was the scene of many a historical incident, has now completely disappeared. According to the tradition of the local Purohitas it stood at a site close the river-bank and nearly opposite to the bridge over the Vitastā. When I first visited Vij^abrōr in 1889 I still found some ancient slabs and fragments at this spot. It was then some 15 feet below the level of the surrounding ground,³ and has since been partly built over. Stone materials are said to have been removed from here for the new temple

¹ Compare for detailed references, *Rājat.* i. 38, 105 notes.

² The legend of the Tīrtha is given at length in the x. Prakāśa of the *Haracari-tacintāmaṇi*.

³ General Cunningham who saw these remains in 1847, rightly attributes them to the temple of Vijayeśa, but calls the place 'Vijayapāra.' He justly points to the difference of level as an indication of the antiquity of the structure; see *Anc. Geogr.*, p. 98.

of Vijayeśvara which was built by Mahārāja Raṅbir Singh some thirty years ago higher up on the river-bank.

It is probable that a temple so much frequented had undergone more than one restoration in the course of the fifteen centuries which lie between the time of Aśoka and the end of Hindu reign in Kaśmīr. Some time before A.D. 1081, while King Ananta was residing at the Tīrtha of Vijayeśvara, the temple was burned down in a general conflagration, caused by his son Kalaśa. The latter, however, subsequently restored the shrine. The old Liṅga of Śiva Vijayeśvara seems to have fallen a victim to the iconoclasm of Sikandar Butshikast.¹

The town of Vijayeśvara is ascribed by Kalhaṇa to King Vijaya.² But nothing else is recorded of this ruler, and this may cause a doubt as to his historical existence. It is significant that the town is designated either simply *Vijayeśvara* or as *Vijayakṣetra*, which is abbreviated from *Vijayeśvarakṣetra*. The modern name *Vijābrōr* is the Kś. equivalent of Vijayeśvara, *-brōr* (from Skr. *bhaṭṭāraka* 'god') having replaced the more specific *-īśvara*, the usual designation of Śiva.³

That the town had acquired importance at a comparatively early date, is indicated by the mention of a thousand Agrahāras said to have been granted here by King Mihirakula to a settlement of Gandhāra Brahmans.⁴ It was large enough to accommodate the whole court and army of King Ananta when the latter removed his residence to Vijayeśvara.⁵ The narrative of the civil wars which fills the last Book of Kalhaṇa's Chronicle shows the importance of the town by frequent references to the military operations of which it was the object.⁶ One of these passages proves that there was a bridge over the Vitastā here already in the twelfth century, just as there is one still.

Vijābrōr has remained a town of some importance and still boasts of a considerable number of Brahmans, mostly Purohitas of the Tīrtha. The latter being conveniently situated on the pilgrims' way to Mārtāṇḍa

¹ See *Jonar.* (Bo. ed.), 762; for an earlier mention of this emblem see *ib.*, 127.

² *Rājat.* ii. 62.

³ Compare *Rājat.* i. 38 note; also ii. 134. In the same way *Iśābrōr* represents *Īśēśvara*; with the feminine *-brāṇ* for *bhaṭṭārikā* we have *Sundābrāṇ* for *Samāhyādevī*, *Budābrāṇ* for *Bhedādevī*, etc.

The forms 'Bijbiāra,' 'Bijbihara,' 'Bijbehara,' etc., under which the local name figures in European books, are all based on a faulty Panjābī pronunciation. A fanciful etymology of the name which sees in the first part of the word *vidyā* 'learning' and in the second '*Vihāra*,' has found favour in the guide-books and may be mentioned here for curiosity's sake.

⁴ See *Rājat.* i. 317.

⁵ See *Rājat.* vii. 336 sqq.

⁶ *Rājat.* viii. 746 sqq., 969 sqq., 1140, 1509 sqq., etc.

and Amaranātha is much frequented even at the present day. The Māhātmyas of Vijayeśvara do not fail to name a considerable number of minor Tirthas to be visited along with the main site now marked by the new temple above referred to. But apart from *Cakradhara* and *Gambhīrasaṅgama* I am unable to trace any of these in the older texts.

Turning to that portion of the Dachūnpōr district which lies in the Lid^{ar} Valley we have but few old localities to notice. The village of *Liv^{ar}*, some ten miles to the north-west of Vijayeśvara, is the LEVĀRA of the Rājatarāṅgiṇī, mentioned as an Agrahāra established by King Lava.¹ *Kular*, about four miles higher up the Valley, is identified by an old gloss with KURUHĀRA, said to have been an Agrahāra of Lava's son Kuśa.²

Close to Pah^{algām} where the Lid^{ar} Valley divides into two branches, lies the hamlet of Māmal. A small temple of the usual Kaśmīr style built by the side of a fine spring is visited by the pilgrims to Amaranātha. It is designated in the Māhātmya called Amareśvara-kalpa as MAMMEŚVARA. It is in all probability identical with the shrine of this name mentioned in the Rājatarāṅgiṇī.³

110. As we have already before noticed the several sacred sites of the Amaranātha pilgrimage, we may now turn back and descend to the left or eastern portion of the Lid^{ar} Valley. It forms the modern Pargaṇa of *Khōvurpōr*. The latter name meaning 'left side' reproduces the earlier designation VĀMAPĀRŚVA, of the same significance, found in Jonarāja's Chronicle, the Lokaparakāśa and elsewhere.⁴ In the upper portion of the Pargaṇa I am not able to identify any particular old locality, though ancient remains in the form of sculptures of some interest are found near several Nāgas of this tract, e.g., at Lokutⁱpūr and Sāli (*Pāpaharaṇanāga*).

The large village of *Hut^amar* is undoubtedly an old site. Its modern name seems to identify it with the ŚĀKTAMAṬHA which Kṣemendra names as one of the stations in the peregrinations of his heroine Kaṅkālī. The chief mosque of the place is built with the remains of a Hindu temple and preserves in its walls some sculptured fragments of remarkable beauty.⁵

¹ See *Rājat.* i. 87.

² *Rājat.* i. 88.

³ See viii. 3360.

⁴ *Jonar.* (Bo. ed.) 79,1232.

⁵ See *Samay.* ii. 43. The change of *Śākta* > *Hut^a* is in accordance with the phonetic laws of Kaśmīrī; *mar* is the regular derivative of *maṭha*, see above, § 56. [When preparing my map, I had not noticed the local name of Kṣemendra's text; it is hence not shown on the map].

About one mile below Hut^amar and on the bank of a branch of the Lid^ar, lies the hamlet of *Bum^azu*, which contains an ancient structure of considerable historical interest. The Ziārat of Bāba Bām^adīn Ṣāhib is nothing but a well-preserved temple, converted, with a liberal use of plaster, into the supposed resting place of a Muhammadan saint. I have shown elsewhere that there is good reason to identify this shrine with the BHĪMAKEŚAVA temple which *Bhīma Sāhi*, king of Kābul, the maternal grandfather of Queen Diddā, is said to have erected during the rule of her husband Kṣemagupta (A.D. 950-958).¹

The legendary of the Ziārat relates that the saint was originally a Hindu and bore before his conversion to Islām the name of *Bhīma Sādhi*. It is easy to recognize in this name an adaptation of *Bhīma Sāhi*. Also the name of the locality *Bum^azu* which the Mārtāṇḍa-māhātmya renders by *Bhīmadvīpu*, is clearly derived from the old name of the shrine. *Bhīma* is an abbreviation of *Bhīmakeśava* to which *Ks. zu*, 'island,' has been added with reference to the several islands formed here by the Lid^ar immediately in front of the hamlet.

Kalhaṇa tells us a curious anecdote regarding the fate of *Bhīma Sāhi*'s temple in King Harṣa's time who confiscated the great treasures, with which it was endowed.² Close to the present Ziārat of Bām^adīn Ṣāhib is a small cave in the cliff containing a well-preserved little temple which is still used for Hindu worship. Another smaller shrine outside has been turned into the tomb of Rīshī Ruknu-d-dīn Ṣāhib.

111. About one mile south of *Bum^azu* we reach the Tīrtha sacred to Mārtāṇḍa which has from early times to the present day enjoyed a prominent position among the sacred sites of Kaśmīr. It is marked by a magnificent spring traditionally represented as two, *Vimala* and *Kamala*. An ancient legend connects them with the birth of the sun-god MĀRTĀṆḌA.³ The Tīrtha is visited at frequent intervals by crowds of pilgrims and is well-known also in India proper.

The popular name of the Tīrtha, *Bavan*, is derived from Skr. *bhavana*, '[sacred] habitation.' This somewhat general appellation seems to have come into use already at an early date, as Śrīvara employs it,⁴ and is in itself an indication of the great popularity of the Tīrtha. A

¹ See *Rājat.* vi. 178 note. For an accurate description of the temple, see Bishop COWIE's paper, *J. A. S. B.*, 1866, pp. 100 sq.

² See *Rājat.* vii. 1081 sqq.

³ Compare for a detailed account of the Tīrtha, *Rājat.* iv. 192 note. The *Vimala Nāga* is named by the *Nilamata*, 963; *Śrīv.* i. 377, etc.

⁴ *Śrīv.* i. 376, 387.

more specific designation is *Mats^abavan*, Skr. 'Matsyabhavana'; this owes its origin to the abundance of sacred fish which swarm in the large basins filled by the spring.¹

The ancient remains at the sacred spring itself are very scanty. All the more imposing are the ruins of the great temple which King Lalitāditya erected at a short distance in honour of the presiding deity of the Tīrtha.²

They are situated a little over a mile to the south-east of 'Bavan,' near the northern edge of the Uḍar which stretches towards Anātṇāg. It can scarcely be doubted that the site was chosen with a view to the prominent position it assured to the great temple. Kalhaṇa duly praises "the wonderful shrine of *Mārtāṇḍa* with its massive walls of stone, within a lofty enclosure." Its ruins though much injured by the ravages of time and earthquakes, form still the most impressive specimen of ancient Kaśmīr architecture. They have been much admired by European travellers and often described. They are the earliest ruins in Kaśmīr the date of which is fixed with approximate accuracy.³

The name *Mārtāṇḍa*, in the form of *Mārtāṇḍ* or *Maṭan*, still attaches to the ruins though they have long ago ceased to be an object of religious interest. King Kalaśa had sought this great fane at the approach of death and expired at the feet of the sacred image (A.D. 1089). Harṣa, his son, respected this temple in the course of the ruthless confiscations to which he subjected the other rich shrines of the country. Subsequently in Kalhaṇa's time the great quadrangular courtyard of the temple with its lofty walls and colonnades was used as a fortification. The destruction of the sacred image is ascribed to Sikandar Butshikast.

Kalhaṇa distinctly mentions the town "swelling with grapes" which Lalitāditya founded near his temple; but of this no trace remains now. It is probable that at that time a canal supplied water from the Lid^ar to the naturally arid plateau on which the temple stands. This canal seems to have been repaired by Zainu-l-'ābidīn whose irrigation works on the *Mārtāṇḍ* Uḍar are described at length by Jonarāja.⁴ The

¹ Comp. *Āin-i-Akb.*, ii. p. 358.

² See *Rājat.* iv. 192 and for details my note on the passage. For a description of the temple compare, e.g., CUNNINGHAM, *J. A. S. B.*, 1848, pp. 258 *sqq.*; COLE, *Ancient Buildings*, pp. 19 *sqq.* FERGUSSON, *Ind. Architecture*, pp. 285 *sqq.*

³ Lalitāditya's rule falls in the first half of the eighth century. Gen. Cunningham's assumption that the temple was built by the earlier King Raṇāditya, and only the enclosure by Lalitāditya, rests on a misinterpretation of the *Rājatar.* passages iv. 192 and iii. 462.

⁴ See *Jonar.* 1245 *sqq.*

plateau has since become once more an arid waste though the course of the old canal can still be traced above Hut^amar.

The town of Mārtāṇḍa had left its name to the small Pargaṇa of Maṭan which comprised this plateau as well as the villages situated along the foot of the hills further east. It is referred to as *Mārtāṇḍadeśa* by Jonarāja.¹ Abū-l-Faḍl notices the large temple of *Maṭan* and the well or pit close by, which a Muhammadan legend represents as the place of captivity of the 'angels Hārūt and Mārūt.'²

SECTION VII.—SOUTHERN DISTRICTS OF MAḌAVARĀJYA.

112. At the foot of the western extremity of the Mārtāṇḍa plateau lies the town of Islāmābād or by its Hindu name *Anantanāga*. The latter is derived from the great spring of the ANANTANĀGA which issues at the southern end of the town. The Nāga, though no Tīrtha of particular repute, is mentioned in the Nīlamata, Haracaritacintāmaṇi and some Māhātmyas.³ Of the town, however, I cannot find any old notice, and it is in all probability, as its Muhammadan name implies, a later foundation. To the north of the town and on the way to Bavan is the *Gautamanāga*, named by the Nīlamata and the Mārtāṇḍamāhātmya.

The modern name of the small district which comprised besides Anatnāg the tract immediately south and west of it, is *Anyech*. This is represented in some Māhātmyas of recent composition by *Anekākṣa*. This name occurs also once in Śrīvara's Chronicle, but the locality there meant is not certain.⁴

The valley of the Ār^apath or *Harṣapathā* which opens to the east of Islāmābād, forms the Pargaṇa of *Kuṭhār*. This name is in all probability connected with that of the ancient Tīrtha of KAPATEŚVARA, situated on the southern side of the valley close to the village of *Kōṭhēr*.⁵ The name of the latter is undoubtedly a derivative of *Kapateśvara*, as the analogy of Jyethēr < Jyēṣṭheśvara, Triphar < Tripureśvara, etc., clearly shows.

¹ *Jonar.* 1310.

² See *Āīn-i-Akb.*, ii. p. 358. For the Muhammadan story, see also VIGNE i. p. 361.

³ See *Nīlamata*, 902; *Vitastā*, -*Trisāṁdhyāmāhātmya*, etc., also *Haracar.* x. 251 sqq. (Anantabhavana).

⁴ *Śrīv.* iii. 184.

⁵ See for a detailed account, *Rājat.* i. 32 note.

The place of pilgrimage is the sacred spring of *Pāpasūdana* ('sin-removing'), situated a short distance above Kōṭhēr. In it Śiva is believed to have shown himself in the disguise (*kapāṭa*) of pieces of wood floating on the water. The legend is related at length in the *Nilamata*, and the author of the *Haracaritacintāmaṇī* devotes to it a separate canto which has now become the official *Māhātmya* of the Tīrtha.¹ The importance of the latter is shown by the fact that Kalhaṇa mentions it in his Introduction first among the sacred sites of Kaśmīr.

Before him already Albērūnī had heard of the story that pieces of wood sent by Mahādeva appear annually "in a pond called *Kūdaishahr* to the left of the source of the Vitastā, in the middle of the month of Vaiśākha."² *Kūdaishahr* (کودیشهر), is an easily explained corruption for کودیشور *i.e.*, **Kavadēśvar*, a prakritized form of the name. The map shows that the description of the position of the Tīrtha is accurate enough with reference to the Nilanāga as the Vitastā's traditional source. The date named by Albērūnī is identical with that prescribed for the Kapateśvara Yātrā.

