國立中央研究院歷史語言研究所

集　刊

第四本　第二分

目　錄

中國字調跟語調(英文)……趙元任

藏文前綴音對於聲母的影響(英文)……李方桂

譚「譚」……董作賓

羅羅太上清淨消災經對譯……楊成志

花月痕的作者魏秀仁傳……容肇祖

釋內外轉……羅常培

泰與何石閭韵史稿本跋……羅常培

中華民國二十二年刊印

上　海

中國字調跟語調

趙元任

TONE AND INTONATION IN CHINESE[1]

by

Y. R. CHAO

In this brief paper, I wish to discuss some problems of methodology I have met with in the study of word-tone and sentence-intonation in Chinese.

The most obvious fact we have to recognize is that the actual melody or pitch movement of a tonal language is a different affair from the mere succession of the few fixed tonal patterns which are supposed to make up the tones of that language. It is in fact a resultant of three elements, the characteristic tones of the individual syllable-words, their influence on each other in connected speech, and the movement of pitch, which indicates the mood or attitude of the speaker. The first is usually called *tone*, or *etymological tone*, the second I shall call *neutral intonation*, and the third *expressive intonation*, the latter two together forming sentence intonation. We shall consider these in turn.

I. WORD-TONE

1. *Preliminary Survey of Tones.*—The usual method of investigating the tones of a dialect under study is to ask the informant, the speaker of the dialect, to pronounce separately a list of isolated words, and we either note down the tone by ear or let the speaker speak to a kymograph or an oscillograph for subsequent plotting into a curve. In the course of this procedure, the following problems will have to be taken into consideration.

First, in order to make sure that we have included all classes of tones there exist in the dialect studied, the word list must be made representative enough. This can be largely taken care of by making use of known facts of the tones in the dialects in relation to the tones or *sheng* in ancient Chinese. From these we can anticipate the possible ramifications of tones in the modern dialects with a fair degree of inclusiveness, as shown by the following table:

1. Read before the 145th Meeting of the American Oriental Society, April 20, 1933.

Ancient: Tone Class	Ancient: Initial Consonant	Peiping	Nan-king	Han-kow	Changsha	Soochow	Foo-chow	Canton	Yao[2]
平	Voiceless	I	I	I	I	I	I	I	I
	Voiced	II	II	II	II	II	II	II	
上	Voiceless	III	III	III	III	III	III	III	II
	Soft[1] V'd					Coll. V / Lit. I		IV	I,V
	Hard[1]				Coll. V / Lit.	V	V	IV,VI	V
去	V'less Unasp.	IV	IV	IV	IV / IV	IV	IV	V	III
	V'less Asp. & Fricative								IV
	Voiced				V	V	V	VI	V
入	Voiceless	Majority IV	V	II	VI	VI	VI	short vowels VII / long vowels VIII	I
	Voiced	Majority II				VII	VII	IX	V

It will be noted that besides the original tonal categories, what influenced the modern tones most are the *manners* of articulation of the initials, such as voicing, aspiration, plosive and nasal, etc. and that the *places* of articulation of the original initials have had little influence with changes in modern tones. It should be borne in mind, however, that the use of the so-called ancient Chinese or the language of 切韻 is only an account of the special accessibility of our knowledge concerning it, and not on account of this period being any more influential on modern Chinese than that of any other period. For instance, while we know that the sonority and aspiration are relevant factors in tonal change, we cannot decide without proof that the present tonal scheme of a given dialect depends on the sonority or aspiration of that period rather than some other period. Thus in the tone scheme of the folk-songs of the

1. *Soft* (次濁) stands for nasals, liquids and semivowels. *Hard* (全濁) stands for plosives, affricates and fricatives.

2. Y. R. Chao, *Phonetics of the Yao Folk-Songs* (猺歌記音), Peiping, 1930, pp. 164-167.

Kwangsi Yao's[1] the 陰去 subdivides into high level or high rising according as the initial is an unaspirate or an aspirate-or-fricative. But 借 is high level although it is fricative in Yao [θ:iɑ], because it came from an Ancient Chinese [tsĭa], an unaspirate. On the other hand, 到 [tʻɑu] is high rising on account of its being an aspirate in Yao pronunciation, although Ancient Chinese had an unaspirate [tɑu]. Consequently, the use of this scheme for the study of tone-classes is only to be regarded as suggestive as to the classes there will be, and not to be definitive for any single case, which will have to be decided as questions of isolated fact.

2. *Nomenclature of tone-classes.*—Since by far the greatest number of known dialects follow in rough outline the four main divisions of the ancient 聲 and subdivide if they do into two classes according to the sonority of the ancient initials, the only sensible thing to do for a nomenclature of the classes of tones is to name them by their origin, 平,上,去, or 入, irrespective of their actual tones. For the subdivision, Western sinologists usually use the terms *upper* and *lower* for the ancient voiceless and voiced series respectively. But Chinese writers prefer the term 陰 and 陽, and I shall recommend them as preferable class names, as they are non-committal as to the actual nature of tones, for which we need a separate series of descriptive terms which should have none in common with the classificatory terms (see 3, below). This would prevent such confusions as made by at least one writer[2] who says that the Hakka's upper 入 is pronounced lower 入 and *vice versa*, whereas what was meant was that that class of words which have a high tone in Cantonese have a low tone in Hakka and that class of words which have a low tone in Cantonese have a high tone in Hakka. In our terminology, 陰入 is 陰入 and 陽入 is 陽入. They happen to have such and such values in such and such places, just as x may be equal to 1 and y equal to 2 in one connection, and x may be equal to 2 and y equal to 1 in another, but we should not confuse our discussions by saying that x is equal to y.

In cases where modern classes correspond to the ancient with a small proportion of exceptions, the choice of name is simple. If a whole class is redistributed among other classes, such as 入聲 in Peiping, only the names of the surviving classes will be retained, in this case, 陰平 陽平,上, and 去, although each of these contains a minority from the original 入 class. If, however, two whole classes of subdivisions combine, then the nomenclature may need some deciding. Thus in the dialect of Wuchang, the whole of the ancient 入 combines with 陽平. Should we call this combined class 陽平 or 入? From the point of view of this one

1. *Phonetics of the Yao Folk-songs*, p. 116
2. Ch. Rey, *Dictionnaire Chinois-Français Dialecte Hac-ka*, Hongkong, 1901, p. X and throughout the book.

dialect, there is not much room for choice. But if we take a neighboring dialect, that of Changsha, we find that its 陰平 and 陽平 are closely similar in sound to the 陰平 and the class in question of Wuchang, respectively, while in addition Changsha has a 入 class distinct from all other classes. It is therefore more convenient for us to call this questionable class of Wuchang 陽平 rather than 入. It should be noted here that the comparison in actual sound here is not a concession of classification yielding to descriptions, as it was used only for the collocation of classes between neighboring dialects and consideration was only given as what kind of tone should be called by what kind of name. Another instance of ambiguity in classification is the voiced subdivisions of the 上 and 去 tones of Soochow (see above table), which combine to form one tone. From the point of view of Soochow alone, it could just as well be called 陽上去, but as it is a more common phenomenon among the dialects for a portion of 上 to combine with the whole of 去 (see first three dialects in table) as one undivided class, and would thus be considered as 上 becoming 去 the same may conveniently be applied to the case of Soochow, and we shall call the resulting class 陽去 rather than 陽上.

An interesting case of ambiguous classification touches the question of definition of a tone-class. In the city of Changchow, which is the writer's home town, there are two systems of tones, called the "gentry's speech" and the "speech of the street." In the gentry's system, if the method of pronouncing single words is used, one would discover seven classes, corresponding in the main with the four ancient tones with the voiceless and voiced subdivisions, except that ancient voiced 上 goes partly to 陽平, partly to 陰上 and partly to 去, instead of forming a separate class to complete the total number of eight. But if we observe the combinational behavior of the first of these small classes, namely those which go into 陽平, they do not behave in the same way as the 陽平 proper. Thus the character 勞 (陽平 proper) and 老 (of the class of characters in question) are both pronounced [lɑɣ] with a low-rising tone, which is that of 陽平 in this dialect. But when followed by 先生 ("Mr."), the former changes into a low level, which is what the 陽平 normally does in this tonal environment, but the latter changes into a rising tone, which in turn sounds just like the isolated pronunciation of a 陽去 in this dialect. The upshot of all this is: Without there being an additional eighth kind of tone in actual sound, there is a definable class of characters whose tonal *behavior* differs from that of all the seven classes, and if we conceive of tones from a classificatory point of view, we can properly say that this dialect does have a 陽上 which has type of behavior peculiar to itself. From a historical point of view, this condition is not likely to be a very stable one, and the class will probably not be able to maintain itself against influences of analogy.

3. *Determination of Values of Tones.*—To borrow a figure so aptly used by Bernhard Karlgren in explaining the relations between sound-classes and sound-values,[1] we can regard tone-classes as x's and y's in algebra and the actual movement of pitch as the numerical values of these classes.