The sacred spring rises in a large circular tank, enclosed by an ancient stone-wall with steps leading into the water. According to Kalhaṇa's account this enclosure was constructed about a century before his own time at the expense of the well-known King Bhoja of Mālava. The latter is said to have taken a vow to always wash his face in the water of the Pāpasūdana spring which he caused to be regularly supplied to him in jars of glass.³ In my note on the passage I have shown that local tradition at Kōṭhēr still retains a recollection of this story though in a rather legendary form. A small temple which stands to the east of the tank, and some other remains probably belong to the period of Bhoja. Abū-l-Faẓl too knows, "in the village of Kōtihār, a deep spring surrounded by stone temples. When its water decreases an image of Mahādeva in sandal wood appears."

About four miles to the north-east of Kōṭhēr and on a branch of the Ār^apath river lies the populous village of *Sāngas*, the ancient S'AMĀNGĀSĀ.⁴ The modern name can be traced back to S'amāngāsā through a course of regular phonetic conversion, one stage of which is preserved in the form *S'vāngas* supplied by the old glossator of the Chronicle.⁵ Some old

¹ *Haracar.* xiv.

² See *India*, ii. p. 181.

³ See *Rājāt.* vii. 190 sqq.

⁴ See *Rājāt.* i. 100; viii. 651.

⁵ Compare *Rājāt.* i. 100 note and the analogy of *S'anāra* > *S'ār*.

carved slabs built into the chief Ziārat of the place attest its antiquity. A short distance above Sāngas we come to another old place. It is the present village of *Vutarus* which on the authority of the same glossator and the name itself we can safely identify with Kalhana's *Utrāsa*.¹ Uccala and Sussala in their flight from Harṣa's court found a temporary refuge with the Dāmara who resided there.

Turning back to the west we find in the middle of the valley the village of *Khondur*. An old gloss enables us to identify it with the ancient SKANDAPURA mentioned by Kalhana as an Agrahāra of King Gopāditya.² More important is *Achabal*, a large village at the west foot of the ridge which lines the Kuṭahār Pargaṇa from the south. It is mentioned in the Chronicle under the name of AKṢAVĀLA. The beautiful springs of the place have often been described since Abū-l-Fazl's time, also by Bernier.³ The park around them was a favourite camping ground of the Mughal court. The Nilamata calls the spring *Akṣipālanāga*.

113. The Kuṭahār Pargaṇa is adjoined on the south by the district of Bring which coincides with the valley of the Bring stream. Its old name cannot be traced; the Lokaparakāśa transcribes the modern designation by *Bhr̥ṅga*.

At the western end of the Pargaṇa and about 5 miles to the southwest of Achabal is the village of *Lōkabhavan* which an old gloss identifies with the LOKAPUṆYA of the Rājataranṅinī.⁴ The numerous passages which mention the place agree with this location. The name Lōkabhavan applies also to the fine Nāga adjoining the village, and this explains the second part of the present name *-bavan* (Skr. *bhavana*).⁵ King Lalitāditya is said to have built a town here. A small garden-palace erected in Mughal times near the spring is partly constructed of old materials.

Ascending the Bring valley we come again to an old site at the large village of *Biḍar*. It is certainly the BHEDARA of Kalhana who notices here a wealthy Agrahāra of King Bālāditya.⁶ A ruined mound in the village and some old sculptures at the neighbouring Brahman village of Hāngalgūnd are the only ancient remains now above ground.

¹ Compare vii. 1254.

² See *Rājat.* i. 340.

³ Compare *Rājat.* i. 338. In the translation of the *Āin-i-Akb.* the name appears as 'Acch Dal', ii. p. 358; see BERNIER, *Travels*, p. 413.

⁴ See *Rājat.* iv. 193 note.

⁵ See above, § 111.

⁶ *Rājat.* iii. 481.

From Bid^{ar} we may pay a passing visit to a small Tirtha which though I cannot find it mentioned in any old text, may yet claim some antiquity. About 1½ miles to the south-east of Bid^{ar} lies the village of Nāru in the low hills flanking the valley. It contains a small temple of ancient date which was restored forty years ago by a pious Dogrā official. It stands by the side of a small Nāga at which, according to the local Māhātmya I acquired from the resident Purohita, Śiva is worshipped as ARDHANĀRĪŚVARA, that is, in conjunction with his consort Pārvatī. Inside the temple is an ancient image of Viṣṇu with a short Sanskrit inscription said to have been found in a miraculous way at the restoration of the temple. About half a mile to the south-west is a sacred spring known as *Svedanāga* which seems to have risen originally within a large temple. The remains of the latter lie in shapeless heaps around the spring. The latter is still visited by pilgrims.

It appears to me likely that it is this spot which Abū-l-Faḍl wishes to describe in the following notice. After mentioning the Kuk^{ar} Nāg and Sund^{ar}brār (see below) among the sacred places of Bring, he says: "At a little distance in the midst of a beautiful temple, seven fountains excite the wonderment of the beholder. In the summer-time self-immolating ascetics here heap up a large fire around themselves and with the utmost fortitude suffer themselves to be burned to death."¹ He then mentions a lofty hill containing an iron mine to the north of this spot. This can only be the hill above *Sōp*, on the northern side of the Valley and nearly opposite Nāru, from which iron is still extracted at the present time. There is no other Nāga within Bring to which Abū-l-Faḍl's description would apply so closely as to the *Svedanāga*.

The *Kuk^{ar} Nāg*, mentioned by Abū-l-Faḍl for its good water inciting a healthy appetite, lies about a mile above Bid^{ar}. It is a spring of very great volume, referred to in the *Trisaṁdhyāmāhātmya* as *Kukkuteśvara*.

Bring contains one of the holiest of Kaśmīr Tirthas in the sacred spring of the goddess SAṂDHYĀ, also called Tirtha of Trisaṁdhyā. *Trisaṁdhyā*, the modern *Sund^{ar}brār*.² It is situated in a side valley opening to the south of the village of Devalgōm, circ. 75° 22' long. 33° 32' lat. The spring of Saṁdhyā derives its fame as well as its appellation from the fact that during uncertain periods in the early summer it flows, or is supposed to flow, intermittently, three times in the day and three times in the night. Owing to the analogy thus presented to the three-fold recitation of the Gāyatrī

¹ See *Āin-i-Akb.*, ii. p. 356.

² See *Rājat.* i. 33 note.

(Saṁdhyā), it is held sacred to the goddess Saṁdhyā. At the season indicated it is visited by a considerable concourse of people.

The small spring, which is usually dry for the greater part of the year, has owing to the curious phenomenon above indicated always enjoyed great fame as one of the 'wonders' of the valley. Kalhaṇa duly mentions it immediately after Kapateśvara. The Nīlamata too knows it. Abū-l-Faẓl describes it in detail, and Dr. Bernier made it a special point to visit this 'merveille de Cachemire.'¹ He has observed the phenomenon with his usual accuracy. The ingenious explanation he has recorded of it, shows how closely he had examined the topographical features of the little valley.

Close to the Trisaṁdhyā spring there is another Nāga, sacred to the Seven Ṛṣis, but not sharing the former's peculiar nature. There are no ancient remains in the neighbourhood deserving special notice.

114. To the south of Bring lies the valley of the Sāndraṇ River which forms the Pargaṇa of Shāhābād. This Nīlanāga. name is of comparatively modern origin, as Abū-l-Faẓl still knows the tract as *Vēr*.² This designation still survives in the designation *Vēr-nāg*, *i.e.*, 'the Nāga of Vēr,' popularly given to the fine spring which we have already noticed as the habitation of the NĪLANĀGA and the traditional source of the Vitastā. Abū-l-Faẓl saw still to the east of it 'temples of stone.' These have now disappeared, their materials having been used probably for the construction of the fine stone-enclosure which Jahāngīr built round the spring. The deep blue colour of the water which collects in the spring-basin, may possibly account for the location of the Nilanāga in this particular fountain. Kalhaṇa's reference to the "circular pond" from which the Vitastā rises, shows that the spring had also in ancient times an artificial enclosure similar to the present one.³

Reference has already been made to the sacred spring of *Vithavutur* only about one mile to the north-west of Vitastātra. Vēr-nāg. The small village near by is mentioned by Kalhaṇa as a town under the name of VITASTĀTRA.⁴ Aśoka is said to have erected there numerous Stūpas. Within the *Dharmāranya* Vihāra there stood a lofty Caitya built by him, but of these structures no remains can now be traced above ground. *Vitastātra* could never have been a large town as the ground is too confined. But some importance is assured to the site by the Bān^ahāl route which leads past

¹ Compare *Āin-i-Akb.*, ii. pp. 355 sq. ; BERNIER, *Travels*, pp. 410 sqq.

² See *Āin-i-Akb.*, ii. pp. 361, 370.

³ See *Rājat.* i. 28.

⁴ See *Rājat.* i. 102 note.

it. This pass and its ancient name *Bāṇasālā* we have already spoken of.¹

Of other old localities PAÑCAHASTĀ, the present *Pānzath*, has already been referred to as the site of one of the traditional sources of the Vitastā. Kalhaṇa mentions it in connection with a Maṭha which Śūravarman, Avantivarman's minister, built here.² A pretty valley which opens to the south of Pānzath, is now known by the name of its chief village *Ruzul*. The latter is mentioned by Jonarāja as RĀJOLAKA.³ About three miles higher up this valley is the Nāga of VĀSUKI. It is mentioned in the Nīlamata and other old texts, but does not appear to have ever been an important Tirtha.⁴

115. The Pargaṇa of *Divasar* which adjoins *Shāhābād-Vēr* on the west, may be roughly described as comprising the tract of alluvial plain drained by the *Veśau* (*Viśokā*). By its ancient name of

District of
Devasarasa.

DEVASARASA it is often mentioned in the *Rājatarāṅgiṇī* and other Chronicles.⁵ Being extensively irrigated by canals drawn from the *Viśokā* it is very fertile. This accounts for the great part which the *Ḍāmaras* or feudal landholders of Devasarasa played during the weak reigns of the latter kings. No certain reference to a specific locality within this tract can be traced in our old texts. But it seems probable that *Pārevisoka*, repeatedly named in Kalhaṇa's Chronicle, must be looked for within Devasarasa; the name means literally 'beyond the *Viśokā*.'⁶

The fertile valleys descending to the right bank of the *Viśokā* from that portion of the *Pir Pantṡāl* Range which lies between the *Kōnsar* Nāg Peak and the Mohi Pass, form a small district of their own, known in recent times by the double name *Khur-Nārāvāv*. The first part of this name is taken from the large village of *Khur* situated about two miles from the *Viśokā*, circ. 74° 56' 45" long. 33° 37' lat. It is marked as 'Koori' on the larger Survey map. The name *KHERĪ* which we find used by Kalhaṇa and Śrīvara for the designation of the tract, is in all probability the older form of *Khur*.⁷ It seems that in later Hindu times the administration of *Kherī*, perhaps as a royal allodial domain, formed a special charge. Kalhaṇa often refers to the *Kherīkārya* as a high state-office. The Sikhs and *Dogrās* who established *Jāgīrs* for members

1 Compare above, § 41.

2 See *Rājat.* v. 24.

3 See *Jonar.* (Bo. ed.), 90.

4 See *Nīlamata*, 901.

5 Compare *Rājat.* viii. 504 note.

6 Compare *Rājat.* iv. 5 note.

7 Compare regarding the identification of *Kherī*, *Rājat.* i. 335 note.

of the reigning family in Khur-Nār^avāv, may thus have followed an earlier arrangement.

The only localities in this little district that are known to us by their old names, are GODHARĀ and HASTIŚĀLĀ, **Godharā-Hastiśālā.** the present *Gudar* and *Astihēl*.¹ These two villages are situated close together, on a branch of the Viśokā near the eastern limits of Khur-Nār^avāv. Kalhaṇa mentions the 'Agrahāra' of Godharā-Hastiśālā' as a foundation of King Godhara. The old gloss which transcribes these local names by *Godhar-Astihil* enabled me to identify the places intended.

A small stream which falls into the Viśokā at Gudar is known by the name of Godāvarī and forms a Tirtha of some repute among the Brahmans of the neighbouring districts. In the Māhātmya of the Tirtha the site of the village is called *Godara*, and its name connected with the legend of the appearance of the *Godāvarī*. The local tradition heard by me on the spot tells of a town which King Gudar is supposed to have founded here. It is possible that the name of King Godhara, which we know Kalhaṇa took indirectly from Helārāja's 'List of Kings,' rests on no better foundation than this long-surviving local tradition.² There are no ancient remains traceable above ground at Gudar, and the locality is far too confined for a larger settlement.

The Naubandhana Tirtha and the Kramasaras or Kōns^ar Nāg south of this district have already been previously noticed.

116. To the north of Div^asar lies the considerable district of **District of Karāla** *Āḍ^avin* extending from the western end of **(Ardhavana).** Khur-Nār^avāv to the lower course of the Viśokā. Its present name is derived from that of the large village of *Āḍ^avin*, which lies on the left bank of the Viśokā, about three miles south-west of Vij^abrōr. In the form of *Ardhavana* this name is found already in a passage of Jonarāja's Chronicle, supplied by the new edition.³ The ancient designation of the district, however, was KARĀLA. This is used by Kalhaṇa when speaking of the *Suvarṇamanikulyā*, the present Sun^amaṇⁱ Kul, which has already been referred to as irrigating part of *Āḍ^avin*.⁴

In the lower portion of the district and on the left bank of the Viśokā, we have the ancient *Katimuṣa*, the present village of *Kaimuh*.

¹ For details compare *Rājat.* i. 96 note.

² Regarding the unhistorical character of the royal names which Kalhaṇa inserted on Helārāja's authority, see *Rājat.* i. 86 note. They seem to be all of an eponymic character.

³ See *Jonar.* (Bo. ed.) 1330.

⁴ See *Rājat.* i. 97 note, and above, § 78.

The place is mentioned by Kalhaṇa as an Agrahāra founded by Tuñjīna I., and contains some old remains built into its chief Ziārat.¹

Part of Āḍ²vin lies on an alluvial plateau. The northernmost portion of this Uḍar seems to have been formed into a separate Pargaṇa after Zainu-l-‘ābidīn had constructed there extensive irrigation channels. From the small town of *Jainapurī* founded by him the new subdivision took the name of Zain²pōr or JAINAPURA.² At the east foot of the Zain²pōr Uḍar lies the village of *Vāchⁱ* (map ‘Woochi’) which on the authority of an old gloss may be identified with VAŚCIKĀ (or Vaścika), an Agrahāra founded by Gopāditya.³

The Pargaṇa which joins on to Āḍ²vin in the north-east, is now known as *Bōt* (map ‘Battoo’). Its ancient name is unknown. The only old locality I can trace in it is the village of *Sidau*, 74° 51’ long. 33° 41’ lat., the ancient SIDDHAPATHA.⁴ It has given its name to the route previously mentioned which leads to the Būdil and Kōns²r Nāg Passes.

It is curious that we find no old mention whatever of *S’upiyān*, a considerable town, which is now the trade emporium for the Pir Pantsāl route. In this character *S’upiyān* has replaced the ancient *S’ūrapura* or Hūr²pōr, but the change must be a comparatively recent one.

S’ŪRAPURA which we have already noticed as the Kaśmīr terminus of the Pir Pantsāl route, lies some seven miles higher up on the Rembyār².⁵ It received its name from the minister *S’ūravarma*n who built it in the time of Avanti-varman and transferred to it the watch-station or ‘Draṅga’ of the route. The position of the latter is marked by a spot known as Ilāhī Darwāza, a short distance above Hūr²pōr.⁶ *S’ūrapura* must have been a place of considerable extent as ruins of old habitations can be traced on the river banks for over two miles below the present Hūr²pōr. It evidently retained its importance down to Akbar’s time. For it is regularly mentioned by all the later Chronicles in connection with marches and traffic by the Pir Pantsāl route. The ancient remains of the place have been described by me in my notes on the latter.⁷

Our previous account of the old localities on the way to the Pir

¹ Compare *Rājat.* ii. 55 note.

² See *Jonar.* (Bo. ed.) 1144 sq.; *S’rīv.* iii. 194; Fourth Chron. 360, 383.

³ Compare *Rājat.* i. 343 note.

⁴ See *Rājat.* viii. 557.

⁵ Regarding *S’ūrapura* and its old sites, compare *Rājat.* Note *D* (iii. 227); v. 39 note; also *J. A. S. B.*, 1895, pp. 381 sqq.

⁶ See above, § 42.

⁷ See *J. A. S. B.*, 1895, p. 385.

Panṭṣāl Pass makes it unnecessary for us to proceed now further in this direction. Descending, then, by the Rembyār^a we come on its left bank to the village of *Dēgām* situated about one and a half miles to the west of *Ṣupiyaṅ*. It is the *DEGRĀMA* of the *Rājatarāṅgiṇī* and the site of the *Kapālamocana Tīrtha*.¹ At the spring of the latter *Ṣiva* is supposed to have cleaned himself from the sin attaching to him after the cutting-off of Brahman's head (*kapāla*). The *Tīrtha* is old, because the *Haracaritacintāmaṇi* mentions it twice.² There are but few ancient remains at the sacred site, and the extant *Māhātmya* is evidently not of old date. It calls the village by the name of *Dvigrāma* and knows the modern *Ṣupiyaṅ* by the name of *Ṣūrpāyaṅa*.

117. The villages which lie at the foot of the pine-clad spurs descending into the valley west and north-west of *Ṣupiyaṅ*, formed until recent times a small distinct *Pargaṅa* known as *Ṣūparsāmūn*. *Abū-l-Faṣl* mentions it (*Sōparsāman*), but I am not able to trace it in our older texts.

To the north of this tract and of *Bōṭ* extends the *Pargaṅa* of *Ṣukru*.

Kalyāṅapura.

Its old name is unknown. Here at the foot of the hills, we have the ancient *KALYĀṅAPURA*, represented by the present village of *Kalampōr*, situated 74° 54' long. 33° 48' lat. It was founded by *Kalyāṅadevī*, a queen of *Jayāpīḍa*.³ Being on the high road from the *Pir Panṭṣāl* Pass to *Ṣrīnagar*, it was repeatedly the scene of battles fought with invaders from that direction.⁴

At *Kalyāṅapura* there was in *Kalhaṅa*'s time the splendid country-seat of a powerful *Ḍāmara*.⁵ The large village of *Drāb^agām*, some three miles north of *Kalampōr*, is mentioned as *DRĀBHAGRĀMA* by *Ṣrīvara*, along with *Kalyāṅapura*, in the description of a battle which was fought between the two places.⁶

High up in the valley of the *Birnai* stream which debouches at *Drāb^agām* from the south-west, is the site of **Tīrtha of Bheda.**

Drāb^agām from the south-west, is the site of an ancient *Tīrtha* which though now completely forgotten must have ranked once amongst the most popular in *Kāśmīr*. In *Kalhaṅa*'s introduction there is named, along with *Trisaṁdhyā*, *Svayāmbhū*, *Ṣāradā* and other famous sites, "the hill of *Bheda* (*Bheda-giri*) sanctified by the *Gangodbheda* spring." There the goddess *Sarasvatī*

¹ Compare *Rājat.* vii. 266.

² See *Haracar.* x. 249; xiv. 111.

³ See *Rājat.* iv. 483 note.

⁴ See *Rājat.* viii. 1261 *sqq.*; *Ṣrīv.* iv. 466 *sqq.*

⁵ See *Rājat.* viii. 2348 *sqq.*

⁶ See *Ṣrīv.* iv. 467. For a miniature temple extant at *Drāb^agām*, compare *Bishop Cowie's* note, *J. A. S. B.*, 1866, p. 117.

was believed to have shown herself as a swan in a lake situated on the summit of the hill. This Tīrtha has long ago ceased to be visited by pilgrims, and all recollection regarding its position has been lost to Paṇḍit tradition. Fortunately the old Māhātmya of the sacred lake has survived in a single copy. With the help of some indications furnished by it and an opportune notice of Abū-l-Faẓl, I was able to make a search for this ancient Tīrtha which ultimately led to its discovery at the present Budḡbrār in the valley above indicated.

For the detailed evidence regarding this identification I must refer to my note on Kalhaṇa's passage.¹ Here a brief reference to the topographical peculiarity of the site will suffice. The Māhātmya describes the lake sacred to the goddess Sarasvatī-*Bhedā* as situated on the summit of a hill, and *Gaṅgodbheda* as a spring flowing from it. At *Budḡbrār*, a small Gujar hamlet, which occupies the position marked by BHEḌAGIRI on the map, I found an ancient stone-lined tank fed by a spring on the top of a small hillock. The latter rises about seventy feet above the level of the narrow valley in which it is situated. From the side of the hillock issues a spring which is the natural outflow of the tank and exactly corresponds to the description given of *Gaṅgodbheda*. The name *Budḡbrār* is the direct derivative of *Bhedādevī*, 'the goddess *Bhedā*,' the popular designation of the Tīrtha found in the Māhātmya; *-brār* < Skr. *bhaṭṭārikā* is the equivalent of *devī* as in *Sundḡbrār*, *Harḡbrār* and other names.

The water of the spring which fills the tank, is said to keep warm in the winter. This accounts evidently for the story told in the Māhātmya that snow never lies on the ground around the sacred tank. Also Abū-l-Faẓl's notice of the Tīrtha mentions this particular feature: "Near *Shukroḥ* (*Sukru*) is a low hill on the summit of which is a fountain which flows throughout the year and is a place of pilgrimage for the devout. The snow does not fall on this spur."²

Also *Srīvara* helped to guide my search in the direction of *Budḡbrār* and to confirm the subsequent identification. He mentions the route through *Bhedāvana*, 'the forest of *Bhedā*,' as the line of retreat taken by the troops who after their defeat in the above-mentioned engagement near *Drābḡgām* were fleeing towards *Rajaurī*.³ A glance at the map shows that the thickly wooded valley of *Budḡbrār* is meant here. For a force beaten near *Drābḡgām* it affords the most direct and safest retreat to the *Pīr Pantḡsāl* Pass and hence to *Rajaurī*. The route leading through the valley joins the 'Imperial Road' at *Dubji* and is shown on the map.

¹ See *Rājat*. i. 35, Note A.

² See *Āin-i-Akb.*, ii. p. 362.

³ Compare *Srīv.* iv. 496 and the preceding narrative.

Returning once more to the plain we have yet to notice two other old localities of Śukru. *Bilau* (map 'Belloh') about four miles north-east of Drāb^agām is probably the 'village of BILĀVA' once mentioned by Kalhaṇa.¹ Within a mile of it lies the village *Sun^asāmīl* which we may safely identify with the SUVARṆASĀNŪRA of the Rājataranṅinī, in view of the resemblance of the names and the repeated mention of the latter place together with Kalyāṇapura.²

118. East of Śukru towards the Vitastā stretches the Pargaṇa of *Sāvur* (map 'Showra'). The earlier form of its name cannot be traced. Its northern part is formed by the alluvial plateau known as the *Naunagar Uḍar*. This latter is twice referred to as NAUNAGARA in Kalhaṇa's Chronicle.³ The village of *Pāyer* which lies at the foot of the Uḍar at its north-western end contains a well-preserved little temple often described by European travellers.⁴ Nothing is known regarding the original name of the locality.

To the north of Śukru we have the district of *Chrāṭh* (shown by name on the larger survey map). It extends from the hills above Rāmuh in a north-easterly direction to the left bank of the Vitastā. Its old name is restored in Paṇḍit Sāhibrām's Tīrthasaṁgraha as **S'rīrāṣṭra*, but I do not know on what authority. *Rāmuh*, first correctly identified by Prof. Bühler with Kalhaṇa's RĀMUṢA,⁵ is a considerable village on the high road from Śupiyān to Śrīnagar. It is first mentioned as an Agrahāra, founded by a queen of Tuñjīna I. A small spring at the northern end of the village, called *Dhananāga*, is visited as a Tīrtha and contains some fragments of ancient sculptures. The temple erected by the Brahman family of the Dars which now holds Rāmuh as a Jāgīr, does not seem to mark an old site.

A short distance to the north of Rāmuh rises an alluvial plateau which is crossed by the road to Śrīnagar. It is known as *Gūs Uḍar*, from the village of *Gūs* situated at its eastern foot, about two miles from Rāmuh. The place is mentioned as GUSIKĀ in Śrīvara's

¹ See *Rājat.* vii. 1016.

² See *Rājat.* vii. 1519 note; *sun^a* 'gold' is the regular Kś. derivative of Skr. *suvarṇa*.

³ See *Rājat.* vii. 358.

⁴ Compare, e.g., CUNNINGHAM, *J. A. S. B.*, 1848, pp. 254 *sqq.* I am unable to explain why the place figures in all European accounts as Pāyech, Pā Yech, etc. VIGNE, ii. 41, first uses this form which is locally quite unknown, and does not fail to explain it by one of his naïve etymologies.

⁵ *Rājat.* ii. 55; *Report*, p. 7. Medial ṣ becomes in Kś. regularly *h*; comp. *Katīmuṣa* > *Kaimuh*, *Khonamuṣa* > *Khun^amoh*, etc.

Chronicle which also knows the plateau by the name *Gusikoḍḍāra*.¹ At the other end of Chrāṭh towards the Vitastā lies the large village of *Ratanpōr*, 75° 1' long. 33° 55' lat., which in all probability represents the RATNĀPURA of the Rājatarāṅgiṇī.² The latter was founded in Kalhaṇa's time by Queen Ratnādevī who also constructed there a fine Maṭha.

With Chrāṭh may be mentioned two localities on the left bank of the Vitastā though in recent times they were counted with the riveraine Pargaṇa of Sāiru-l-Mawāzi' Bālā. *Gūr'ipūr*, a small village opposite to the foot of Mount Vastarvan, is identified by an old gloss with GOPĀLAPURA which, according to Kalhaṇa, was founded by Queen Sugandhā (A.D. 904-6).³

Lower down on the river is the large village Kāk^apōr which forms as it were the riverside station or port for Sūpiyaṇ. A note from the hand of Paṇḍit Rājānaka Ratnakaṇṭha who wrote about the middle of the 17th century the Codex Archetypus of the Rājatarāṅgiṇī, identifies UTPALAPURA with Kāk^apōr.⁴ Utpalapura was founded by Utpala, an uncle of King Cippaṭa-Jayāpīḍa, in the early part of the 9th century. If this identification is correct, one of the ruined temples extant at Kāk^apōr and noticed already by Gen. Cunningham, may be the shrine of Viṣṇu *Utpalasvāmin* mentioned by Kalhaṇa in connection with the foundation of Utpalapura. Jonarāja also knows the latter place and records a late restoration of its Viṣṇu temple.⁵

119. North of Chrāṭh we come to the district of Nāgām which is one of considerable extent. Its old name **Districts of Nāgām and Yech.** NĀGRĀMA is often mentioned in the later Chronicles.⁶ The only old locality which I can trace in it, is the village of *Ār'igōm*, situated 74° 45' long. 33° 56' lat. It is the HĀḌIGRĀMA of Kalhaṇa, mentioned as an Agrahāra of Gopāditya and as the scene of several fights in the Chronicler's own time.⁷

¹ *Srīv.* iv. 532, 465, 592 sqq.; -*uḍḍāra* is the Skr. original of the Kś. term *uḍar*, see *Rājat.* note viii. 1427.

² See *Rājat.* viii. 2434.

³ See *Rājat.* v. 244 note.

⁴ See *Rājat.* iv. 695 note. The learned copyist's note is in a copy of the *Kṣetrapālapaddhati* seen by me in 1895 in the possession of a Kaśmīr Brahman resident at Lahore.

⁵ See *Jonar.* (Bo. ed.) 111 sqq., 369, 1142.

⁶ Compare *Jonar.* (Bo. ed.) 661; *Srīv.* ii. 10; iii. 24, 430; iv. 349; Fourth Chron. 258, etc.

⁷ See *Rājat.* i. 340 note. The old glossator on this passage renders Hāḍigrāma correctly by *Āḍegrām*.

Some remains of old buildings are reported to exist at this place ; I have not seen it myself.

About five miles due south of Ārīgōm we find a small lake known as Nilānāg, situated in a valley between low spurs descending from the Pīr Pantṣāl Range. It appears to have been formed by an old landslip which blocked a narrow defile in the Valley. This lake does not appear ever to have enjoyed any particular sanctity. But Abū-l-Faḍl by some curious misapprehension transfers to it the legends of the famous Nilanāga (at Vērnāg). He adds to them what appears like a garbled version of the story of the city submerged in the Mahāpadma or Volur lake.¹

Nāgām is adjoined on the north by the Pargaṇa of *Yech* which extends to the immediate vicinity of Śrīnagar. Its old name is given as IḶṢIKĀ by Śrīvara.² In the centre of the tract lies an arid alluvial plateau known as *Dāmādar Uḍar*, where an ancient popular tradition surviving to the present day has localized the legend of King *Dāmodara*.

The story as related by Kalhaṇa, represents the king as having built a town on the Uḍar which latter was called
Dāmodara's Uḍar. after him DĀMODARASŪDA.³ In order to bring water to it he had a great dam, called GUDDASETU, constructed by supernatural agency. Once hungry Brahmans asked the king for food, just as he was going to bathe. The king refused to comply with their request until he had taken his bath. The Brahmans thereupon cursed him so that he became a snake. Ever since the unfortunate king is seen by people in the form of a snake "rushing about in search of water far and wide on the Dāmodara-Sūda." He is not to be delivered from the curse until he hears the *whole* Rāmāyaṇa recited to him in a single day, a task which renders his release hopeless.

The modern name Dāmādar Uḍar is the exact equivalent of Kalhaṇa's *Dāmodara-Sūda*, the old Skr. term *sūda* meaning a 'place where the soil is barren.' The local name *Guddasetu* still lives in that of the small village *Gudṣuth* situated at the south foot of the Uḍar. Just at this point the latter shows its greatest relative elevation and falls off towards the valley with a steep bank over one hundred feet high. The wall-like appearance of this bank probably suggested the story of an embankment which was to bring water to the plateau. In view of the configuration of the ground no serious attempt at irrigation by means of an aqueduct could ever have been made in this locality.

¹ Compare *Āin-i-Akb.*, ii. p. 363. It is possible that of the two Nilanāgas which the Nilamata, 903, mentions besides the famous spring of that name, one was located in the Nāgām lake.

² *Śrīv.* iii. 25.

³ Compare for detailed references, *Rājat.* i. 156 note.

The Uḍar stretches in a north-westerly direction, for about six miles from the village of Vah^atōr, with a breadth varying from two to three miles. It bears only scanty crops of Indian corn in patches. Being entirely devoid of water, it is a dry and barren waste, a haunt of jackals as in the days when King Kṣemagupta hunted over the 'Dāmodarāraṇya.'¹ The main features of the legend regarding it are well known to popular tradition throughout Kaśmīr. The inhabitants of the neighbouring villages also point to a spot on the Uḍar known as *Sat^arās Tēng*, as the site of Dāmodara's palace. A spring called *Dāmodar-Nāg* in the village of Lālgām, is believed to have served for the king's ablutions.