Even here, we have to make several abstractions. Obviously, we do not concern ourselves with the absolute pitch of the tone, and consider only the pitch relative to the speaker's range of voice, so that what would be a low tone for a soprano is actually higher in pitch than the high tone of a tenor or even of a contralto.

Again, the range of pitch between different tones and within the limits of moving tones is also a variable quantity depending on force of articulation and force of vocalization. Moreover, when the range is modified by these changes, we have as yet no proof that the inflexion will change *proportionally,* somewhat as a graph drawn on an elastic band would be magnified when stretched. As our first inquiry is the most colorless average pronunciation of individual tones, our aim will be to get an average curve and range of the tone as spoken in a most colorless way.

No satisfactory method has yet been devised to obtain quickly and accurately a large number of tone-curves from which averages for class-values can be quickly obtained. The Kymographic method, such as used by Fu Liu[2] is extremely laborious and does not allow of statistical application. What is needed and has not been found is a device which draws automatically, not the time-displacement curves, as with the kymographs, oscillographs, etc., which have to be measured and computed and redrawn, but time-pitch curves in direct response to the sound. For lack of something better, the writer has been in the habit of using one of three things, a sliding pitch pipe, a swanee whistle, and a beat-frequency vacuum-tube oscillator with continuous pitch control over the range of human voice. In each case, the informant speaks the tone and the experimenter imitates the tone on the instrument while noting the pitches of the starting and ending positions and turning points if the tone is circumflex. This is of course far from being satisfactory, and all questions of the form of the curvature would have to be judged quite subjectively, but it serves most purposes of classification if the following points about systematic errors are attended to.

The dangers of systematic errors, or errors of interpretation, and errors of uncontrolled conditions in the study of tones are so great that all the refinements of experimental study are useless unless these are pro-

1. B. Karlgren, *Phonologie Chinoise,* Vol. I, pp. 9-10.
2. Fu Liu, *Etude Expérimentale Sur les Tons du Chinois,* Paris. 1925.

perly guarded against. In the first place, the speaker must be placed in the mood of a matter of fact information. He should not be led to feel as a pupil reciting his lessons, in which case all his tones become flattened or narrowed in range, nor feel as a language teacher impressing the distinction of the tones on the ignorant learner, in which case the tones would be exaggerated. The list of typical characters should be in random order, and should be spaced far enough in time to avoid influencing each other. It goes without saying that no two adjacent words should form possible phrases. In the writer's experience, it is also a good practice to disregard the first and last few words in a list, as the speaker has not yet decided which key he is going to speak at when starting, and he always tends to drop his voice a little at the last word, feeling that "this is the end of the list." It is usually very dangerous to ask the speaker to repeat a word, for then he would give the tone plus some kind of expressive intonation, "now I am repeating this, do you get it now?" Rather than actual repetition, the writer has found it very convenient to have the reading recorded phonographically and then analyze it by ear at leisure. The reason for having the whole list said together is to insure that the tones should be said in the same key and thus be comparable. Some speakers change their keys more readily than others, and the recorder should be constantly on the lookout. In no case should parts of one list be compared with each other if the list has been interrupted by intervening conversation. Different readings of the whole list on different occasions may of course be used together for purposes of getting an average. The standard is to space the words far enough to be out of influence of sentence intonation and yet near enough to keep a unity of key in the memory of the speaker, and this condition is not always easy to fulfil.

4. *Notation and Nomenclature for Tone-values.*—Between the extremes of class-name and class-notation in the form of diacritical or other normalized rudimentary tone-marks on the one hand, and the very detailed experimental curves of single occurrences of tones on the other, it would be rather useful to have an intermediate kind of notation to indicate the general nature of tone-values. As early as in 1857, Edkins[1] gave a list of twenty-four natural tones (our tone-values), which is sound in principle, but somewhat inconvenient in its method of division; for such an ordinary tone-value as the Cantonese 陰去, which is a middle level tone, would find no place in the scheme. The writer proposed in *Le Maître Phonétique*[2] a system as follows:

1. Joseph Edkins, *A Grammar of the Chinese Colloquial Language Commonly Called the Mandarin*, Shanghai, 1857.
2. "A System of Tone-Letters", *Le Maître Phonétique*, 1930, p. 24.

"Each tone-letter consists of a vertical reference line, of the height of an *n*, to which a simplified time-pitch curve of the tone represented is attached. The total range is divided into four equal parts, thus making five points, numbered 1, 2, 3, 4, 5, corresponding to low, half-low, medium, half-high, high, respectively."

In this way, there will also result a simple way of naming the tones by the figures, "11:" will be low level, "15:" will be low rising to high, "315:" will be middle-low-high circumflex. Short tones can be indicated by narrower signs (in abscissa) and extra-long tones can be indicated by wider signs, though there is usually no need of marking them in Chinese.

As the scale is relative, we cannot say how large the interval 1-5 is, or how high the pitch is. But in practice, the average is between an augmented fifth and an octave (each step being between a whole tone and a tone and half), and the pitch of 1 is about the lowest limit of the speakers voice.

II. NEUTRAL INTONATION

5. *Tonal Environment.*—Even in plain matter of fact statements, where there is no question of special expressive intonation, the tones of

First word \ Second word	陰平 44: ㄱ	陰上 22: ㄴ	陰去 12: ㄴ	陰入 13: ㅅ	陽平 52: ㄴ	陽去 242: ㅅ	陽入[1] 4: ㄱ
陰平 44: ㄱ	春天 ㄱㄱ	思想 ㄴㄴ	恭敬 ㄴㄴ	公爵 ㄴㅅ	天文 ㄱㄴ	軍隊 ㄴㅅ	驅逐 ㄱㄱ
陰上 22: ㄴ	祖宗 ㄴㄱ	水彩 ㄱㄴ	寶貝 ㄱㄴ	禮節 ㄱㅅ	野蠻 ㄴㄴ	隱士 ㄱㅅ	好食 ㄴㄱ
陰去 12: ㄴ	退婚 ㄱㄱ	信仰 ㄴㄴ	吾退 ㄴㄴ	氣壓 ㄴㅅ	透明 ㄱㄴ	怨恨 ㄴㅅ	糧業 ㄱㄱ
陰入 13: ㅅ	雪花 ㄴㄱ or 借書 ㄱㄱ	七巧 ㄱㄴ or 借手 ㄴㄴ	窄布 ㄱㄴ or 尺寸 ㄴㄴ	竹節 ㄱㅅ or 拍劫 ㄴㅅ	惡名 ㄴㄴ or 拍球 ㄱㄴ	得道 ㄱㅅ or 僻地 ㄴㅅ	出力 ㄴㄱ or 燭盒 ㄱㄱ
陽平 52: ㄴ	檀香 ㄱㄱ	蘋菓 ㄴㄴ	裁判 ㄴㄴ	洋鐵 ㄴㅅ	彈琴 ㄴㄴ	仁義 ㄴㅅ	涼藥 ㄱㄱ
陽去 242: ㅅ	護兵 ㄱㄱ	項羽 ㄴㄴ	僭做 ㄴㄴ	用筆 ㄴㅅ	閏年 ㄱㄴ	杏樹 ㄴㅅ	事業 ㄱㄱ
陽入 4: ㄱ	伏羲 ㄱㄱ	日本 ㄴㄴ	習慣 ㄴㄴ	十一 ㄴㅅ	石頭 ㄴㄴ	學問 ㄴㅅ	六月 ㄱㄱ

1. T'ao Yü-Min, "Phonetics of the Foochow Dialect", in this *Bulletin*, I, 4, 1930, pp. 163-165.

words undergo marked or even radical changes in connected speech. The influence of tones on each other, usually the second on a preceding one, is remarkably regular. Where the dialect has no marked tonic stress, such as exists in that of Peiping, one can cover practically all combinations by a systematic permutation between the tones. To illustrate we shall take the tones of Foochow, as given on p. 7.

It will be noticed that the tones changed in combination are sometimes like the old tones and sometimes have a new sound entirely. The usual way of describing this is to say that tone A when followed closely by tone B becomes a tone C. But it should be remembered that this only means that tone A closely followed by tone B only sounds as C would sound if C stood alone. If a real tone C were followed by a tone B it would not always remain having the isolated pronounciation of C but would again sound like tone D (if standing alone). And so we have 試探 [søy˩ tʻaŋ˩] sounding like 徐 + 探 [sy˥ tʻaŋ˩][1], 徐探 like 始 + 探]sy˩ tʻaŋ˩], and 始探 pronounced [sy˩ tʻaŋ˩], for which there is no isolated word pronounced [sy˩].