To Yech belongs also the small village of *Som^ar^abug* on the left bank of the Vitastā which according to the note of the old glossator A₂ marks the site of the temple of Viṣṇu SAMARASVĀMIN mentioned by Kalhaṇa.² Another old locality in Yech is probably marked by the hamlet of *Hal^athal* to which Abū-l-Faḍl refers. It is not shown on the Survey map, and I have not been able to ascertain its exact position. Hal^athal is evidently a derivative of S'ĀLĀSTHALA, the name given by Kalhaṇa to a locality where a fight took place in the time of King Ananta.³ Abū-l-Faḍl mentions 'Halthal' for its quivering tree. "If the smallest branch of it be shaken, the whole tree becomes tremulous."

SECTION VIII.—SOUTHERN DISTRICTS OF KRAMARĀJYA.

120.—To the west of Yech and reaching close up to the capital, lies the Pargaṇa now called *Dūnt^s* (map **Districts of Dūnt^s, Bīru, Māñch^ahōm.** 'Doonsoo'). Its ancient name is uncertain; possibly it is intended by the name *Dvāvimśati* in the Lokaprakāśa's list of 'Viṣayas.' In Abū-l-Faḍl's table of Pargaṇas Dūnt^s ('Dūnsū') is already counted with Kamrāz. An old locality in it is *S'ilⁱpōr*, a large village situated circ. 74° 45' long. 34° 1' lat. (map 'Shalipoor'). We may safely recognize in it the SELYAPURA of the Rājatarāṅgiṇī which is referred to as a place on the direct route from the Tōṣ^amaidān Pass and the Kārkotadrāṅga to Śrīnagar.⁴

Hukh^alit^ar (map 'Haklitri') can safely be identified, in view of the name and the evidence of an old gloss, with S'USKALETRA mentioned in the

¹ Compare *Rājat.* vi. 183.

² See note v. 25.—The ending *-bug* is not rare in Kaśmīr village names. According to Paṇḍit tradition, it is derived from Skr. *bhoga* in the sense of 'property granted for the usufruct [of a temple].'

³ See note vii. 159; *Āin-i-Akb.*, ii. p. 363.

⁴ See *Rājat.* vii. 494 note; viii. 200.

Rājatarāṅgiṇī as a place where Stūpas were erected by King Aśoka.¹ I have not visited the village myself and am hence unable to say whether there are any remains in the vicinity which could be attributed to Stūpas. Kalhaṇa locates at Śuṣkaletra the fierce battle in which King Jayāpīḍa recovered his kingdom.

West of Dūntṣ and towards the mountains of the Pīr Pantṣāl lies the Pargaṇa of Bīru. Its old designation BAHURŪPA is derived from the spring of that name which is situated at the present village of Bīru, 74° 39' long. 34° 1' lat., and is already referred to as a Tīrtha in the Nīlamata.² Abū-l-Faẓl knows the village and spring by an intermediate form of the name, *Bīruvā*, and mentions the miraculous power of the spring to heal leprosy.³ Close to the village of Bīru is *Sunapāh* in which we may, with an old glossator of the Rājatarāṅgiṇī, recognize SUVARṆAPĀRŚVA, an Agrahāra of Lalitāditya.⁴

About four miles to the south-west of Bīru we reach *Khāg*, a considerable place. It is undoubtedly the KHĀGI or KHĀGIKĀ mentioned by Kalhaṇa as an Agrahāra both of King Khagendra and of Gopāditya.⁵

Some miles north of Khāg an isolated spur known as *Pōṣkar* projects into the level plain from the slopes of the Pīr Pantṣāl Range. At its eastern foot is the *Puṣkaranāga*, referred to as a Tīrtha in the Nīlamata and several older Māhātmyas, and still the object of a regular pilgrimage.⁶ Of the route which leads down into Bīru from the Tōṣmaidān Pass, and of KĀRKOTADRAṄGA, the watch station on it, we have already spoken above.

Bīru and Dūntṣ are adjoined on the north by the Pargaṇa of *Māñchāhōm* which extends eastwards as far as the Vitastā. It is probably intended by the name of *Mākṣāśrama* found in a single passage of Śīvara and in the Lokaprakāśa.⁷ The village of *Ratṣun*, situated 74° 38' long. 34° 4' lat., is probably, as indicated by an old gloss, the

¹ Compare *Rājat.* notes i. 102; iv. 473; Kś. *Hukhālitār* is the direct phonetic derivative of the Skr. form.

² See *Nīlamata*, 948, 1180, 1341 sq. The name Bahurūpa is given to the tract by *Jonar.* (Bo. ed.) 286, 840; *Śrīv.* ii. 19, iii. 159; iv. 620, and ought to have been shown on the map.

³ *Ām-i-Akb.*, ii. p. 363.

⁴ See *Rājat.* iv. 673.

⁵ Compare *Rājat.* i. 90, 340.

⁶ See *Nīlamata*, 1021, 1347. There were several other Puṣkara Tīrthas in Kaśmīr. One was connected with the Sureśvarī pilgrimage and probably situated in Phākh; see *Śarvāv.* v. 56 sqq.

⁷ See *Śrīv.* iv. 351.

ARIṢṬOTSĀDANA of the Rājatarāṅgiṇī.¹ From this form the modern name of the village can be derived without difficulty. A temple is said to have been erected there by a queen of Bālāditya.

On the Vitastā some six miles below Śrīnagar is the small village of *Malur* which on the authority of Rājānaka Ratnakaṅṭha may be identified with MALHĀṆAPURA, a foundation of King Jayāpīḍa.² *Zain^akōṭh*, situated near marshy ground about two miles south-east of it, preserves the name of Zainu-l-‘ābidīn, its founder, and is mentioned as JAINAKOṬṬA by Jonarāja.³

121. The Pargana of *Par^aspōr* (map ‘Paraspoor’) which lies next to Māñch^ahōm, is one of small extent, but contains a site of great historical interest. It has received its name from the ancient PARIHĀSAPURA, which King Lalitāditya had built as his capital.⁴ The identity of the name *Par^aspōr* and *Parihāsapura* is evident on phonetic grounds and was well-known to the authors of the Persian abstracts of the Rājatarāṅgiṇī. Yet curiously enough the site of Parihāsapura had remained unidentified until I visited the spot in 1892 and traced the ruins of Lalitāditya’s great structures as described by Kalhaṇa, on the plateau known as the ‘Par^aspōr Uḍar.’

This plateau rises south-east of Shhādīpūr, between the marshes of Pañzīnōr on the east and those of Hār^atrath on the west. Its length is about two miles from north to south, and its greatest breadth not much over a mile. On the north this plateau is separated from the higher ground of Trigām by the Badrihēl Nāla which, as I have shown above, represents the old bed of the Vitastā previous to Suyya’s regulation.⁵ On the other sides it is surrounded by marshes which for a great part of the year are still accessible by boats. Its general elevation is about one hundred feet.

A broad ravine which cuts into the plateau from the south, and in which the village of *Divar* (map ‘Diara’) nestles, divides it into two parts. On the south-western portion are the ruins of two large temples, much decayed, but still showing dimensions which considerably exceed those of the great temple of Mārtāṇḍa. On that part of the Uḍar which lies to the north-east and towards the Badrihēl Nāla, there is a whole

¹ *Rājat.* iii. 482.

² Compare *Rājat.* iv. 484.

³ *Jonar.* (Bo. ed.), 1248.

⁴ For a detailed account of the site of Parihāsapura and its identification, compare Note *F*, *Rājat.* iv. 194-204. The large scale map added to Note *I* shows the position of the several ruins in detail.

⁵ See § 70.

series of ruined structures. Among these three great buildings attract attention. As an indication of their size it may be mentioned that the ruined mound which marks the central shrine of the northernmost building has a diameter of nearly 300 feet. Though it consists now only of a confused heap of massive blocks it still rises to a height of over 30 feet from the ground. The enclosing quadrangle which can also be traced, measures about 410 feet square. At some distance from this group of ruins there is another smaller one at the south-eastern extremity of the plateau now known as *Gurdan*.

I must refer for a more detailed account of these ruins and their relative position to the Note on Parihāsapura, *F*, appended to my translation of the Chronicle. Here it will suffice to point out that the four great temples of Viṣṇu Parihāsakeśava, Muktākeśava, Mahāvarāha, Govardhanadhara as well as the *Rājavihāra* with its colossal image of Buddha, which Kalhaṇa mentions as Lalitāditya's chief structures at Parihāsapura, must all be looked for among these ruins. Their extremely decayed condition makes an attempt at detailed identification difficult.

Still less we can hope to trace now the position of the numerous shrines, Liṅgas, Vihāras, etc., which are mentioned by Kalhaṇa as having been erected at the king's favourite residence by his queens and court.¹ One of the great ruins of the northern group shows features characteristic of a Vihāra and may be the *Rājavihāra*. Some clue is also furnished by the name *Gurdan* attaching to the isolated ruins above mentioned. *Gurdan* is the common Kaśmīrī form of the name *Govardhana*, and hence points to these ruins being the remains of the temple called GOVARDHANADHARA.

The state of utter destruction in which the ruins of Parihāsapura, are now found, is easily accounted for by the history of the site. Parihāsapura ceased to be the royal residence already under the son of its founder. The Chronicle distinctly records of King Vajrāditya that he withdrew the various foundations which his father Lalitāditya had made there.² When a century later King Avantivarman effected his great regulation of the Vitastā, the bed of the river and its junction with the Sindhu was diverted to *Shādīpūr*, nearly three miles away from Parihāsapura.³ This change must have still more seriously diminished the importance of the latter. The ruinous condition into which Parihāsapura must have fallen only one and a half centuries after its foundation,

History of Parihāsapura.

¹ See *Rājat.* iv. 207-216.

² *Rājat.* iv. 395.

³ See above, §§ 70, 71.

is shown by the fact that Śaṃkaravarman (A.D. 883–902) carried away from it materials for the construction of his new town and temples at *Pattana* (Patan).¹

Some of the shrines of Parihāsapura, however, survived to a later period. Thus we find the colossal copper statue of Buddha at the Rājavihāra mentioned as one of the few sacred images which escaped being melted down in the reign of King Harṣa (A.D. 1089–1101). Also a great religious festival established at Parihāsapura by Lalitāditya seems to have been held still in Kalhaṇa's time.² In the rising which led to the downfall of Harṣa, Parihāsapura was occupied by the pretender Uccala.³ The steep slopes of the plateau and the marshes around made it a position of military value. When Uccala had suffered a defeat some of the routed rebels threw themselves into the Rājavihāra, which was subsequently burned down. After this, Harṣa carried away and broke up the famous silver statue of Viṣṇu which had been placed by Lalitāditya in the temple of Parihāsakeśava.

The final destruction of the temples is attributed by Abū-l-Faẓl and the Muhammadan chroniclers to Sikandar Būtshikast. The former records the tradition that after the destruction of the lofty temple of 'Paraspūr' a copper tablet with a Sanskrit inscription was discovered which predicted its destruction 'after the lapse of eleven hundred years' by one Sikandar.⁴ This prophecy *post factum* shows that its author, whoever he may have been, was rather weak in historical chronology. Parihāsapura had been founded only about six and a half centuries before Sikandar Butshikast's time.⁵ At the beginning of the eighteenth century the ruins seem still to have been in a somewhat better condition than now. Both Muḥammad 'Azīm and Nārāyaṇ Kaul mention them and speak particularly of fragments of a large monolithic column. Tradition seems to have connected these fragments with the pillar of Garuḍa which Kalhaṇa mentions as having been set up by Lalitāditya.⁶ The huge square block of stone still visible on the top of the northernmost mound is perhaps one of them.

¹ See *Rājat.* v. 161.

² See *Rājat.* iv. 242 sq. For the temple of Rāmasvāmin which was seen empty in Kalhaṇa's time, compare iv. 275, 334 sq.

³ *Rājat.* vii. 1326 sqq.

⁴ See *Āīn-i-Akb.*, i. p. 364.

⁵ Exactly the same tradition is now current among the Purohitas of Vijābrōr about the destruction of the Vijayeśvara image. This alleged inscription is said to have run: *Ekādaśaśatām varṣām Sikendaramahābala | bismilla iti mantreṇa naśyante Vijayeśvarāḥ* || The curious Sanskrit of this doggerel is an indication that its author may probably have belonged himself to the noble guild of the Bāchbaṭṭas.

⁶ Compare WILSON, *Essay*, p. 50; also footnote 16 to Note F, on Parihāsapura.

The ruins of Parihāsapura have served ever since Śaṅkaravarman's time as quarries for stone-material. Their position near to navigable water-channels made them particularly convenient for this purpose. Since 1892 when I first saw the ruins, till 1896 many large stone-blocks have found their way as road metal into the new Tonga Road which passes the plateau on the south. On my report steps were subsequently taken by the Darbār to stop this vandalism and prevent its recurrence.

122. We have already above when describing the old bed of the Vitastā near Parihāsapura, had occasion to refer to the village of *Trigām*, the ancient TRIGRĀMĪ. It lies about one and a half miles to the north-east of the Parāspōr ruins. The place is mentioned already in Lalitāditya's time in connection with an affray which took place at Parihāsapura.¹ The *Bōnāsar* (*Bhavanasaras?) lake to the west of Trigām is visited as a subsidiary Tīrtha on the Kapālamocana pilgrimage. The ruined temple south of Trigām which I believe may be identified with the VAINYASVĀMIN temple, has already been mentioned in our remarks on the site of the old confluence.

A ruined site which lies opposite to Vainyasvāmin on the western side of the Trigām swamp, may for reasons set forth elsewhere be taken for the old *Viṣṇusvāmin* temple.² This is named by Kalhaṇa as having been situated opposite to the Vainyasvāmin shrine on the other side of the old confluence. The passage of the Chronicle describes the temple of Viṣṇusvāmin as belonging already to Phalapura, while Vainyasvāmin was counted with Parihāsapura.

From this and some other indications I conclude that PHALAPURA was the designation of a small territorial subdivision which probably extended along the present left bank of the Vitastā near Shāḍīpūr.³ The site at which I locate the Viṣṇusvāmin temple, was included in recent times in the riveraine Pargaṇa of Sāiru-l-mawāzi' Pāyīn (map 'Salimozapaieen'). This, we know from Abū-l-Faẓl, was created already before Akbar's time and probably absorbed Phalapura as well as other minor tracts.⁴ Phalapura had received its designation from a locality of that name which Lalitāditya had founded apparently before Parihāsapura,⁵ just as the latter gave its name to the Parāspōr Pargaṇa.

¹ See *Rājat.* iv. 323 sqq.

² Compare *Rājat.* Note I, v. 97-100, § 12.

³ See *Rājat.* Note I, § 13.

⁴ See *Āin-i-Akb.*, ii. p. 367.

⁵ Compare *Rājat.* iv. 184, 673.

Descending by the left bank of the Vitastā for about five miles below Shādⁱpūr, we approach the site of king **Jayapura.** Jayāpīḍa's capital, the ancient JAYAPURA.¹ It is marked by the present village of *And^arkōṭh*. This consists of two distinct parts. One lies on an island in the marshes opposite Sāmbal and the other facing the former on the strip of land which separates these marshes from the Vitastā. On the island there are conspicuous remains of ancient temples which have been first examined and described by Prof. Bühler.² They are attributed by the local tradition to King 'Jayāpīḍ.' The identity of *And^arkōṭh* with King Jayāpīḍa's town is also well-known to the Śrīnagar Paṇḍits. As Śrīvara still uses the term Jayapura or Jayāpīḍapura for the designation of the present *And^arkōṭh*, we can easily understand the survival of the tradition.

Kalhana's description of the town indicates clearly the situation of the latter and also accounts for its modern name. Jayāpīḍa according to this notice had the castle (*kōṭṭa*) of Jayapura built in the middle of a lake, after having the ground required for it filled up, as the legend asserts, by the help of Rākṣasas. There he constructed a large Vihāra with Buddha images, a temple of Keśava (Viṣṇu), and several other shrines; other sacred structures were erected by his ministers. Besides Jayapura the king built on ground recovered from the lake another place, called DVĀRAVATĪ, in imitation of Kṛṣṇa's famous town by the sea-shore. Kalhana notes that in his own time Jayapura was popularly designated as the 'Inner Castle' (*ābhyantara kōṭṭa*) while Dvāravatī was known as the 'Outer Castle' (*bāhya kōṭṭa*).

The present name AND^aARKŌṬH (from Skr. **Antarakōṭṭa*) is the direct derivative of this popular designation of Jayapura. It has in the course of time been extended also to the site on which originally Dvāravatī stood. In my note on the passage I have shown that Jayapura must be identified with the island portion of *And^arkōṭh*, while the remains in that part of the village which lies on the lake shore opposite, belong to Dvāravatī. These remains are far less extensive than those on the island. This is in full agreement with the fact that Kalhana men-

¹ For a detailed note on the position of the twin towns Jayapura-Dvāravatī, see *Rājat.* iv. 501-511. For a map showing the site on a larger scale refer to Note I, v. 97-100.

² See *Report*, pp. 13 *sqq.* where the topography and ruins of *And^arkōṭh* are described in detail. General Cunningham had already heard of the identity of *And^arkōṭh* with Jayāpīḍa's town but he does not seem to have visited the place; *Anc. Geogr.*, p. 101. Owing to the erroneous location of Parihāsapura on the *right* bank of the Vitastā opposite Sāmbal, there is a good deal of confusion in his notes on the two capitals.

tions great religious buildings only in Jayapura and not in Dvāravatī. The latter is, indeed, referred to only in connection with the foundation of Jayapura and does not appear ever to have been a place of importance. We can thus understand why its original name Dvāravatī and its subsequent designation 'Outer Castle' have both completely disappeared. The distance between the island and the opposite lake shore being only about four hundred yards at the narrowest point, the name of the far more important 'Inner Castle' was naturally extended also to this outlying suburb.

The term *kotta* which Kalhaṇa repeatedly applies to Jayapura, and which is contained also in its popular designation, is justified by its position surrounded on all sides by water.¹ The limited extent of the island precludes the belief of Jayapura ever having been a populous place. But it retained a certain importance far longer than Parihāsapura and served occasionally as a royal residence even in late times. Queen Koṭā, the last of the Hindu rulers of Kāśmīr, retired to Jayapura, and there she was murdered by her husband, the adventurer Shāhmīr (A.D. 1339).² Zainu-l-'ābidīn restored the town which had fallen into decay and built there a new palace on the lake-shore.³

We have no distinct information as to the old course which the Vitastā followed in the neighbourhood of Jayapura previous to Avanti-varman's regulation. If our views on the subject as above indicated are right, the main channel of the river must then have passed through the marshes west of Jayapura. Notwithstanding the change subsequently effected, Jayāpīḍa's town did not lose its convenient access to river communication. The great canal known as *Nōr* which, as we saw, is in reality nothing but an old river-bed, runs but a short distance to the south-west of And²rkōṭh. A branch of it which is much used by boats even at the present day though not shown on the map, passes still actually along the old Ghāṭs on the south side of the And²rkōṭh island. It seems probable that Jayapura owed its preservation from the fate of Parihāsapura in part at least to the retention of a convenient waterway.

In Abū-l-Fazl's time And²rkōṭh gave its name to a separate small Pargana.

123. From the marshy tracts south of the Volur which we have approached at And²rkōṭh, we may return once more to Par²spōr. Crossing the swamps formed west of the Par²spōr plateau by the

District of Bhāṅgila;
Pattana.

¹ *Rājat.* iv. 506, 512; vii. 1625. *Srīvara*, iv. 540, 545, applies to Jayapura the expression *durga*, 'fort.'

² See *Jonar.* 300.

³ See *Srīv.* i. 250 sqq.

Sukhnāg and other hill streams, we come to the considerable district of *Bāngil*. It is often referred in the *Rājatarāṅgiṇī* and the other Chronicles by its ancient name of BHĀṄGILA.¹ No old localities belonging to it are mentioned in our texts, unless we may count with Bāngil the closely adjacent *Paṭan* situated on the shore of the Pambāsar marsh, circ. 74° 37' long. 34° 10' lat.

This large village occupies the site chosen by King Śaṃkaravarman (A.D. 883–902) for the town which was to bear his name.² Kalhaṇa, however, informs us that *Śaṃkarapura* “subsequently lost its proper appellation and became known only by the name PATTANA, ‘the town.’”³ This somewhat general designation still survives in the present *Paṭan*. Kalhaṇa sees in this disappearance of the original appellation the just retribution of fate for the king’s cruelty and other bad qualities. Yet the old name must have long lingered on by the side of the popular ‘Pattana.’ For Kṣemendra mentions Śaṃkarapura, and Kalhaṇa himself speaks of the ‘town of Śaṃkaravarman’ when subsequently referring to events of his own time.⁴ Paṇḍit tradition too has retained a recollection of the founder of Pattana and its original name.

Śaṃkaravarman is said to have carried off “whatever was of value at Parihāsapura,” in order to raise the fame of his own town. At the same time Kalhaṇa plainly tells us that “what gave fame to that town was only what is still to be found at Pattana,—manufacture of woollen cloths, trade in cattle, and the like.”⁵

The only ancient remains of any pretension which can now be found at Paṭan, are, in fact, the ruins of the two temples which were erected there by Śaṃkaravarman and his queen Sugandhā.⁶ These shrines which bore the names of *Śaṃkaragaurīśa* and *Sugandheśa* are structures of no great dimensions and are without the fine quadrangular courts which enclose all more important Kaśmīrian temples. They have been fully described by General Cunningham and others. Kalhaṇa when mentioning these buildings ironically alludes to kings who like bad poets take the materials for their works from others’ property. This combined with the immediately following mention of Śaṃkaravarman’s exploitation of Parihāsapura, makes it probable that the building materials for these very temples were taken from the ruins of Parihāsapura. This could have easily been done, owing to the convenient water-

¹ See *Rājat.* vii. 498 note.

² See *Rājat.* v. 156 note.

³ Compare v. 213.

⁴ Compare *Samay.* ii. 13; *Rājat.* viii. 2488, 3130.

⁵ *Rājat.* v. 161 sq.

⁶ Compare *Rājat.* v. 158 note.

route offered by the marshes which stretch between Par^aspōr and Paṭan, a distance of only seven miles.

Though Śaṃkarapura owed thus to its founder but little that could secure distinction, yet the site he had chosen for it was one likely to retain some importance. Paṭan still lies on the direct road between Śrīnagar and Bārāmūla, reckoned at two daily marches, and has probably always just as now been the half-way station between the two places. Considering that Bārāmūla is the starting point of the route to the west, traffic and trade were thus sure to be attracted to Śaṃkaravarman's town. We find it referred to as a local centre still in Kalhaṇa's time, and it has remained to the present day a large and thriving place.

Paṭan figures as a separate Pargaṇa in Abū-l-Faḏl's list. A popular tradition has it that when Tōdar Mal, Akbar's minister, was arranging for the redistribution of Pargaṇas, he inadvertently omitted the Paṭan village at which he was just then encamped. To remedy the mistake Paṭan with its immediate vicinity was made into an additional Pargaṇa.¹ However this may be, we find Paṭan subsequently named as the chief place of the Til^agām Pargaṇa.² At the last settlement it became the headquarters of one of the new Taḥsils.

The Pamḥasar lake which stretches to the east of Paṭan as far as the 'Gond Ibrahim' and 'Adin River' of the map, is referred to by Kalhaṇa under the name of PAMPĀSARAS. King Harṣa seems to have extended or regulated it.³ The Karēwa ground to the west of Paṭan with the deep valleys which intersect it, forms the Pargaṇa of Til^agām. It is mentioned in the Fourth Chronicle, 780, by the name of TAILA-GRĀMA.

About four miles to the north-west of Paṭan and on the high road to Bārāmūla lies *Tāpar*, a considerable village.
Pratāpapura. On the evidence of an old gloss and several passages of the Chronicles, it can be safely identified with the ancient PRATĀPAPURA.⁴ The latter was founded by King Pratāpāditya-Durlabhakā, the father of Lalitāditya, probably in the second half of the seventh century. When visiting the place in 1892 I found close to the road two ruined mounds covered with large slabs and architectural fragments evidently marking the sites of old temples. Since then, I am informed, most of these remains have been turned into road metal by the native contractors employed in the construction of the new cart-road to Śrīnagar.

¹ See BATES, *Gazetteer*, p. 2.

² See MOORCROFT, ii. p. 113; VIGNE, ii. 166.

³ See *Rājat.* vii. 940 note.

⁴ Compare *Rājat.* iv. 10 note.

124. The district through which the Vitastā flows immediately before leaving the Valley, bears now the name of *Kruhin*. The ancient form of this name is unknown unless the Lokaparakāśa's 'Krodhanaviṣaya' may be connected with the tract. *Kruhin* extends along both sides of the river, but its greater portion lies on the left bank.

Proceeding on the road towards *Bārāmūla* and at a distance of about six miles from the latter place, we pass on our right the village of *Kānispōr*. It is identified by an old glossator of the *Rājatarāṅgiṇī* and by the Persian Chroniclers with the ancient KANIṢKAPURA. The latter is mentioned in the *Rājatarāṅgiṇī* as a town founded by the Turuṣka king Kaniṣka,¹ whom we know as the great Indo-Scythian or Kuṣana ruler from the coins and Buddhist tradition. There are no conspicuous remains above ground at *Kānispōr*, but old coins and carved stones are occasionally extracted from an old mound near the village.

We have already had occasion to speak of the important position occupied by the ancient twin towns HUṢKAPURA and VARĀHAMŪLA. Built on the banks of the Vitastā immediately above the gorge through which the river leaves the Valley, they form the starting-point on the great route of communication to the west. It is unnecessary to refer here again to the commercial and other advantages which have made this site one of great importance from ancient times to the present day.

Varāhamūla, situated on the right river-bank, has left its name to the present town of *Varahmul*, usually called *Bārāmūla* by Panjābis and other foreigners.² The name *Varāhamūla* or *Vārāhamūla*—both forms occur in our texts—is itself derived from the ancient Tirtha of Viṣṇu Ādi-Varāha who was worshipped here evidently since early times. From it the site of the town and its whole neighbourhood received also the designation of *Varāhakṣetra*. Various legends related at length in the *Varāhakṣetramāhātmya* and often alluded to in the *Nilamata* and the other *Māhātmyas*, connect this sacred site and the Tirthas of the immediate neighbourhood with the Varāha or Boar incarnation of Viṣṇu. An abstract of these legends as well as an accurate description of the scanty remains of ancient date to be found at the several Tirthas, has been given by Prof. Bühler.³

¹ Compare *Rājat.* i. 168 note. General Cunningham's suggested identification of Kaniṣkapura with 'Kāmpōr,' on the road from *Srīnagar* to *Sūpiyaṇ*, is unsupported by any evidence. The place is really called *Khāmpōr* and has no ancient remains whatever.

² For detailed references regarding *Varāhamūla* and *Varāhakṣetra*, see *Rājat.* vi. 186 note.

³ See *Report*, pp. 11 sqq.

The ancient temple of Varāha which seems to have been one of the most famous shrines of Kāśmīr, is repeatedly mentioned by Kalhaṇa. According to the tradition of the local Purohitas it stood near the site of the present *Koṭitīrtha*, at the western extremity of the town and close to the river-bank. Some ancient Liṅgas and sculptures found at the *Koṭitīrtha* may have originally belonged to the temple. The destruction of its sacred image is noted by Jonarāja in the reign of Sikandar Būṭshikast.¹ A short distance below this site where a steep spur runs down to the river-bed, stood the ancient watch-station, still known as *Drang*, which has already been described. A bridge over the *Vitastā* existed at *Varāhamūla* already in old times.²

It cannot be doubted that *Varāhamūla* is a very ancient place. It enjoyed the advantage of being on the right river-bank, which is followed by the old route down the *Vitastā* Valley. But on the other hand the contracted nature of the ground which it occupies, between the hill-side and the river, did not favour the development of a large town. On this account we find that the twin town of *HUṢKAPURA* built on the open plain of the opposite bank was in ancient times the larger of the two places.

Huṣkapura is mentioned by Kalhaṇa as the town built by King *Huṣka*, the *Turuṣka*, and is often referred to in his subsequent narrative.³ Its name survives in that of the small village of *Uṣkūr*, situated about two miles to the south-east of the present *Bārāmūla*. The identity of *Uṣkūr* and *Huṣkapura*, correctly noted already by General Cunningham,⁴ is well-known to *Srīnagar* Paṇḍits, and is indicated also by an old glossator of the *Rājatarāṅgiṇī*. Kalhaṇa in one passage distinctly includes *Huṣkapura* within *Varāhakṣetra*, *i.e.*, the sacred environs of the *Varāha Tīrtha*,⁵ and the same location is implied by numerous other references in the *Chronicle*.

King *Huṣka* of the *Rājatarāṅgiṇī* has long ago been identified with the Indo-Scythian ruler who succeeded *Kauṣka*, the *Huviṣka* of the inscriptions and the *OOHPKI* of the coins. The foundation of *Huṣkapura* falls thus probably within the first century of our era. *Hiuen Tsiang*, as we saw, spent his first night after passing through the western entrance of the kingdom, in a convent of *Hu-se-kia-lo* or *Huṣkapura*. *Albērūnī* too knows '*Uṣhkārā*' opposite to *Bārāmūla*.

¹ Compare *Jonar.* 600.

² See *Rājat.* viii. 413.

³ For detailed references as to *Huṣkapura* : *Uṣkūr*, see *Rājat.* i. 168 note.

⁴ See *Anc. Geogr.*, pp. 99 sq.

⁵ See vi. 186.

Kalhana mentions Huṣkapura far more frequently than Varāhamūla. The conclusion to be drawn herefrom as to the relative importance of the two places in Hindu times, is confirmed by the frequent references which the Chronicle makes to religious buildings erected in Huṣkapura. Of King Lalitāditya-Muktāpīḍa it is recorded that he built there the great temple of Viṣṇu *Muktasvāmin* and a large Vihāra with a Stūpa.¹ Kṣemagupta who sought the sacred soil of Vārāhakṣetra in his fatal illness, had founded two Mathas at Huṣkapura.²

At present foundations of ancient buildings can be traced at numerous points of the plain which stretches from the left river-bank towards the low hills behind Uṣkūr. These remains as well as two colossal Liṅgas still *in situ* have already been noted by Bishop Cowie.³ About 400 yards to the west of the village are the much-damaged remains of a Stūpa, which had been found still intact by Bishop Cowie and photographed in that condition by Major Cole (1870). Subsequently it was dug into and partly levelled down "by some Ṣāhib's order," as the villagers told me. Of this excavation I have not been able to trace a report. But General Cunningham refers to an ancient coin of the Taxila type which was found in this Stūpa and had come into his possession.⁴

It is possible that this Stūpa was identical with the one which King Lalitāditya erected at Huṣkapura. Of the Vihāra which Kalhana mentions in connection with the king's Stūpa, I have shown elsewhere that it was in all probability the same convent which Ou-k'ong refers to under the name of *Moung-ti* Vihāra.⁵ The *Moung-ti* of the Chinese transcription seems to represent a prakritized form of the shortened name *Mukta* or *Muktā*. The latter forms which are abbreviations (*bhīmavat*) for *Muktāpīḍa*, occur also in the designations of other religious buildings erected by that king (*Muktākeśava*, *Muktasvāmin*).