Since tones in combination give rise to new and yet typical tones, it is necessary in our recording of typical tone values to take into account all of these. Thus, from a more concrete setting of tones in connected speech, we get a more representative idea of what a certain tone-class is. It is not an adequate description of the Foochow 上 and the Canton 陽去 as both being half-low level, or "22:" For the former is a "22:" which does such and such things when followed by such and such tones (see second row of Table) whereas the latter does nothing of the kind. There are several advantages in thus conceiving the tone-classes as a pattern of collection[2] of tones. In the first place, it is nearer to fact. For instance, if we consider the Peiping 上 primarily a "214:" concave-circumflex tone, we should be puzzled by the fact that not once in a long paragraph do we actually hear a 上聲 actually pronounced that way. The reason is that 上聲 is a tone which is "21:" or "11:", low-falling or level most of the time, except when followed by another 上聲 in which case it becomes "35:" or middle-rising-to-high, and only when it is final does it have the "214:" tone. Secondly, it enables us to recognize the existence of a tone-class of which the isolated tone value cannot be distinguished from that of another class, such as the 陽上 of Changchow referred to above (section 2). Thirdly, when a value in combination is entirely new

1. The change of vowels in combination is a peculiarity of the Foochow dialect.

2. We could, if we chose, speak of *tonemes* instead of *collections*. But as we may have to consider the tone-values as tonemes when compared with the total resultant tone, neutral intonation, and expressive intonation, which resultant would then be the real tones, it is better not to commit ourselves now as to which stage of abstraction would be called the toneme-stage.

to the list of isolated tones, such as the truncated 上聲 of Peiping or that form of Foochow 上聲 which has the "35:" value, it will not be necessary to treat it as a heterogeneous addition to the list, but simply consider it as one member of the group that forms that class in question, a member which does not happen to belong to any of the other groups or classes, nor *is* the value of this class when pronounced in isolation.

6. *Tonic Stress.*—Stress-accent does not play any important part in most Chinese dialects. But in a few dialects, including that of Peiping, tonic stress plays such an important part that unstressed syllables not only tend to have their vowels obscured, but also lose their proper tones, and acquire a level, usually short tone, the pitch being determined by the preceding syllable. In Peiping, this neutral tone has a half-low pitch ("2:" ˩) when preceded by one of the two *p'ing's*, half-high ("4:" ˧) when preceded by a 上聲 (thus forming together with the truncated 上聲 a complete 上聲), and low ("1:" ˩) when preceded by a 去聲. To the Peiping ear, the values "˩" and "˩" sound like a 去聲, and the"˧" sounds like a 陰平. If unstressed syllables occur in succession, then the pitch of each will depend upon what the preceding one *sounds like* according to the above rules. Thus,

打˩ 扮˧
打˩ 扮˧ 了˩
打˩ 扮˧ 了˩ 沒˩ 有˩

But

看˨˩ 見˩
看˨˩ 見˩ 了˩
看˨˩ 見˩ 了˩ 沒˩ 有˩

7. *Special Changes in Tones.*—While the study of the permutations and of stress will cover most of what one needs to know in order to render a fairly adequate account of the neutral intonation, or the total resultant intonation of colorless connected speech, there always remains the possibility of special kinds of intonation for which one should be on the lookout. Thus, in Cantonese, there are many words which take on special tones, known as 變音, or modified tones, when used in colloquial speech, e. g. 錢 read as [tɕʻi:n˩] in the literary pronunciation, but [tɕʻi:n˧] in the spoken language.[1]

In Peiping, when words are reduplicated to form adjectives or adverbs of manner, the second syllable always takes a high level tone, as 慢慢(兒)的 [man˨˩ man˧ də˩] Again, the words 一 and 不 have many peculiar behaviors according to the succeeding syllable, not following the

1. The 變音 's are all marked by an sterisk in the transcriptions in J. D. Ball's *Cantonese Made Easy*, 3rd Ed., 1904.

general rules for tonal succession.[1] Where rules cannot cover such cases, we practically have to fall back on a purely lexical point of view and record the facts for further systamatization and historical explanation.

III. EXPRESSIVE INTONATION[2]

8. *Existence of Expressive Intonation in Chinese.*—Owing to the fact that Western learners of Chinese tend to use intonation in a purely expressive role, writers on and teachers of Chinese have gone to the other extreme of regarding Chinese intonation as entirely fixed by word-tones. It is true that many of the functions of intonation in other languages are fulfilled in Chinese by other devices than intonation, such as the use of particles. But there still remains a good deal of pitch movement in Chinese speech which expresses moods and attitudes of the speaker in addition to the modulation of pitch due to the etymological word-tones and the more or less regular forms of neutral speech intonation when tones are joined together. So little work has been done along this line that we can only indicate briefly some of the factors that have to be considered.

9. *Logical Intonation and Emotional Intonation.*—In their work on English intonation, Klinghardt and Klemm,[3] divide the expressions of speech into logical and emotional expressions, the former depending on stress and intonation, while the latter on the quality of the voice, unusual degrees of stress (or weakness), the general pitch of the whole phrase, and the tempo of the speech. Very significant is their further remark that while all these elements in the method of expression are universal for human speech, the manner of their actual application is universal only for emotional expression and would vary from language to language as to their application to logical expression. We shall see that except for the abundant use of grammartical particles in place of intonational changes, the preceding observation apply largely also to expressive intonation in Chinese.

10. *Addition of Tone and Intonation.*—We have to consider now how it is possible for speech intonation to exist simultaneously with the etymological tones. In the matter of neutral intonation, it is fairly

1. See, for instance, C. Goodrich, *A Pocket Dictionary and Pekingese Syllabary*, Shanghai, 1899, under these characters *I* and *PU*.

2. A more detailed account of this topic has been published under the title of "A preliminary Study of English Intonation (with American Variants) and Its Chinese Equivalents", *The Ts'ai Yüan P'ei Anniversary Volume* (Supplementary volume I of this *Bulletin*, 1932)

3. H. Klinghardt and G. Klemm, *Uebungen im Englischen Tonfall*, 2nd ed., Leibsic, 1926, p. 1.

simple. Each word-tone simply acquires a more or less regular modification because of its tonal enviroment, or, if we take the point of view of a tone-class consisting of a group of its sound-values, we can say that it takes on such and such a value when joined to such and such a tone. If, however, a falling tone should occur at a place where a rising expressive intonation is called for, then we meet with the problem of tonal addition. When an occidental student of Chinese says correctly.

這 個 東 西 ↗好, 那 個 東 西 ↘壞……I

(This thing is ↗good, that thing is ↘bad) and then goes on to say wrongly,

那 個 東 西 ↗壞, 這 個 東 西 ↘好 ……II

(That thing is ↗bad, this thing is ↘good)

he is simply using sentence intonation to the exclusion of word-tone. As a first approximation towards correcting his intonation, he will be told to stick to the falling tone of 壞 even though it ends a suspense-clause and to the rising tone of 好 even though it ends a conclusion. But of we observe more closely the intonation of such a succession of clauses, we shall notice even without any instrumental aid, that the falling tone in the suspense-clause does not fall quite so low, and the rising tone in the conclusion does not rise quite so high. These tones are in fact the algebraic sums or resultants of two factors, the original word-tone and the sentence intonation proper, in this case a purely logical intonation.[1]

If, however, we have an example like the following,

(Do you say) this is ↗bad? It is (decidedly) ↘good!

這 個 壞? 這 個 好!

this first clause will also have a rising intonation and the second a falling intonation in Chinese, but the fall and rise will not be added simultaneously to the last syllables, but will be joined on successively, *after* the word-tones are completed, thus:

這 個 ↘↗ 壞? 這個 ↗↘ 好!

Thus we see there are at least two types of tonal additions, simultaneous addition and successive addition, and in our consideration of the forms of intonation, we have not only to ascertain what they are, but also how they are applied to the tonal systems of the language.

11. *Some Forms of Intonation.*—In a preliminary comparative study of English and Chinese intonation,[2] the writer undertook to work

1. It should be borne in mind that this method of distinguishing suspense and conclusion, which is like that of English, is only *one* of the ways in which such logical import is expressed. Other methods such as prolonging the last syllable on the suspense, are also possible.
2. "A preliminary Study of English Intonation (with American Variants) and its Chinese Equivalents," *The Ts'ai Yuan P'ei Anniversary Volume.*

out some of the forms and functions of Chinese intonation as are found in Mandarin. I shall give here some illustrations of how these forms are combined with tones to form resultant speech melodies.

The forms which add simultaneously are:

(a) ↑ General raised level of pitch,
(b) ↓ General lowered level of pitch,
(c) ↕ Widening of range,
(d) ↨ Narrowing of range,

all of which may affect either the whole or a part of the intonation group. These modifications, however, do not all apply in a simple manner to the resultant intonation. For intonation (a), there is usually, though not always, an accompanying (d), due probably to the greater effort in raising the upper limit of a normal tone than the lower limit, resulting in what may be compared to be the flattened sun on the horizon caused by differential refraction. More remarkable is the fact that when unstressed syllables following 陰平 and 陽平 normally have lower pitch (cf. 6 above), now have a high pitch, resulting in a changed pattern. Thus, a question asked for the first time.

你 說 什 末 來 看 ？　　˩ ˧ ˦ ˩ ˩ ˩
(What did you ↘says?)

will on repetition

你 說 什 末 來 看 ？　　↑˩ ˧ ˦ ˧ ˧ ˧
(↗What did you say?)

Intonation (b) is nearly always accompanied by (d), because the lowest tone in a dialect being usually near the lower limit of voice, any general lowering of pitch must result in a narrowing of the range as well. A peculiar effect that often results from the effect to lower the pitch is the loss of voice at the lowest point, resulting in a sort of a grunt or sometimes a glottal stop. In such a low intonation, the *shang-sheng* of Peiping which is the lowest tone, often breaks into two syllables, as 好 [↓xɑu ʔʊ˧], 你 [↓ni ʔi˧].[1]

The effects of (c) widening and (d) narrowing the range of pitch are probably evenly applied to the neutral intonation without special features, so far as Mandarin is concerned, except that a magnified *shang-sheng*, which normally ends at half high, does not end quite as high as proportionally.

Two forms of successive addition deserve special attention, the rising ending and the following ending. If we use the signs ↗ and ↘ to

1. Some dialects have regular tones always pronounced this way, e. g. the 陽上 of Huang Yen in Chekiang.

represent these endings, we can best represent their effects on tones by the following formulae:

↗ 55:= 56: ↗
↗ 35:= 36: ↗
214:=216: ↗
↗ 51:=513: ↗

where 6 is to represent extra high pitch. The most interesting effect is that on the *ch'ü-sheng*, resulting in a circumflex tone. When the syllable to which the rising ending applies is an unstressed and therefore toneless syllable, it is changed into a rising tone, the general pitch depending upon whether it was originally half high (after *shang-sheng*), half low (after one of the *p'ings*) or low (after *ch'ü-sheng*).

The falling endings have the following effect:

↘ 55:= 551: ↘
↘ 35:= 351: ↘
↘214:=2141: ↘
↘ 51:=5121: ↘

When it applies to an unstressed syllable, it rises through one step and falls to the original level, forming a circumflex tone, except that the unstressed tone following a *shang-sheng*, which is high, falls directly downwards.

12. *Form and Function in Intonation.*—It is a well known fact that the relations between grammartical forms and functions is not that of one-to-one correspondence, but that of many--to-many correspondence. While there is in the matter of expressive intonation a greater degree of universality, as already noted by Klinghardt, the relation is still by no means quite simple. For an initial effort in gathering data in this field, we must be prepared to find the same intonation used for different functions and the same function expressed by different intonations, and also by non-intonational elements of speech. Thus the same falling ending expresses in Chinese the following functions:

(1) Enumeration:
說你多有錢↗, 說他多好看↘, 說你們多快活↗
(2) Protesting statement:
不是你↘, 是他↘
(3) Satisfaction over new situation:
廿↘, 這樣好↗
(4) Affected exclamation:
眞可憐↗

On the other hand, enumeration is not only expressed by the falling ending in Chinese, but also by such devices as lengthening of last syllable, addition of such particles as 啊, [a], 咧 [lə]. With such cases of many-to-many correspondence, there are two directions in which further analysis can be pursued. We can try to differentiate further the forms into varieties which have so far escaped notice, such as different lengths in the falling ending. On the other hand, we can try to differentiate the functions further, such as simple enumeration, with neutral intonation and simple pauses, and impressive enumeration, which would have the falling ending. If expressive intonation were determined purely by physiological and psychological factors, the ultimate results of such analysis would be the one-to-one correlation of each function with each form, or more likely each functional element with each formal element. But even in this matter of expressive intonation, which, as Klinghardt already noted, is much more universal than that of lexical elements (phonetic elements and etymological tone), there will still probably remain a large amount of arbitrary usage, which have to be regarded as historical facts to be explained only in terms of antecedent historical conditions. Thus we see that after we have disentangled the two historical factors of (1) Etymological intonation and (2) neutral intonation from the total resultant intonation of actual spoken Chinese, the remaining factor of (3) expressive intonation will form a subject to be treated by the methods both of historical linguistics and of general linguistics.

CERTAIN PHONETIC INFLUENCES OF THE TIBETAN PREFIXES UPON THE ROOT INITIALS

FANG-KUEI LI

If one reads any Tibetan grammar, one is impressed in the very beginning by the definite rules which govern the prefixes, i. e. certain prefixes appear only before certain definite types of initials and do not appear before others. The native grammarians are equally sensitive of these and form rigid statements about them,[1] which we may summarize as follows:

r-(*ra-mgo*)	appears before	11	consonants:	*k, t, ts, g, d, b, dz, ṅ, n, ń, m.*
l-(*la-mgo*)	,,	10	,,	*k, t, p, tś, g, d, b, dź, ṅ, h.*
s-(*sa-mgo*)	,,	11	,,	*k, t, p, ts, g, d,b, ṅ, n, ń, m.*
b-(*śnon-ḍźug*)	,,	10	,,	*k, t, tś, ts, ś, s, g, d, ź, z.*
g-(,,)	,,	11	,,	*t, tś, ćs, ś, s, d, ź, z, y, ń, n.*
d-(,,)	,,	6	,,	*k, p, g, b, ṅ, m.*
ḍ-(,,)	,,	10	,,	*g, d, b, dź, dz, kh, th, ph, tśh, tsh.*
m-(,,)	,,	11	,,	*g, d, dź, dz, kh, th, tśh, tsh, ṅ, ń, n.*

Such dictates of euphony as formulated by the native grammarians more or less according to their system of writing seems at once inadequate in the light of modern linguistics. As a matter of fact, the *s* in *sl-* and *sr-* is also undoubtedly a prefix although it is considered by the natives as having an initial *s-* with a *ra-btags* and a *la-btags;* on the other hand, I believe, *lh-*, in some cases at least, is not to be considered as a prefix *l* followed by an *h*, but rather as a simple consonant. Futhermore, *s-*, *ś-* in some cases are not simple initials but represent a combination of prefix plus initial. The details of these will have to follow, but it is evident that these euphonic phenomena will have to be interpreted in more scientific terms, before any serious phonological study can be pursued.

When a prefix is said not to be able to stand before a certain initial, it is necessary to examine what this statement exactly means. It may mean, I believe, any one of the following three things. Firstly, a prefix may not be able to exist before a certain consonant because of the dissimilatory tendency of similarly articulated sounds; thus, prefix *b-* cannot stand before labial initials, prefix *g-* cannot stand before guttural initials, prefix *d-* cannot stand before dental plosives, fricatives, and affricatives etc. This not only applies to the prefix placed immediately before the

1). Cf. Foucaux, *Grammaire de la langue tibetaine, appendices,* and Bacot, *Les ślokas grammaticaux de Ton-mi Sambhota* pp. 51-54.

initial but also when it is seperated by another interposed prefix. Thus, in verbs like *s-kum-pa, b-s-kums, b-s-kum, s-kums* "to contract, to draw in (the legs)", we find a regular *b-* prefix in the perfect and in the future form, but in roots with a labial initial this prefix regularly disappears, thus: *s-pon-ba, s-pans, s-pan, s-pons* "to give up, to renounce". Forms like *b-s-pans, b-s-pan* cannot exist because *b-* is dissimilated by the following initial *p-*.

Secondly, a prefix may influence the following initial, so as to modify its manner of articulation in a definite way. This kind of phonetic influence takes place irrespective of the function of the prefix and the meaning of the root, and the result of this is that certain initials will not be found after certain prefixes. What I believe to be obvious examples of this is that in Tibetan after prefixes *s-, b-, g-, d-*, are not found aspirated consonants and after *a-* are not found spirants. In other words, aspirated consonants after *s-, b-, d-, g-*, and spirants after *a-* are changed into other sounds. The details of these will have to be given later, but Tibetan, so far as I can see, is particularly rich in this sort of phonetic change; and I propose to make a special study of this in the present paper.

There is of course a third possibility, namely, the following initial may influence the prefix in a definite way, so that before certain initials only certain prefixes are allowed. This is particularly evident in Lhota Naga where an old prefix *me-* is differentiated into *n-* and *m-* according to the following initial.[1] In classical Tibetan, however, I do not find definite traces of this type, except possibly prefixes *d-* and *g-* whose notorious compensatory behavior has made many people suspect them of a single origin.