As we do not meet with the name of Huṣkapura in any of the later Chronicles it may be assumed that its importance did not survive the time of Hindu rule.

¹ See *Rājat.* iv. 188.

² *Rājat.* vi. 186.

³ See *J. A. S. B.*, 1866, p. 123.

⁴ See *Coins of Anc. India*, p. 62.

⁵ Compare *Notes on Ou-k'ong*, pp. 5 sqq. ; *Rājat.* iv. 188 note.

SECTION IX.—THE NORTHERN DISTRICTS OF KRAMARĀJYA.

125. The ancient localities in the Vitastā Valley below Varāhamūla have been noted by us already in connection with the route which leads through it. We may therefore proceed now to those Pargaṇas of the ancient Kramarājya which lie to the north of the river and the Volur lake.

The district which adjoins Kruhīn in this direction, is known as **District of Śamālā.** *Hamal* (map 'Hummel'). Its ancient name was ŚAMĀLĀ from which the former designation is the direct phonetic derivative.¹ Śamālā is very frequently mentioned in the last two Books of the Rājatarāṅgiṇī, particularly on account of its feudal chiefs or Dāmaras who played a prominent part in all the civil wars of the later reigns. The pretender Bhikṣācara in particular had his most powerful adherents in Śamālā and often took refuge with them. The village of VANAGRĀMA which is mentioned on one of these occasions, is probably identical with the present *Vangām*, situated circ. 74° 25' long. 34° 19' lat.² *Kākaruḥa*, another place in Śamālā, referred to in connection with Bhikṣācara's campaigns, can no longer be traced.

To the north of Hamal we reach the Pargaṇa of Maḥ¹pūr (map 'Mochipoora.') Its ancient name is nowhere mentioned. In it lies the sacred site of **Tīrtha of Svayāmbhū.** of SVAYĀMBHŪ which owing to the apparently volcanic phenomenon there observed has from early times been renowned as a Tīrtha. Kalhaṇa in his introduction duly notes the 'Self-created Fire' (*Svayāmbhū*), which "rising from the womb of the earth, receives with numerous arms of flame the offerings of the sacrificers."³

The spot meant is still known as *Svayāmbhū*, or to the villagers as *Suyam*. It lies on a low ridge about half a mile south-west of the village of Nich^hōm (not shown on map) and about one and a half miles north of *Tsak^avaḍar* (map 'Sheikwadda.') Visiting it in 1892 I found there in a shallow hollow the soil bright red like burned clay and furrowed by narrow fissures. In certain years steam has been known to issue from these fissures. The ground then becomes sufficiently hot to boil the Śrāddha offerings of the pilgrims who at such times flock to the site in great numbers. The phenomenon which may be either truly volcanic or, according to a modern authority, be caused by hidden seams of coal taking fire, was last observed in the year 1876. Occurrences at

¹ See *Rājat.* vii. 159 note.

² See *Rājat.* viii. 1438.

³ See *Rājat.* i. 34, and for further references the note thereon.

the beginning of the present century are referred to by Mr. Vigne and Dr. Falconer.¹ Abū-l-Faẓl too mentions the phenomenon at 'Soyam.'²

Considering the rarity of the occasions when this manifestation of the 'Self-created Fire' is observed and the pilgrimage performed, the total absence of ancient remains cannot surprise us. There is, however, a Māhātmya of the Tirtha, and the latter is also referred to in the Nilamata. A pilgrimage which King Uccala (A.D. 1101-11) made to Svayāmbhū gives Kalhaṇa occasion to acquaint us with some localities of the neighbourhood.³ The king who was stopping in Kramarājya, is said to have started for the village of VARHATAČAKRA with a small retinue to see the miracle there. On his way which took him past the village of KAMBALEŚVARA, he was set upon in a deep mountain gorge by robbers from whom he escaped only with difficulty.

I believe, the places mentioned in connection with this adventure, can still be identified without difficulty. Varhatačakra is probably the present *Tsak^avaḍar*, *tsak^a* being the ordinary Kś. form for Skr. *čakra* and *vaḍar* the phonetic derivative of *Varhata*.⁴ Cases of village names in which the two component parts, being originally distinct names, can alternate in their position, are by no means unfrequent in Kaśmīr. Thus we have now *Dārā-Sād^apōr* and *Sād^apōr-Dārā*, etc.

In *Kambaleśvara* we may safely recognize the present village of *Krambhar*, situated about six miles north-east of Svayāmbhū; for the ending *-har* as the derivative of Skr. *-śvara*, compare *Triphar* < *Tripureśvara*, etc.⁵ The way from *Krambhar* to Svayāmbhū leads through the valley of the Panjtar stream. The latter as I convinced myself by personal inspection on a tour in 1892, passes above Rājipōr a narrow thickly-wooded gorge. The path which follows the tortuous course of the stream at the bottom of the gorge, offers excellent opportunities for an ambushade such as described by Kalhaṇa.

Bad^arkāl, a small village, about four miles south-east of *Krambhar*, has a small local Tirtha marked by a spring and some old Liṅgas. It is visited on the pilgrimage to Svayāmbhū and mentioned by the name of BHADRAKĀLĪ in the Māhātmya of the latter.

126. The Pargaṇa of Uttar stretching along the foot of the range towards the Kiṣangangā, forms the extreme north-west of the Kaśmīr Valley. A passage

¹ See VIGNE, *Travels*, ii. p. 280; LAWRENCE, *Valley*, p. 42.

² *Āin-i-Akb.*, ii. p. 365.

³ Compare *Rājat.* viii. 250 sq. note.

⁴ For medial Skr. *r* > Kś. *ḍ*, compare e.g., *Bhaṭṭāraka*[*maṭha* > *Braḍⁱ*][*mar* for *ṭ* > *r*, e.g. *Kāṣṭhavāṭa* > *Kaṣṭ^avār*.

⁵ For detailed evidence on the phonetic points alluded to, see *Rājat.* viii. 250 note.

of the Rājatarāṅgiṇī records its ancient name UTTARA, and refers also to GHOṢA as a locality situated in it.¹ The place meant is undoubtedly the present *Guš* situated in the centre of Uttar, near the confluence of the Kāmil River and the stream coming from Lōlau. It is the starting-point for the S'āradā pilgrimage and is mentioned correctly as *Ghoṣa* in the S'āradāmāhātmya.

About ten miles higher up the Kāmil river lies the village of Pānz¹gām, circ. 74° 7' long. 34° 29' lat. I take its position from Major Bates' Gazetteer; the 'Atlas of India' map does not show the place. It is in all probability identical with PĀÑCIGRĀMĪ, mentioned by Kalhaṇa in connection with the surrender of the pretender Bhoja.² I have not been able to visit this portion of the district, and Major Bates' reference to Pānz¹gām attracted my attention only after the preparation of my map.³

In the extreme north-east of Uttar and within a mile of each other, we have the old villages of *Draṅg* and *Hāyāśrām*, referred to by Kalhaṇa under their ancient designations of DRAṅGA and HĀYĀŚRAMA.⁴ The latter place, as its name shows, marks the position of an old frontier watch-station towards the Kiṣangaṅgā. We have already seen that there is a route leading past it to Sardi, the ancient Tīrtha of S'āradā situated on that river.

Draṅga and Hāyāśrama are both mentioned by Kalhaṇa in connection with the siege of the S'iraṣīlā castle which took place in his own time. A brief reference may therefore be made here both to this stronghold and the neighbouring shrine of S'āradā, though they are both situated outside the limits of the Kaśmīr Valley.

127. The introduction of the Rājatarāṅgiṇī mentions the temple of the goddess S'āradā amongst the foremost Tīrthas of Kaśmīr.⁵ It was well known even far beyond the frontiers of Kaśmīr. Albērūnī had heard of it,⁶ and a story recorded in a Jaina life of the great grammarian Hemacandra proves that its fame had spread even to far-off Gujrāt.

¹ See *Rājat.* vi. 281.

² See *Rājat.* viii. 3124.

³ There seems to be good reason to suspect that TĀRAMŪLAKA, a place repeatedly referred to in connection with Bhojā's last campaign, lay somewhere in or near Uttar. Unfortunately this locality which is of importance also for other portions of Kalhaṇa's narrative, has not yet been identified; see note vii. 1307.

⁴ For *Hāyāśrama*, see *Rājat.* viii. 2937 note; for *Draṅga*, viii. 2507 note, also Note B, i. 37.

⁵ The position and history of the temple of S'āradā have been fully discussed in Note B, i. 37.

⁶ See *India*, i. p. 117.

Notwithstanding this former celebrity the Śāradā shrine is now almost completely forgotten by the Paṇḍits of Śrinagar and the great mass of the Brahman population of the Valley. Fortunately, however, tradition had been more tenacious in the immediately adjoining tracts of Kamrāz. Guided by it I was able to ascertain the position of the ancient Tirtha at the present *Sardi*, situated circ. 74° 15' long. 34° 48' lat., on the right bank of the Kiṣangaṅgā.

My note on Rājat. i. 37 (B) gives a detailed account of the tour which in 1892 led me to the Tirtha as well as a description of the ancient temple still extant at the site. The situation of the shrine corresponds exactly to Kalhaṇa's description. Immediately in front of it the sacred stream of the MADHUMATĪ falls into the Kiṣangaṅgā, while another confluence, that with the SARASVATĪ river coming from the north, is also visible from the temple.

In Jonarāja's time the shrine was still sufficiently popular to attract a visit even from Sultān Zainu-l-'ābidīn.¹ Soon afterwards apparently the miracle-working image of the goddess was destroyed. Abū-l-Faḍl, however, still notes the sanctity of the site and correctly indicates its position on the bank of the Madhumatī.²

The subsequent neglect of this Tirtha must be ascribed chiefly to the obstacles to the pilgrimage which arose from the troubled political condition of the Upper Kiṣangaṅgā Valley. The Bomba chiefs of the latter had made themselves independent in the later Mughal and Paṭhān times. Their predatory inroads often threatened the adjacent tracts of Kaśmīr while their own territory became practically inaccessible to peaceful pilgrims. It is only since the advent of the Sikhs that the pilgrimage to Śāradā's seat was revived. It is probable that the difficulties here briefly indicated must be held to account for the several substitute Tirthas of Śāradā which are now to be found in various parts of Kaśmīr proper.

My visit to the old 'Śāradāsthāna' also enabled me to identify with certainty the site of the ŚĪRAḤŚILĀ Castle. The latter had been the scene of a memorable siege by King Jayasimha's troops which Kalhaṇa describes at length.³ The accurate topographical data furnished in this account prove clearly that the castle occupied the top of the steep ridge which projects into the Kiṣangaṅgā valley about two and a half miles below the Śāradā temple.

¹ *Jonar.* (Bo. ed.) 1056-71. This visit apparently took place A.D. 1422.

² *Āin-i-Akb.*, ii. pp. 365 sq. Abū-l-Faḍl places Śāradā's stone temple "at two days' distance from Hāehāmūn," i.e. Hāyāhōm.

³ *Rājat.* viii. 2492-2709. The position of *Śīraḥśilā* and the evidence for its identity with the 'Gaṇeś Ghāṭī' hill have been fully discussed in my Note L, viii. 2492.

The several incidents of the siege, in particular those connected with the attempted escape of the pretender Bhoja, became at once easily intelligible on a close inspection of this site. The ridge bears now the name of *Gaṇeś Ghātī*, from a curious rock formation on its side which resembles the head of an elephant and is accordingly worshipped as a 'Svayambhū' representation of the elephant-faced god. It is very probable that the older name *Sīraḥsilā* which means literally 'the rock of the head,' owed its origin also to this very rock.

128. Returning from our excursion to the Kiṣangaṅgā and the confines of the Dard country, we enter immediately to the east of Drang-Hāy^ahōm the Pargaṇa usually called *Lōlāb*. Its proper Kaśmirī name is *Lōlau*, derived from Skr. LAULĀHA.¹ In the picturesque valley which forms this district, no old localities can be specified.

Districts of Lōlau, Zain^agīr. Lōlau is adjoined on the south by the Pargaṇa of Zain^agīr which comprises the fertile Karēwa tract between the Volur and the left bank of the Pohur River. It received its present name from Zainu-l-'ābidīn who is credited with having carried irrigation canals from the Pohur to the Uḍar ground of JAINAGIRI.² The earlier name of this tract can no longer be traced.

The chief place in it is the town of *Sōpūr*, the ancient SUYYAPURA, the foundation of which by Suyya, Avantivarman's engineer, has already been mentioned.³ *Sōpūr* which lies a short distance below the point where the Vitastā leaves the Volur, has retained its importance to this day, and is still a town of over 8000 inhabitants. It has during recent times been the official head-quarters for the whole of Kamrāz. From a passage of *S'rīvara* it appears that this had been the case already at an earlier period.⁴ Relating a great conflagration which destroyed Suyyapura in Zainu-l-'ābidīn's time, this Chronicler tells us that in it perished the whole of the official archives relating to Kramarājya. The royal residence, however, escaped and the town itself was again built up by the king in great splendour. Of this, however, nothing has remained; nor does the town now show older remains of any interest.

The suggested identity of the village *Zōlur* (map 'Zohlar') in the north-west part of Zain^agīr with JĀLORA once mentioned as a foundation of King Janaka,⁵ is doubtful, resting only on the resemblance of

¹ Compare *Rājat.* vii. 1241 note.

² See *Jonar.* (Bo. ed.) 1449-56; also *S'rīv.* i. 562 sq.; iii. 59, 78.

³ Compare for Suyyapura, *Rājat.* v. 118 note.

⁴ Compare *S'rīv.* i. 560 sqq.

⁵ See *Rājat.* i. 98.

the names. The large village of *Bumai* (map 'Bamhai'), situated 74° 30' long. 34° 22' lat., may be Kalhaṇa's BHĪMATIKĀ. The name *Bumai* can be traced back without difficulty to the older form; but the context of the single passage in which *Bhīmatikā* is mentioned, does not supply any evidence as to its location.¹

Round the north shore of the Volur lake there stretches in a semi-circle the district of *Khuyāhōm*. Its ancient name is given by Kalhaṇa as KHŪYĀŚRAMA while Śrīvara and the Lokaparakāśa, with a slight variation, call it *Khoyāśrama*.² The old route which led up to the *Madhumatī* stream and over the Pass of DUGDHAGHĀTA or *Dudākhut* into the Darad territory on the *Kiṣangaṅgā*, has been already fully described.³

In connection with a Darad invasion which was directed into Kaśmīr by this route, we read of MĀTRGRĀMA as the place where the invading force encamped.⁴ This is certainly the present village of *Mātrgōm* situated close to the foot of the *Trāgābal* Pass, circ. 74° 43' long. 34° 28' lat. It lies just at the point where the route along the *Madhumatī* debouches into an open valley, and is the first place where a larger camp could conveniently be formed.

The tract on the north-east shore of the Volur appears in old times to have formed a separate small sub-division called *EVENAKA*. It is once mentioned by Kalhaṇa, and also referred to in the *Tirthasaṅgraha*.⁵ But the evidence is not sufficient for a certain location. To it may possibly have belonged also the village of *Sudārkōṭh*, circ. 74° 43' long. 34° 18' lat., which Śrīvara refers to by the name of SAMUDRAKOTĀ.⁶

129. We have now reached the vicinity of the Sind Valley which forms the largest of the Pargaṇas of Kaśmīr. **District of Lahara.** The district now known as *Lār* comprises the whole of the valleys drained by the Sind and its tributaries as well as the alluvial tract on the right bank of that river after its entry into the great Kaśmīr plain.

Its ancient name was LAHARA, and by this it is mentioned in very

¹ Compare *Rājat.* vii. 6; as to the relation of *Bumai* < *Bhīmatikā* comp. *Bumā*, [zu: *Bhīma*[keśava].

² See *Rājat.* viii. 2695-98 note.

³ See above, § 56.

⁴ See *Rājat.* viii. 2775.

⁵ Compare *Rājat.* viii. 2695-98 note.

⁶ See *Śrīv.* i. 400.

numerous passages of the *Rājatarāṅgiṇī* and the later Chronicles.¹ The lands of the district seem to have been from early times in the hands of great territorial nobles. One family of *Dāmaras* resident in *Lahara* was powerful enough for its members to play the part of true kingmakers during a succession of reigns following after *Harṣa*.² It is probable that the great trade-route to *Ladākh* and Central Asia which passes through the district, added already in old times to its wealth and importance.

In the midst of the wide water-logged tract of the *Sind Delta* we find the ancient *Tīrtha* of *TŪLAMŪLYA* at the village now known as *Tul²mul*, situated 74° 48' long. 34° 13' lat. The *Purohita* corporation of *Tūlamūlya* is represented as a well-to-do and influential body already under King *Jayāpīḍa*.³ The large spring of *Tūlamūlya* is sacred to *Mahārājñī*, a form of *Durgā*, and is still held in great veneration by the *Brahman* population of *Srīnagar*. It is supposed to exhibit from time to time miraculous changes in the colour of its water, which are ascribed to the manifestation of the goddess. Owing to its convenient position the *Tīrtha* attracts large numbers of pilgrims from the capital. *Abū-l-Faḍl* notices the place and its marshy surroundings.⁴ About two and a half miles to the east of *Tul²mul* lies the village of *Dud²rhōm*, on the main branch of the *Sind* which becomes here navigable. It is repeatedly spoken of by *Srīvara* under its old name of *DUGDHĀŚRAMA*.⁵

Ascending the valley we come to the large village of *Mañⁱgām*, situated a short distance from the right bank of the river, 74° 52' long. 34° 17' lat. It is the *MAYAGRĀMA* of *Kalhaṇa's* Chronicle, mentioned in connection with a campaign of *Bhikṣācara* in *Lahara*.⁶ In the time of King *Samgrāmarāja* (A.D. 1003-28) *Mayagrāma* gave its name to a separate fund (*Mayagrāmīṇagañja*) which Queen *Srīlekhā* had established evidently with the revenue assigned from this village.⁷ *Mañⁱ-gām-Mayagrāma* still owns a large area of excellent rice-fields. The village itself contains no ancient remains; but a short distance above it, at the foot of the spur which descends from a high alp known as

¹ Compare for the identification of *Lār* and *Lahara*, note *Rājat.* v. 51. The authors of the *St. Petersburg Dictionary* were already aware of it; see P. W. S. v. LAHARA.

² Compare regarding the political part played by *Janakacandra*, *Gargacandra* and their descendants, *Rājat.* viii. 15 *sqq.*, 354 *sqq.*, 502 *sqq.*, etc. For an earlier instance of *Dāmara* power in *Lahara*, see v. 51 *sqq.*

³ See *Rājat.* iv. 638 note.

⁴ *Āin-i-Akb.*, ii. p. 364.

⁵ *Srīv.* iv. 110, 136, 263.

⁶ See *Rājat.* viii. 729.

⁷ Compare *Rājat.* vii. 126.

Mohand Marg, there is an ancient stone-lined tank filled by a fine spring known as *Vuṭ^aśan Nāg*. This is visited as a Tirtha by the Brahmans of the neighbourhood and is also mentioned under the name of *Uccaiḥśīrṇa Nāga* in the *Haramukuṭa* and several other *Māhātmyas*. About a mile above the village the high-road leading up the valley passes a shapeless mound of large slabs which undoubtedly belonged to an ancient temple.

130. About four miles above *Mañⁱgām* on the left bank of the **Tirtha of Cīramocana.** Sind we reach a site which has enjoyed sanctity from an early period. Close to the village of *Prang* (not shown on map) situated circ. $74^{\circ} 55' 30''$ long. $34^{\circ} 16' 45''$ lat., a small branch of the *Kānk^anai River* (*Kanakavāhinī*) flows into the *Sind*. This confluence is now visited by the pilgrims proceeding to the *Haramukuṭa* lakes as one of the chief Tirthas on the route. In the modern *Haramukuṭa Māhātmya* it is designated as *Karaṅkatīrtha*. But I have shown that it is in reality identical with the ancient Tirtha of *CĪRAMOCANA* mentioned in the *Rājatarāṅgiṇī*, the *Nilamata* and the old *Nandikṣetramāhātmya*.¹

The *Kānk^anai* or *Kanakavāhinī* which is always named together with *Cīramocana*, is a sacred river as it carries down the waters of the holy *Gaṅgā*-lake below the *Haramukuṭa Peaks*.² This explains the importance attached to this 'Samgama.' The *Haramukuṭa Māhātmya* which shows its comparatively recent origin by many of its local names, metamorphoses the old *Kanavāhinī* into *Karaṅkanadī* and consequently also changes the name of its confluence into *Karaṅkatīrtha*.³ King *Jalauka*, the son of *Aśoka*, whom the *Chronicle* represents as a fervent worshipper of *Sīva Bhūteśa* and of *Nandīśa*, is said to have ended his days at *Cīramocana*.

Our survey has already taken us to the sacred sites of *BHŪTEŚA* and **Tirthas of Bhūteśa,** *JYEṢṬHARUDRA* marked by the ruined temples at the present *Buthⁱśēr* high up in the *Kānk^a-nai Valley*. They are closely connected with the Tirthas of *NANDIKṢETRA* below the *Haramukuṭa glaciers* which have also been described.⁴ The village of *Vāngath*, which is the highest permanently inhabited place in the valley, lies about two miles below *Buthⁱśēr*. It is named *VASIṢṬHĀŚRAMA* in the *Māhātmyas* and believed to mark the residence of the *Rṣi Vasiṣṭha*. Allusions in the *Rājatarāṅgiṇī* and *Nilamata* show that this legendary location is of old date.⁵

¹ See *Rājat.* i. 149-150 note.

² See above, § 57.

³ Regarding the local nomenclature of this *Māhātmya*, see above, § 31.

⁴ See above, § 57; also *Rājat.* notes i. 36, 107, 113; v. 55-59.

⁵ Compare *Rājat.* viii, 2430 note.

At the mouth of Kānkānai Valley, and about two miles to the north-east of Cīramocana, is the hamlet of *Bāravul* which Kalhaṇa mentions as an Agrahāra of King Jalauka under the name of VĀRABĀLA.¹ A large sculptured Liṅga base which I found here in 1891, shows the antiquity of the place.

131. Returning to the main valley we come, about three miles above Cīramocana, to the large village of **Upper Sind Valley.** *Kangan* situated on the right bank on the Sind. It is, perhaps, identical with KAṆKAṆAPURA which Queen Diddā is said to have founded in commemoration of her husband Kṣemagupta, known by the epithet of 'Kankaṇavarṣa.'² No old localities can be identified with certainty in the Sind Valley until we reach the village of *Gagangīr*, situated two marches above Kangan, circ. 75° 15' long. 34° 18' lat. This is undoubtedly the GAGANAGIRI of Jonarāja, and the Fourth Chronicle.³ The place is mentioned in both texts in connection with invasions which were made into Kaśmir over the Zōji-Lā Pass. The first was that of the Bhauṭṭa Riñcana, the second the famous inroad of the Mughal leader Mirzā Ḥaidar (A.D. 1532).⁴ The account which the latter himself has left us of his exploit, fully explains the special reference made to Gaganagiri by the Hindu Chronicler.

About three miles above Gagangīr two rocky spurs descend from opposite sides into the valley and reduce it to a narrow gorge (see map). The passage of this defile was until recent improvements of the road distinctly difficult, as large fallen rocks blocked the narrow space between the right bank of the river and the high cliffs rising above it. It is at this point of the valley which Mirzā Ḥaidar calls 'the narrow defile of Lār,' that the Kaśmir chiefs vainly attempted to stop the brave Turks of the invader's advanced guard.

Kalhaṇa's Chronicles shows that the defile here indicated had witnessed fighting already at an earlier epoch. When King Sussala's forces had driven Gargacandra, the great feudal chief, from his seats in Lahara, we are told that the Dāmara with his followers retired to the mountain called DHUḌĀVANA. There he was long besieged by the troops

¹ See *Rājat.* i. 121 note.

² See *Rājat.* vi. 301.

³ Compare *Jonar.* (Bo. ed.), 197, and Fourth Chron. 316. The old name of the locality ought to have been entered in the map. The Bombay edition of the Fourth Chron. wrongly reads *gamananiryanta* for *gaganagiryanta* of the MSS.

⁴ See *Tārīkh-i Rashīdī*, p. 423. Mr. ELIAS in his note on the passage has quite correctly identified the defile meant by his author. The Fourth Chronicle names the autumn of the Laukika year [460]8 as the date of the event which agrees exactly with Mirzā Ḥaidar's A.H. 939 Jamād II (December, 1532 A.D.).

“of the king who was encamped at the foot of the mountain.” In my note on the passage I have shown that the name *Dhūḍāvana* survives in *Dūrīn Nār* (map ‘Darnar’), the appellation of the high spur which descends into the Sind Valley from the south between Gagangīr and Sun^amarg.¹ It is exactly at the foot of this spur that the river passes through the gorge above described. The position taken up by the king’s opponent is thus fully explained.

Gagangīr being already 7400 feet above the sea, is the last permanently inhabited place in the valley. Some twenty-five miles higher up we arrive at the Zōjī-Lā Pass. Here we have reached the limits of Kaśmīr as well as the end of our survey.

¹ See *Rājat.* viii. 595 sqq.—*Dūrīn* is the direct phonetic derivative of *Dhūḍāvana*. *Nār*, the Kś. equivalent of Skr. *nāḍa*, the Anglo-Indian ‘Nullah,’ is often found as the second part in names of high hill-ranges in Kaśmīr; compare, *e.g.*, the ‘Soornar’ and ‘Baibnar’ of the map, east of the Haramukh Peaks.

SUPPLEMENTARY NOTE AA.—§ 29.

MĀHĀTMYAS OF KASHMĪRIAN TĪRTHAS.

The following is a complete list of the MĀHĀTMYA texts acquired by me in Kāśmīr. The numbers in the fourth column refer to the manuscripts representing these texts in my collection. Where the same text is found in several Manuscripts, the number of the best copy has been shown first. In the column of Remarks the Tīrtha to which the Māhātmya refers has also been indicated, as well as the paragraph of the present Memoir in which it has been discussed.

Serial No.	Name of text.	Alleged source.	Nos. of MSS. in my collection.	REMARKS.
1	Amaranāthamāhātmya ...	Bhṛṅgīśasamhitā ...	8, 7	Amaranātha, § 59.
2	Amareśvara Kalpa ...	Vāthulatantra ...	214	Ditto. (Copied from Poona MS. No. 49).
3	Ardhanārīśvaramāhātmya	Ādikalpa ...	251	Ardhanārīśvara, § 113.
4	Īśālayamāhātmya ...	Bhṛṅgīśasamhitā ...	43	Īśeśvara, § 103.
5	Kapaṭeśvaramāhātmya ...	Haracaritacintāmaṇi	43	Kapateśvara (Pāpasūdana), § 112.
6	Kapālamocanamāhātmya	Bhṛṅgīśasamhitā ...	43, 19, 20, 21, 22	Kapālamocana, § 116.
7	Kedāratīrthamāhātmya...	Bhṛṅgīśasamhitā ...	49	Tīrtha in Varā-hakṣetra.

Serial No.	Name of text.	Alleged source.	Nos. of MSS. in my collection.	REMARKS.
8	Kedārapurāṇa ...	.....	215	Doubtful (copied from Poona MS. No. 54).
9	Koṭitīrthamāhātmya ...	Bhṛṅgīśasamhitā ...	50	Koṭi Tīrtha, § 124.
10	Gaṅgodbhedamāhātmya	Ādipurāṇa ...	216	Bhedā Tīrtha, § 117 (copied from Poona MS. No. 56.)
11	Gayāmāhātmya ...	.....	55	Gayā (near <u>Shā</u> dipūr).
12	Gayāmāhātmya ...	Bhṛṅgīśasamhitā ...	54	Ditto.
13	Godāvarīmāhātmya ...	Bhṛṅgīśasamhitā ...	43	Godāvārī (Godharā), § 115.
14	Jaṭāgaṅgāmāhātmya ...	.....	43	Tīrtha at Gaṅga-jaṭan, Pargaṇa Bīru.
15	Jyeṣṭhādevīmāhātmya ...	Bhṛṅgīśasamhitā ...	43	Jyeṣṭheśvara, § 102.
16	Tripurāprādurbhāva ...	Bhṛṅgīśasamhitā ...	43	Small Tīrtha near the Kanye Kadal, Srīnagar.
17	Trisāṁdhyāmāhātmya ...	Ādipurāṇa, Nandīśvarāvātāra.	43	Trisāṁdhyā, § 113.
18	Trisāṁdhyāmāhātmya ...	Nandīśvarāvātāra by Śivasvāmin.	67	Ditto.
19	Dhyāneśvaramāhātmya...	.....	75	Tīrtha in hills of Khuyāhōm.
20	Nandikṣetramāhātmya ...	Sarvāvātāra ...	77	Tīrthas of Nandikṣetra, § 57.
21	Naubandhanamāhātmya	.....	43, 85, 86	Naubandhana, § 41.
22	Piṅgaleśvaramāhātmya...	Haracaritacintāmaṇi	43, 88	Tīrtha at Pingilyun, Chrāṭh Pargaṇa.
23	Puṣkaramāhātmya ...	Bhṛṅgīśasamhitā ...	43	Puṣkara Tīrtha, § 120.