It is indeed strange that while various functions of the Tibetan prefixes have been from the very beginning zealously studied, the purely mechanical phonetic reactions which must certainly have taken place between the prefix consonant and the root initial have remained so far untouched and that grammars seem to be simply satisfied with the euphonic statements of the native grammarians, more or less modified, without further inquiry. Conrady's pioneer work, *Eine Indochinesische Causativ-Denominativ-Bildung,* 1896, is chiefly interested in the functions of the prefixes, but he advocates a theory that the quality of the initial, i.e. tenuis, media or aspirata, is associated with definite grammatical functions in Tibetan[2]— a theory which has greatly influenced his work. Before pronouncing whether this theory is to what extent correct, I believe that Conrady might have materially improved his work by trying to find

1). Cf. Wolfenden, *Outlines of Tibeto-Burman Linguistic Morphology,* 149, 156.

2). Op. cit. pp. 54-55.

out what the initials of the verbs he deals with really are, minus the influence of the prefixes. For in verbs like *ḍ-dud-pa, b-tud, g-dud, dud* or *thud,* "to bend down, to bow," *ḍ-debs-pa, b-tab, g-dab, thob* "to throw, to strike", etc. where we have all three initials *d-, t-, th-* appearing in one verb, it is really a problem to determine what the true initial (or initials) is and under what conditions it is differentiated into *d-, t-, th-.* Conrady gives *tud-pa, tab-pa* as the original stems, evidently considering that the perfect forms with the *b*-prefix are the original stems. Similarly he gives *krol-ba* as the original stem for *ḍkhrol-ba, p. f. d-krol.* Instead of deriving the other forms from his reconstructed stem and showing how the initials may be influenced by the prefixes, he concludes by saying that these roots are contaminated forms and really 'unvereinbar'[1], thus completely ignoring the possibility that these different initials may be due to the mechanical working of the prefixes.

Wolfenden recently studies the Tibetan prefixes from an entirely different point of view in his most stimulating book *Outlines of Tibeto-Burman Linguistic Morphology.* He is mainly interested in tracing the functions of the prefixes and their later adaptations and leaves out entirely the problem of their phonetic influences. However, in agreement with Conrady, he maintains that the perfect form in *b-* with a following surd is nearer the original than the form with *ḍ-* and an aspirated initial[2]. Whether this viewpoint is acceptable or not we shall later see, but it seems certain and is generally felt that in the so-called three or four-rooted verbs presenting various types of initials, some form (or forms) of the initial must be original and the others secondarily developed. It is quite possible that a functional interchange of consonants might have been operating in these cases, but it seems to me that a clearer understanding of such forces can only be obtained by first realizing what mechanical influences the prefix and the root-initial may possess for each other. In the following pages I shall study the various combinations of prefixes and initials and try to show what the original form may be.

Prefix *s-*

1. *sk-* <*s-kh-*

   s-kam-pa 'to long for' : *kham* 'appetite'

   s-kor-ba, b-s-kor 'to surround' : *kho-ra* 'circumference' *khor-mo-yug* 'continually'

   s-kol-ba, b-s-kol 'to boil' : *khol-pa* 'boiled, bubbling', *khol-ma* 'anything boiled'

   s-kyogs-pa 'to turn (the neck)' : *khyog-po* 'curved, bent'

---

1). Op. cit. pp 27 ff.

2). Op. cit. p. 49.

s-kyor 'the hollow of the hand filled with a fluid' : *khyor* 'a handful'
s-kyes, s-kyas-ma, s-kyos-ma 'a present : *khyos-ma* 'a present'

It is well to remember here the foundamental principle formulated by Conrady that the prefixed forms of the Tibetan written language are derived from the prefixless forms (op. cit. p. 3). The prefixless simple nouns (or adj.) as quoted above are beyond the slightest doubt original forms and therefore present the initial in the original state, namely *kh-*. The derivatives with the *s-* prefix present without exception an unaspirated *k-*. The reason for such a change is simple: the *s-* deprives the following aspirated initial of its aspiration. For this reason we find no aspirates after *s-* in Tibetan. An excellent example of this force of *s-* can be found in English, cf. *tone* and *cope* pronounced [t'oun] and [k'oup] but *stone* and *scope* pronounced [stoun] and [skoup].

Conrady's explanation that the aspirated consonants are derived from prefix *s-* with an unaspirated surd or sonant seems to me to have put the cart before the horse, for in that case we cannot understand why in Tibetan we have *sk-* side by side with *kh-*, etc. If *sk-*, etc. has become *kh-*, etc., in classical Tibetan we shall have no *sk-* at all. On the other hand, some dialectical forms in *kh-* versus Tib. *sk-* as cited by Conrady are definite proofs that Tib. *sk-* comes from *s-kh-* and that the dialectical *kh-* comes from a prefixless form and is therefore original. For instance, *kham* is thought to be the provincial (Wt.) pronounciation for *r-kam, s-kam,* but the dialects so far as we can gather from Jäschke seem to have regularly the pronounciation *k-* for *sk-, rk-,* never *kh-*. According to our theory, *kham* represents the original form, and *s-kam* is a derivative coming from *s-kham*. The examples can be readily multiplied if we recognize such intransitive verbs like *a-khum-pa, khums* 'to shrink', *a-khol-ba, khol* 'to boil, intr.', etc. as possessing an original *kh*. The prefixless perfect forms as well as the present forms with *a-* present alike an aspirated surd, and there is no reason to think that this is not their original initial, but the *s-* derivatives have all *k-*:

s-kum-pa, b-s-kums, b-s-kum, s-kums 'to contract': *a-khum-pa, khums* 'to shrink'

s-kol, b-s-kol 'to boil, tr.': *a-khol-ba, khol* 'to boil, intr.'

s-kyur-ba, b-s-kyur 'to throw, to cast off': *a-khyur-ba* 'to be seperated'

s-kur-ba, b-s-kur 'to send, to transmit': *a-khur-ba, khur* 'to carry, to convey'; *khur* 'burden'

s-koṅ-ba, b-s-kaṅs, b-s-kaṅ, s-koṅs 'to fulfill': *a-kheṅs-pa, kheṅs* 'to be full'

s-kyil-ba, b-s-kyil 'to bend': *a-khyil-ba* 'to wind, to twist, intr.'

s-kyom-pa, b-s-kyoms, b-s-kyom, s-kyoms 'to shake, agitate': *a-khyom-pa a-khyoms* 'to rock, to reel, intr.'

s-kyel-ba, b-s-kyal,—— *s-kyol* 'to conduct, to accompany': *ạ-khyol-ba, khyọl* 'to be carried, to be brought somewhere'

Similarly the origin of many combinations of *s*+ unaspirated surd can be proved to come from an *s-* with an aspirated surd.

2. *st-*<*s-th-*

s-tuṅ-ba, b-s-tuṅs, b-s-tuṅ, s-tuṅs 'to shorten': *thuṅ--ba* 'short'

s-tod 'the upper, higher part', *s-tod, b-s-tod* 'to exalt': *thod* 'a head-ornament; over, above the door'

s-tim-pa, b-s-tims, b-s-tim, s-tims 'to penetrate, to be absorbed': *thim-pa* 'to disappear by being absorbed', also *ạ-thim-pa*

s-tob-pa, b-s-tab, b-s-tob, s-tob 'to force to accept, to feed': *thob-pa* 'to get, to obtain'

s-tun-pa, b-s-tun 'to agree': *ạ-thun-pa, m-thun-pa* 'to agree'

s-tugs-pa 'thick, thickness': *ạ-thug-pa, m-thug-pa* 'thick'

s-ton-pa, b-s-tan-pa 'to show': *ạ-thon-pa, thon,*——, *thon* 'to come out, to step forth (from the crowd)'

3. *sp-*<*s-ph-*

s-puṅ-ba, s-puṅs 'to heap, to accumulate': *phuṅ-po* 'a heap'

s-poṅ-ba, s-paṅs, s-paṅ, s-poṅs 'to give up, to renounce': *phoṅs-pa* 'poor, needy', *ạ-phoṅs-pa, ạ-phoṅs* or *phoṅs* 'to be poor, to be deprived of'

s-pra-ba, s-pras,——, *spros* 'to adorn': *phra* 'ornament, jewel'

s-phriṅ-ba, s-priṅs 'to send a message, to give information': *phrin, ạ-phrin* 'news'

s-paṅs 'height': *ạ-phaṅ, ạ-phaṅs* 'height'

s-por-ba, s-par-ba 'to lift up': *ạ-phar-ba* 'to leap, to be raised'

s-pur-ba 'to make fly, to scare up': *ạ-phur-ba, phur* 'to fly'

s-pel-ba 'to increase': *ạ-phel-ba, phel* 'to increase, intr.'

s-po-ba, s-pos, ——, *s-pos* 'to change, tr.': *ạ-pho-ba, ạ-phos, ạ-phos* 'to change place, to migrate'

s-pyaṅ-ba 'to make hang down': *ạ-phyaṅ-ba, ạ-phyaṅs* 'to hang down'

s-prul-ba 'to juggle': *ạ-phrul-ba* 'juggery'

s-pro-ba, s-pros 'to make go out': *ạ-phro-ba, ạ-phors* 'to emanate'

s-prod-pa, s-prad-pa, 'to deliver': *ạ-phrod-pa, phrod* 'to be delivered'

4. *sl-*<*s-lh-*

s-lad-pa, b-s-lad 'to mix, to adulterate': *lhad* 'an alloy'

s-lan-pa 'to mend': *lhan* 'together', *lhan-pa* 'a patch'

s-le-ba, lhas 'to braid': *lhas lhes-ma* 'a braid', *lhe-ba* 'to braid'

These simple nouns in *lh-* in contrast with their derivatives with *sl-* undoubtedly show that we are dealing with roots with an original initial *lh-* and that the development into *sl-* is exactly parallel to the preceeding types, *sk-*: *kh-*, *st-*: *th-*, *sp-*: *ph-*. In fact *lh-* has to be treated as a simple consonant, which may be defined as a voiceless or whispered *l* in contrast to the voiced *l*.[1] This pronounciation is kept at least in Eastern Tibet according to Jäschke. The reason why the Tibetans have written it as an *h-* with a *la-mgo* is probably, because they had no good equivalent for it when they first borrowed their alphabet from the Indians and the *lh-* is probably as good as any that came close in expressing it. Furthermore, the perfect root of the Tibetan verb often appears in a prefixless form, and here *lhas*, the perfect of *s-le-ba*, clearly indicates that we have here a simple prefixless initial *lh-*.

On the other hand, *sl-* can equally well be derived from *s-l-*:

s-log-pa, slogs, b-s-log 'to turn round, about': *log-pa* 'to return'[2]

s-loṅ-ba, s-laṅ-ba, b-s-loṅs, b-s-laṅ, s-loṅs 'to cause to rise': *laṅ-ba laṅs*, ———*loṅs* 'to rise'[2]

s-lob-pa, b-s-labs, b-s-lab, slobs 'to learn, to teach': *lob-pa, lobs* 'to learn'

5. *s-*<*s-tsh-*

saṅ-ba, (b)-saṅs (b)-saṅ 'to cleanse': *tshaṅs-pa* 'purified', *ą-tshaṅ-ba, tshaṅs, b-tsaṅ* to 'make clean'

sad-pa 'to test, examine': *tshad, tshod* 'measure, the right measure', *tshod l-ta-ba* 'to try, to prove'

sig-pa 'to hitch up, as porters do with a load on their back': *tshigs* 'member between two joint, joint'

sib-bu 'a sort of small pox, measles': *tshibs* 'measles'

sim-pa 'to be well, well off': *tshim-pa* 'to be content, adj. contented'

sog-pa, b-sags, b-sag, sogs 'to gather, to heap up': *tshogs* 'an assemblage, accumulation', *ą-tshogs-pa, tshogs* 'to assemble'

1). Y. R. Chao noted it as ɬ in the pronounciation of *lha-sa*, cf. Yu and Chao, *Love Songs of the 6th Dalai lama Tshangs dbyangs rgyo mtsho*, p. 26.

2). Cognate to these verbs we have,

l-daṅ-ba, l-daṅs or *laṅs*, ————, *ldoṅ* 'to rise'

l-dog-pa, log, ————, *log* 'to return'

In these verbs we have to reckon with a metathesis of *d-l-* into *l-d-* as suggested by Simon (*Tibetisch-Chinesische Wortgleichungen* pp. 30-31). But it is not necessary to accept his wholesale consideration of *r-* and *l-* prefixes as due to metathesis: for in that case we cannot understand why we have at the same time *lg-* and *gl-*, etc. The *d-* in the above two verbs is then a prefix attached to the present root, the perfect roots present, as they often do, a plain initial (*l-*).

6. *ś-<s-tśh-*

śad 'the mark of punctuation (<a cutter)': *tśhad-po* 'rent, torn, a limited time', *ạ-tśhad-pa, tśhad* 'to be cut'

śam, g-śam 'the lower part of a thing': *tśham la ạ-bebs-pa* 'to throw down, to cause to lie down'

śas 'part': *tśha* 'part, portion'

śom-pa, bśoms or *b-śams, b-śam, b-śoms* 'to prepare, to make ready': *tśhom-pa* 'to be finished, accomplished'

Prefix *b-*

7. *bk-<b-kh-*

b-kal perf. of *ạ-khal-ba* 'to send things, to charge': *khal* 'burden, load'

b-ku-ba 'to extract, to make an extract of a drug by drawing out the juice': *khu-ba* 'fluid, liquid'

b-kyigs, b-kyig perf. and fut. of *ạ-khyig-pa* 'to bind'

b-krus, b-kru perf. and fut. of *ạ-khrud-pa* 'to wash'

b-kur-ba 'to carry, convey': *ạ-khur-ba, khur* 'to carry'

b-kon perfect of *ạ-khon-pa* 'to bear a grudge'

The above examples show conclusively that *bk-* is derived from *b-kh-*. But the examples can be readily increased if we take into consideration the following regular type of transitive verbs:

ạ-gegs-pa, b-kag, d-gag, khog 'to hinder'

ạ-geṅs-pa, b-lkcaṅ, d-gaṅ, khoṅ 'to fill'

ạ-gebs-pa, b-kab, d-gab, khob 'to cover'

ạ-ges-pa, b-kas, d-gas, khos 'to split'

ạ-gog, b-kog, d-gog, khog 'to take away, to rob'

ạ-god-pa, b-kod, d-god, khod 'to establish, to build'

ạ-grems-pa, b-kram, d-gram, khroms 'to put down, to scatter'

ạ-grol-ba, b-krol, d-grol, khrol 'to liberate'

It has usually been considered that the perfect roots in *bk-* are probably the original[1], and from this Conrady built up two causative series of these types: Intr. *g-*: tr. *k-* and *kh-* and Intr. *kh-*: tr. *k-* (op. cit. p. 54). But it seems to me doubtful whether the perfect roots here actually represent an original unaspirated surd initial. There is much to be said for the view held by Francke and Simon that the verb in general falls into two groups, the present and the future forming one group and the perfect and the imperative the other[2]. The first group has a sonant initial and

1). Cf. Conrady, op. cit. pp 26 ff.

2). Jäschke, *Tibetan Grammar, addenda by A. H. Francke and Simon*, p. 144.

the second group a surd initial. The problem, however, is to see if we can find out whether the surd initial is aspirated or not. In the first place, the imperative is without a prefix and therefore is likely to present the initial in its original form, uninfluenced by any prefix, and secondly we know that *b*-prefix does not exist before an aspirated consonant which makes us suspect that a loss of aspiration has probably taken place where *b-* stands. But a proof of this is furnished in verbs of this type with a labial initial.

a-bud-pa, phud, ———, phud 'to pull off'
a-bogs-pa, phog, d-bog, phog 'to impart advice'
a-bigs-pa, phigs, d-big, phigs 'to pierce'
a-bebs-pa, phab, d-bab, phob 'to cast down'
a-bul-ba, phul, d-bul, phul 'to offer'

This type is exactly parallel to the preceeding type with the exception that the perfect root has no *b*-prefix. The perfect *b-* evidently is dissimilated here on account of the labial initial, but at the same time it presents a very interesting phenomenon, namely, the perfect root shows instead of an unaspirated surd an aspirate as initial. If, as it is generally believed, *bk-* represents an original initial *k-* with a *b*-prefix, we shall not be able to understand why, in the case of labials where the *b*-prefix cannot exist on account of dissimilation, we have aspirates instead of unaspirated surds. A type such as *a-b-* with perfect in *p-* simply does not exist in Tibetan.[1] It is evident, then, that in the type *a-g-, b-k-, d-g, kh-* as well as in the type *a-b-, ph-, d-b-, ph-* we are really dealing with two stem forms, *g-*: *kh-* and *b-*: *ph-*; the present and the future have a sonant initial, the perfect and the imperative an aspirated surd. I may remark also that this interchange of initials belongs primarily to be transitive verbs, and rarely occurs in the neuter or intransitive verbs.

Of the types of present and perfect roots, Francke and Simon (pp. 144-145) give *a-g-*: *kh-* as a seperate type, but, among the examples given, 13 out of 14 all have labial initials, with a single exception *a-dul-ba, thul* 'to conquer' which has also a perfect *b-tul.* As a matter of fact a type *a-g-*: *kh-* does not exist by itself, and *a-b-*: *ph-* type is but a variant of their type I, *a-g-*: *b-k-*, with the *b*-prefix dissimilated. To be more exact, we may speak only of an original type *a-g-*: *b-kh-* which gives *a-g-*: *b-k-*

1). There is, of course, a type *a-b-*:*b-* which corresponds to *a-g-*:*g-*, or *a-g-*:*b-g-*
a-bub-pa, bub, ———, bubs 'to be turned upside down'
a-bor-ba, bor, ———, bor 'to throw'
Cf. *a-gol-ba, gol* 'to part'
a-gyel-pa, gyel, ———, gyel 'to fall, to tumble'
a-gyed-pa, b-gyes, b-gye 'to divide'

or *a-b-*: *ph-* according to whether the *b-* is dissimilated or not. The perfect *thul* may be from an accidental dropping of *b-* and is clearly exceptional, but even there the initial is *th-*, not *t-*.