Serial No.	Name of text.	Alleged source.	Nos. of MSS. in any collection.	REMARKS.
24	Bahurūpakalpa ...	Kaśmīratīrthamāhātmyasaṅgraha.	95, 96	Bahurūpa Nāga, § 120.
25	Bhadrakālīprādurbhāva	Mahābhārata, Vana-parva.	97	Bhadrakālī Tīrtha, § 125.
26	Mahādevagirimāhātmya	Bhṛṅgīśasaṁhitā ...	104	Mount Mahādeva, § 103.
27	Maheśvarakuṇḍamāhātmya.	Bhṛṅgīśasaṁhitā ...	43	Said to be in <u>Shāhābād</u> Paragaṇa.
28	Mārtāṇḍamāhātmya ...	Bhṛṅgīśasaṁhitā ...	43	Mārtāṇḍa, § 111.
29	Mārtāṇḍamāhātmya ...	Brahmapurāṇa, Kaśmīrakhaṇḍa.	217, 110	Ditto. (Copied from Poona MS. No. 78).
30	Mārtāṇḍamāhātmya ...	Bhaviṣyatpurāṇa ...	109	Ditto.
31	Mitrapathāmāhātmya ...	Ādipurāṇa ...	218	Uncertain. (Copied from Poona MS. No. 80).
32	Yogyālaṅkaraṇamāhātmya.	.....	43	Tīrtha on Ḍal, in Rānīvōr quarter.
33	Rājñīprādurbhāva ...	Bhṛṅgīśasaṁhitā ...	43, 211	Tūlamūlya, § 129.
34	Rājñīmāhātmya ...	Bhṛṅgīśasaṁhitā ...	43	Ditto.
35	Varāhakṣetramāhātmya	Varāhapurāṇa ...	219, 143, 144	Varāha Tīrtha, § 124 (also in Poona MS. No. 85).
36	Vardhamāneśamāhātmya	.....	142	Vardhamāneśa ; see § 31, note.
37	Vijayeśvaramāhātmya ...	Ādipurāṇa ...	220	Vijayeśvara, § 109. (Copied from Poona MS. No. 77).
38	Vijayeśvaramāhātmya ...	Bhṛṅgīśasaṁhitā ...	152	Ditto.
39	Vitastāmāhātmya ...	Bhṛṅgīśasaṁhitā ...	156, 153, 154	Tīrthas on Vitas-tā.
40	Vitastāmāhātmya ...	Ādipurāṇa, Kaśmīrakhaṇḍa.	252, 155	Ditto. (Copied from Poona MS. No. 88).

Serial No.	Name of text.	Alleged source.	Nos. of MSS. in my collection.	REMARKS.
41	S'arvāvatāra... ..	.....	213	Copied from Poona MS. No. 94.
42	S'aradāpuramāhātmya ...	Vitastāmāhātmya ...	160	'Prayāga' at Shāḍīpūr, § 68.
43	S'aradāmāhātmya ...	Bhṛṅgīśasamhitā ...	43, 161	S'aradā Tīrtha, § 127.
44	S'aradāmāhātmya ...	Ādipurāṇa ...	43	Ditto.
45	S'arikāpariccheda ...	Bhṛṅgīśasamhitā ...	163, 162, 204	S'arikā Hill, § 95.
46	Svetagaṅgāmāhātmya ...	Bhṛṅgīśasamhitā ...	43	Dugdhaḅgaṅgā (Chatsākul), § 67.
47	Sureśvarīmāhātmya ...	Bhṛṅgīśasamhitā ...	43, 176, 177	Sureśvarī, § 103.
48	Svayam̄bhvagnimāhātmya	Bhṛṅgīśasamhitā ...	43, 183, 184	Svayam̄bhū, § 125.
49	Haramukuṭagaṅgāmāhātmya.	Bhṛṅgīśasamhitā ...	185, 186, 210, 211	Haramukuṭa Lakes, § 57.
50	Haridrāgaṅeśamāhātmya	Bhṛṅgīśasamhitā ...	43	Said to be in Dachūnpōr Parḅaṅa.
51	Harṣeśvaramāhātmya ...	.....	194, 195, 196	Harṣeśvara § 105.

SUPPLEMENTARY NOTE BB.—§ 86.

THE LISTS OF KAŚMĪR PARGAṆAS.

The following table shows the names of Kaśmīr Pargaṇas as contained in the lists of Abū-l-Faẓl, Moorcroft, Von Hügel, Vigne and Major Bates. The list of the latter (*Gazetteer*, p. 2) is the fullest and also indicates the division of the Pargaṇas between Marāz and Kamrāz as shown in the table.

The arrangement of the Pargaṇa names conforms to the topographical order followed in Chapter IV. of this Memoir. The second column gives the Pargaṇa names according to their present Kaśmīrī pronunciation, without regard to the often curiously distorted forms in which these names are presented by the earlier lists. The third column shows the authorities in whose lists each particular name is found. In the fourth column the Sanskrit name of the district has been indicated, whenever known, together with the text in which it first occurs. In the last column references have been given to the paragraphs of the Memoir specially dealing with the historical topography of the several districts.

Besides the Pargaṇas shown in the table, Abū-l-Faẓl counts with Kaśmīr the Pargaṇas of 'Maru Aḍwin' (Maḍivāḍvan), 'Banihāl' (Bān^ahāl), and 'Dachhin Khāwarah' (*i.e.*, Dachhūn-Khōvur, the valley on both banks of the Vitastā below Bārāmūla). In the same way Moorcroft adds the Pargaṇas of 'Durbid' (*i.e.*, Dvārbidī in the Vitastā Valley, comp. § 53), 'Karnao' and 'Tahirabad'; of the position of the last-named tract I am not certain.

[The list of Kaśmīr Pargaṇas given by P. JOSEPH TIEFFENTHALER, *Description de l'Inde*, p. 77, is only a defective reproduction of Abū-l-Faẓl's list. RITTER, *Asien*, ii. pp. 1136 *sq.*, has endeavoured to elucidate

Tieffenthaler's queer names with whatever materials were then available].

List of Abbreviations.

AF.	ABŪ-L-FAZL, <i>Āin-i Akb.</i> , ii. pp. 368-371.
Mo.	MOORCROFT, <i>Travels</i> , ii. p. 113.
Hü.	VON HÜGEL, <i>Kaschmir</i> , ii. 206 sq.
Vi.	VIGNE, <i>Travels</i> , i. p. 272.
Ba.	BATES, <i>Gazetteer</i> , p. 2.

Serial No.	Modern name.	Shown in Pargana list of	Sanskrit name.	REMARKS AND REFERENCES.
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PARGANAS OF MARĀZ (MAḌAVARĀJYA).

1	Phākh	... AF. Mo. Hü. Vi. Ba.	PHĀKHUVĀ (S'rīv.) ...	§ 101.
2	Atshan	... Mo. Hü. Ba.	These small districts, formed apparently during the Sikh administration, comprised groups of villages in the immediate vicinity of S'rīnagar, to the west, south and north, respectively.
3	Balada	... Mo. Hü. Ba.	.....
4	Ārvai	... Ba.	.....
5	Vihī AF. Mo. Hü. Vi. Ba.	KHADŪVĪ (Rāj.) ...		§ 105.
6	Vular	... AF. Mo. Hü. Vi. Ba.	HOLAḌĀ (Rāj.) ...	§ 106.
7	Dachūnpōr	.. AF. Mo. Hü. Vi. Ba.	DAKṢIṆAPĀRA (S'rīv.)	§ 107.
8	Khōvurpōr	... AF. Mo. Hü. Vi. Ba.	VĀMAPĀRŚVA (Jonar.)	§ 110.
9	Maṭan	... AF. Mo. Hü. Vi. Ba.	MĀRTAṆḌA (Jonar.)	§ 111.
10	Anyech (Anatnāg)	AF. Mo. Hü. Vi. Ba.	.....	§ 112. Also called Islāmābād (Mo. Hü). Anyech appears in AF. misspelt as Itch.
11	Kuṭ ^a hār	... AF. Mo. Hü. Vi. Ba.	[KAPATEŚVARA, Rāj.]	§ 112. Skr. name found only as that of Tirtha.

Serial No.	Modern name.	Shown in Pargana list of	Sanskrit name.	REMARKS AND REFERENCES.
12	Bring ...	AF. Mo. Hü. Vi. Ba.	*BHRŪGA (Lokapr.)	§ 113.
13	Shāhābād (Vēr) ...	AF. Mo. Hü. Vi. Ba.	.....	§ 114. Mo. calls the Pargana "Banna-hal."
14	Div ^a sar ...	AF. Mo. Hü. Vi. Ba.	DEVASARASA ...	§ 115.
15	Ād ^a vin ...	AF. Mo. Hü. Vi. Ba.	KARĀLA (Rāj.) ... ARDHAVANA (Jonar.)	§ 116.
16	Zain ^a pōr ...	AF. Mo. Hü. Vi. Ba.	JAINAPURA (Jonar.)...	do.
17	Bōṭ ...	AF. Mo. Hü. Vi. Ba.	.....	§ 116. Hü. Vi. call the district after "Sūpiyaṅ Shahr," its headquarters.
18	Sūparsāmūn ...	AF. Mo. Hü. Vi. Ba.	.....	§ 117.
19	Sukru ...	AF. Mo. Hü. Vi. Ba.	.....	do.
20	Sāvur ...	Hü. Vi. Ba.	.....	§ 118.
21	Chrāṭh ...	Vi. Ba. ...	.....	do.
22	Sāiru-l-mawāzi' Bālā.	AF. Mo. Hü. Vi. Ba.	.....	do.
23	Nāgām ...	AF. Mo. Hü. Vi. Ba.	NĀGRĀMA (Jonar.)	§ 119.
24	Yech ...	AF. Mo. Hü. Vi. Ba.	IKṢIKĀ (S'riv.) ...	do.

PARGANAS OF KAMRĀZ (KRAMARĀJYA.)

25	Dūnt ^s ...	AF. Mo. Hü. Vi. Ba.	*DVĀVIMŚATI (Lokapr.)	§ 120.
26	Bīru ...	AF. Mo. Hü. Ba.	BAHURŪPA (Jonar.)	do.
27	Māñch ^a hōm ...	Mo. Hü. Vi. Ba.	MĀKṢĀŚRAMA (S'riv.)	do.
28	Par ^a pōr ...	AF. Mo. Hü. Ba.	PARIHĀSAPURA (Rāj.)	§ 121.

Serial No.	Modern name.	Shown in Pargana list of	Sanskrit name.	REMARKS AND REFERENCES.
29	Sāiru-l-mawāzi' Pāyīn.	AF. Mo. Hü. Vi. Ba.	.....	§ 122.
30	Andarkōth ...	AF. Mo. ...	[ABHYANTARAKOṬṬA] (Rāj.)	do.
31	Bāngil ...	AF. Mo. Hü. Vi. Ba.	BHĀṄGILA (Rāj.) ...	§ 123.
32	Paṭan ...	AF. ...	PATTANA (Rāj.) ...	do.
33	Tilāgām ...	AF. Mo. Vi. Ba.	TAILAGRĀMA (Fourth Chron.)	do.
34	Khuy ...	AF. Mo. Hü. Ba.	.....	A small tract ('Quihi' on map) to the north of Paṭan and Tilā- gām.
35	Kruhīn ...	AF. Mo. Hü. Ba.	*KRODHANA (Lokapr.)	§ 124.
36	Hamal ...	Mo. Vi. Ba.	SAMĀLĀ (Rāj.) ...	§ 125.
37	Maḥīpūr ...	Mo. Vi. Ba.	.....	do.
38	Uttara ...	Vi. Ba. ...	UTTARA (Rāj.) ...	§ 126.
39	Lōlau ...	Mo. Hü. Vi. Ba.	LAULĀHA (Rāj.) ...	§ 128.
40	Zaināgīr ...	AF. Mo. Hü. Vi. Ba.	JAINAGIRI (Jonar.)	do.
41	Khuyāhōm ...	AF. Mo. Hü. Vi. Ba.	KHŪYĀŚRAMA (Rāj.)	do.
42	Lār ...	Mo. Hü. Ba.	LAHARA (Rāj.) ...	§ 129.

ADDITIONAL NOTE.—§ 14.

MR. W. MERK, C.S.I., C.S., at present Deputy Commissioner of the Hazāra District, to whom I submitted the above-printed remarks on Albērūnī's route to Kaśmīr (p. 23) and on the town of *Babrahān* mentioned by him, has kindly supplied me in a letter, dated 25th April, 1899, with the interesting information that "the basin formed by the three Nullahs which unite at *Chamhad* is called the 'Babarhān' tract." Chamhad is shown on the map as a village in the Mian Khaki Nullah, south-west of Abbottabad, circ. $34^{\circ} 7'$ lat., $73^{\circ} 7'$ long.

Mr. Merk believes that the position of Albērūnī's "town *Babrahān*, half-way between the rivers Sindh and Jailam" is marked by the present 'Babarhān' which practically retains the same name. There is much to support this identification. The Nullah called Mian Khaki on the Survey map forms a convenient route from the central plain of Hazāra, about Mirpur, towards the Siran Valley through which the Indus could conveniently be gained at Torbela. The latter has remained a favourite crossing place to the present day, being situated just where the Indus debouches from the mountains.

The 8 *Farsakh* or about 39 miles which Albērūnī counts from Babrahān to "the bridge over the river," *i.e.*, according to my explanation, the present Muzaffarābād, would well agree with the actual distance between the latter place and Babarhān. In calculating this distance it must be kept in view that the old road from the Indus to Kaśmīr, according to Mr. Merk's information, descended to Garhi Habībullā, on the Kunhār River, through the Doga Nullah, *i.e.*, by a more direct route than that followed by the modern cart-road *viā* Mansahra.

I am further indebted to Mr. Merk for the very interesting notice that the plain near Mirpur, about 5 miles north-northwest of Abbottabad, is popularly known by the name of *Urash* or *Orash*. There can be no doubt as to this local name being the modern representative of the ancient *Uraśā*. Its survival in that particular locality strikingly confirms the conclusion indicated above in § 83, and also in my note on Rājāt. v. 217, as to the position of the old capital of *Uraśā*. The designation of this capital was undoubtedly *Uraśā*.

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LIST OF ABBREVIATIONS.

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- Life. The Life of Hiuen-Tsiang. By the Shamans Hwui Li and Yen-Tsung. With a Preface, etc., by Samuel Beal. London, 1888.
- Māh. Māhātmya [compare below, p. 49. The several texts are quoted from MSS.].
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NOTE.

The transcription of Sanskrit, Persian and Arabic words in the present Memoir conforms to the system approved by the International Oriental Congress of 1894. In the phonetic rendering of Kaśmīrī words the lines adopted by Dr. G. A. Grierson, in his analysis of Paṇḍit Īśvara Kaula's Kaśmīrī Grammar (*J. A. S. B.*, 1897-98) have been closely followed.

CORRIGENDA.

Page.	Line.				
10	7	For	<i>expect</i>	read	<i>except.</i>
40	27	„	<i>-brāṛ</i>	„	<i>-brṛ.</i>
55	35	„	<i>Rāshidī</i>	„	<i>Rashīdī.</i>
88	1	„	NORTHERN	„	NORTHERN AND EASTERN.
93	21	„	<i>Rāshidī</i>	„	<i>Rashīdī.</i>
98	29	„	<i>Nāru</i>	„	<i>Nāru.</i>
103	14	„	Vastarvan	„	Vast ^a rvan.
103	17	„	Rāmuṣa	„	Rāmuṣ.
104	17	„	<i>Bhattāra</i> ^o	„	<i>Rhattāra</i> ^o .
105	21	„	<i>Sureśvari</i>	„	<i>Sureśvari.</i>
110	2	„	<i>larger-</i>	„	<i>large.</i>
123	1	Add heading: SECTION VIII.—ETHNOGRAPHY.			
126	6	For	<i>Karnāv</i>	read	<i>Karnau.</i>
155	36	„	<i>Rānī</i>	„	<i>Rānī.</i>
206	18	„	<i>latter</i>	„	<i>former.</i>