8. *bt-*<*b-th-*

b-tug-pa 'to reach': *thug-pa* 'to reach'

b-tub 'fit, practical', *b-tub-pa* 'to be able': *thub-pa* 'to be able to cope with'

b-tum-pa 'to wrap around': *thums* 'covering, a parcel wrapped up'

b-tags, b-tag perf. and fut. of *a-thag-pa* 'to weave': *thags* 'texture, web'

b-tig-pa, b-tigs 'to drop, to let fall in drops': *thigs-pa* 'a drop', *thig-le* 'a spot', *a-thig-pa, a-thigs* 'to fall in drops'

b-tus, b-tu, b-tus perf., fut., and imp. of *a-thu-ba* 'to gather': *thus-mi* 'an assemblage of men'

Similar to the type *a-g-*: *b-k-* discussed above which goes back to an original alternation of sonant and aspirate in the verbal initial,[1] we have here *a-d-*: *b-t-*,

a-diṅ-ba, -tiṅ, g-diṅ, thiṅs 'to spread on the ground'

a-dud-pa, b-tud, g-dud, dud or *thud* 'to bend down'

a-dul-ba, b-tul or *thul, g-dul, thul* 'to tame, to conquer'

a-degs-pa, b-tegs, g-deg, theg 'to lift, to support', cf. *theg-pa* 'a vehicle; to be able to carry'

a-debs-pa, b-tab, g-tab, thob 'to cast, to throw'

a-dogs-pa, b-tags, g-dags, thogs 'to bind'

a-don-pa, b-ton, g-don, thon 'to cause to go'

9. *bts-*<*b-tsh-*

b-tsags, bsag perf. and fut. of *a-tshag-pa* 'to tread'

b-tsaṅs, b-tsaṅ perf. and fut. of *a-tshaṅ-ba*, imp. *tshoṅs* 'to hold, to keep'

b-tsabs, b-tsab perf. and fut. of *a-tshab-pa* 'to conceal'

b-tsam perf. of *a-tsham-pa* 'to agree'

b-tsas, b-tsa, perf. and fut. of *a-tsha-ba*, imp. *tshos* 'to prepare, to bite'

1). It is interesting to observe the note made by Jäschke in his dictionary under *thag* (p. 228), 'In *thag-pa* and other words beginning with *th-* (e. g. *than, tho*), *d-* sometimes takes the place of *th-*, and this uncertainty in the use of the initial letter dates perhaps from a time when the aspirated pronounciation of the media first began to be adopted in C., and was not yet generally indroduced.' It seems to me that some of these variations may really go back to an old alternation of *d-*: *th-*.

b-tśiṅs, b-tśiṅ perf. and fut. of *ą-tśhiṅs-pa*, imp. *ą-tśhiṅs* 'to bind'

b-tśibs, b-tśib perf. and fut. of *ą-tśhibs-pa*, imp. *tśhibs* 'to ascend'

b-tśus, b-tśu perf. and fut. of *ą-tśhu-ba*. imp. *tśhus* 'to scoop water, to irrigate', cf. *tśhu* 'water'

b-tśes, b-tśe perf. and fut. of *ą-tśhes-pa*, imp *tśhes* 'to assure'

b-tśems, b-tśem perf. and fut. of *ą-tshems-pa* 'to chew'

b-tśos, b-tso perf. and fut. of *ą-tśhos*, imp. *tśhos* 'to prepare, to gnaw off'

It is impossible to agree with Wolfenden and Conrady in considering that the *b-ts-* represents the original initial. The imperative uninfluenced by any prefix shows an aspirate *tśh-* and such simple noun as *tśhu* 'water' possesses also an aspirated initial. There is not the slightest reason to believe that the initial of *tśhu* is secondary while that of its derivative *b-tśus* represents on the contrary the original.

Verbs showing an alternation of *ą-dź-: b-tś-* (<*btśh-*) like ą-g-: *b-k-* (<*b-kh-*) are,

ą-dźil-ba. b-tśil, gźil 'to expel'

ą-dźal-ba, b-tśal. g-źal, ą-dźol 'to weigh, to repay'

ą-dźil-ba, b-tśil, g-źil 'to expel'

ą-dźug-pa, b-tśug. g-źug, tśhug 'to put in, to cause'[1]

ą-dźun-pa, b-tśun. g-źun tśhun 'to subdue, to soften', cf. *ą-tśhun-pa* 'to be tamed'

ą-dźum-pa. b-tsum, g-źum 'to shudder, to shrink', cf. *tśhum-pa* 'to shrink, to crouch with fear'

ą-dźur-ba, b-tśur 'to be entangled'

ą-dźoms-pa, b-tśom, g-źom, tśhom 'to conquer, to finish', cf. *tśhom-pa* 'to be finished'

The *ź-* in the future forms is probably due to the prefix *g-* which softens the *dź-* into *ź-* as suggested by Simon (*Wortgleichungen* p. 30).

10. *bts-* <*b-tsh-*

b-tsa-ma 'fruit', *b-tsas-ma* 'harvest, wages', *b-tsa-ba, b-tsas* 'to bring forth, to bear': *tsha-bo* 'grand-children'

b-tsags also *tshags, b-tsag* perf. and fut. of *ą-tshag-pa*, imp. *tshog* 'to cause to trickle, to sift', cf. *tshag-ma, tshags* 'sieve, filter'

1). The colloquial form of the perfect of this verb is *tśhug* (Jäschke, *Tib. Gr., Addenda* p. 140) which according to the usual rule that perfect is used for all tenses, corresponds to *b-tśug*, but goes back to a prefixless form, cf. *b-tul, thul* pf. of *ą-thul-ba* 'to tame'. The *tśh-* is original.

b-tsaṅ fut. of *ạ-tshaṅ-ba*, perf. *tshaṅs* 'to press into, to stuff'

b-tsir, g-tsir or *b-tsir* perf. and fut. of *ạ-tshir-ba*, imp. *tshir* 'to press out, to wring'

b-tses, b-tse or *g-tse* perf. and fut. of *ạ-tshe-ba* 'to hurt, to damage'

b-tsems or *tshems, b-tsem* perf. and fut. of *ạ-tshem-pa*, imp. *tshems* 'to sew', cf. *tshem-po* 'seam'

b-tsags, b-tsog perf. and fut. of *ạ-tshog-pa*, imp. *tshog* 'to hew'

b-tsoṅs, b-tsoṅ perf. and fut. of *ạ-tshoṅ-ba*, imp. *tshoṅ* 'to sell', cf. *tshoṅ* 'trade'

b-tsos, b-tso perf. and fut. of *ạ-tshod-pa, ạ-tshed-pa*, imp. *tshos, tshod* 'to cook vegetables', cf, *tshod-ma* 'vegetables'

b-tsol perf. and fut. of *ạ-tshol-ba*, imp. *tshol* 'to seek'

Alternation of *ạ-dz-*: *b-ts-* (<*b-tsh-*):

ạ-dzugs-pa, b-tsugs, g-zugs, zugs 'to prick into'

ạ-dzud-pa, b-tsud, ———, *tshud* 'to put, to lead', cf. *ạ-tshud-pa, tshud* 'to be put'

ạ-dzum-pa, b-tsum, g-zum, tshum 'to close one's eyes, mouth'

ạ-dzog-pa, b-tsogs, b-tsog 'to heap together', cf. *tshogs* 'an assemblage, accumulation', *ạ-tshogs-pa, tshogs* 'to assemble'

Prefix *g-*

11. *gt-* <*g-th-*

g-tigs-pa 'to fall in drops': *thigs-pa* 'a drop'

g-tibs-pa 'to be gathering of clouds': *ạ-thibs-pa, thibs* 'to gather of clouds', *thib-pa* 'dark'

g-tim-pa 'to disappear': *thim-pa* and *ạ-thim-pa* 'to disappear'

g-tug-pa, g-tugs 'to reach': *thug-pa* 'to reach'

g-tub-pa 'to be able': *thub-pa* 'to be able'

g-tubs-pa 'to cut to pieces': *ạ-thub-pa, ạ-thubs, g-tub, ạ-thub* or *b-tub* 'to cut to pieces'

g-tum-pa 'to veil, to wrap up': *thums* 'covering', *ạ-thum-pa, ạ-thums* or *b-tums, b-tum, ạ-thum* or *b-tum* 'to cover'

g-toms-pa 'filled up', *g-tams-pa* 'full': *tham-pa* 'complete, full', *thams-tsad* 'whole, all'

g-tor-ba 'to scatter': *ạ-thor-ba, b-tor, g-tor, ạ-thor* 'to be scattered'

12 *g-tś-* <*-gtśh-*

g-tśags-pa 'to love': *tśhags-pa* 'to love'

g-tśog-pa, b-tśag, ———, *tśhogs* 'to break, to split': *ạ-tśhag-pa tśhags* 'to break, to be broken off', *tśhogs-pa* 'to be broken'

g-tśod-pa, b-tśad, g-tśad, tśhod 'to cut': *tśhod-pa* 'to be cut off', *tśhad-po* 'rent, torn'

13. *gts-* <*g-tsh-*

g-tsag vulg. for *ą-tshag-pa* and *ą-dzag-pa* 'to filter'

g-tsaṅ 'clean, cleanness': *tshaṅs* 'purified', *ą-tshaṅ-ba, tshaṅs, b-tsaṅ* 'to make clean'

g-tsir fut. of *ą-tshir-ba* 'to press'

g-tse-ba, g-tses fut. and perf. of *ą-tshe-ba* 'to hurt'

14. *gź-* <*g-dź-* (see the future roots of the verbs listed under 9.)

15. *gz-* <*g-dz-* (see the future roots of the verbs listed under 10.)

16. *gl-, kl-* <*g-lh-, g-l-*

g-lan-pa, g-lon-pa 'to patch, to mend': *lhan-pa* 'to join; a patch', cf. *s-lan-pa* 'to mend'

k-lon-pa 'to mend', cf. the preceding verb

g-leb-pa 'to make flat': *leb-mo* 'flat', *lhub* 'width', *lhab-lhub* 'wide, flowing'

g-lod-pa 'to loosen, to comfort': *lhod-pa* also *lad-pa* 'loose, easy'

g-lon-pa, g-lan-pa 'to return an answer': *lhon-pa* 'to return, to give back', *lan* 'a return, an answer', cf. *l-don-pa* 'to give back' (§ 27)

g-log-pa, lhog-pa 'a large ulcer or sore'

k-lub-pa, k-lubs 'to cover e.g. the body with ornaments': *lhub-pa* 'to fasten e.g. ornaments to the ear'

Prefix *d-*

17. *dk-* <*d-kh-*

d-krol perf. and fut. of *ą-khrol-ba*, imp. *khrol* 'to cause to sound, to play musical instruments', cf. *khrol-doṅ* 'a musical instrument'

d-kri-ba, d-kris 'to wind up, to wrap a garment round the body'; *ą-khri-ba, ą-khris* 'to wind, to twist oneself'

d-kyu-ba 'to run a race': *ą-khyu-ba, ą-khyus* 'to run'

d-krigs-pa 'darkened, dim': *ą-khrig-pa* 'to be clouded (of the sky)'

d-krug-pa 'to stir up': *ą-khrug-pa, ą-khrugs* 'to be disturbed'

18. *dp-*<*d-ph-*

d-pyaṅ-ba 'to suspend, to make hang down': *ą-phyaṅ-ba, ą-phyaṅs* 'to hang down'

d-pyo-ba 'to change': *ą-pho-ba, ą-phos* 'to change place'

Prefix *a-*

19. *atśh-* <*a-ś-*

a-tśhad-pa, b-śad, b-śad, śod 'to explain, to tell': *śod-pa, b-śad* 'to say, to declare'

a-tśhar-ba, śar 'to rise, appear': *śar* 'east (<rising sun)', *śar-pa* 'grown up youth (collective noun, probably from the rising generation)'

a-tśhi-ba, śi 'to die'

a-tśhigs-pa 'to bind': *śig-ge-ba, śig-śig* 'close-bounded'

a-tśhegs-pa, b-śags, b-śag, śog 'to cleave, split': *g-śog-pa* also *b-śog-pa, g-śag-pa, g-śeg-pa, g-śags* or *b-śugs, g-śag* or *b-śag, g-śog* 'to cleave, split'

a-tśhor-ba, śor 'to escape'

a-tśhor-ba, b-śor, g-śor 'to pursue, chase'

This type of verbs with their perfects in *ś-* (intr.) or *b-ś-* (tr.) is fundamentally different from the type *a-tśh-* with their perfects in *tśh-* (intr.) or *b-tś-* (tr.); both the prefixless perfects and the imperatives and their cognates show unquestionably an original *ś-* as initial while the latter type has *tśh-*. This *ś-* must not be thought of as the weakening of *tśh-* (cf. Conrady, op. cit. p. 19); as *tśh-* and *ś-* both can exist as root initials without a prefix, we see no reason why weakening takes place in one verb and not in the other, nor can we assume that *b-ś-* is weakened from *q-tśh-*, for *b-tśh-* gives regularly *btś-* (9). The present forms in *a-tśh-*, then, goes back to *a-ś-*, and as prefix *a-* does not exist before *ś-*, we may safely assume the development *a-ś*>*a-tśh-*.

20. *atsh-* <*a-s-*

a-tsho-ba, sos, ———, sos 'to live, exist; to feed, intr.' perf. *b-sos* 'to feed, tr.', cf. *g-so-ba, g-sos* or *b-sos* 'to feed, to nourish'

Similar to the preceding type, verbs showing an alternation of *a-tsh-* and *s-* go back to an original initial *s-* and are different from those showing an alternation of *a-tsh-* and *tsh-* or *b-ts-* which go back to *tsh-*. We have equally here (19 and 20) to guard against confusion with 5 and 6 which also show an alternation of *ś-*: *tśh-* and *s-*: *tsh-*. There the prefixless forms in *tśh-* and *tsh-* are the test forms for an original *tśh-* and *tsh-*, and show that the *ś-* and *s-* are secondary forms from *s-tśh-* and *s-tsh-*, while here in 18 and 19 the prefixless *ś-* and *s-* and the existance of *tśh-* and *tsh-* only after an *a-* definitely speak for an original *ś-* and *s-* and for an affricativing of *ś-* and *s-* into *tśh-* and *tsh-* after the prefix *a-*.

There are, however, certain uncertainties in verbs of this type,

a-tshab-pa, tshabs or *b-sabs, b-sab, tshob* 'to pay back, to refund'

While *tshabs* and *tshob* speak for an original *tsh-*, *b-sabs* and *b-sab* favor an original *s-*. It seems to me that this probably represents a mixed type of inflection. We have probably originally two verbs from one root with different prefixes, thus

a-tshab-pa, tshabs, ———, *tshob*

[*sab-pa*], *b-sabs, b-sab,* [*sabs*] (<*s-tshab-pa*)

A blend of these two verbs gives us the forms actually found in Tibetan.

21. *adź-* <*a-ź-*

a-dźig-pa, b-źig, g-źig, b-śig 'to destroy; to be ruined', cf. *źig-ral-ba* 'ruined'

a-dźu-ba, a-dźus 'to melt, to digest': *źu-ba* 'to melt, to digest', *źun-pa* 'melted'

a-dźug-pa, źugs, ———, *źugs* 'to go, to walk'

a-dźo-ba, b-źos, b-źo, a-dźos 'to milk', cf. *źo* 'milk'

a-dźog-pa, b-źag, g-źag, źog 'to put, to arrange'

a-dźog-pa, b-źogs, g-źog, źog 'to cut, to carve'

There are also uncertain forms like *a-dźoms-pa, b-tśom* or *źom, g-źom, tśhom* 'to conquer' which may also be due to a blend as in 19. In such a case a development of *s-dź-* into *ź-* has to be assumed.

22. *adz-* <*a-z-*

a-dzad-pa, zad 'to be on the decline'

a-dzar-ba, b-zar, g-zar 'to hang down', cf. *zar-babs* 'tassel, gold-brocade', *zar-bu* seems to be 'tassel'

a-dzin-pa, b-zuṅ, g-zuṅ, zuṅs 'to take hold, to catch', also *zin-pa*

a-dzur-ba, b-zur, g-zur, zur 'to make way, to step aside', cf. *zur* 'edge, side, corner'

a-dzer-ba 'to say': *zer-ba* 'to say'

a-dzoms-pa 'to come together': *zom* 'point, summit'

There are again some uncertain forms such as,

a-dzugs-pa or *zug-pa, b-tsugs* or *zugs, g-zug, zugs* 'to prick into', cf. *a-tshugs-pa, tshugs* 'to go into, to penetrate'

a-dzum-pa, b-tsum or *zum, g-zum, tshum* 'to close one's eyes, mouth'

The *z-* forms speak for an original *z-* and the *tsh-* or *b-ts-* forms for an original *tsh-*, which, as we have noticed above (in 10), alternates with *dz-*. A blend as suggested in 19 probably explains best such irregularities,

a-dz-, b-ts- (<*b-tsh-*), *g-z-* (<*g-dz-*), *tsh-*

z- (<*s-dz-*), *b-z-* (<*b-s-dz*), ———, *z-* (<*s-dz-*)

It is to be noticed that we have to assume here the development of *s-dz-* into *z-*. There is of course another uncertainty in verbs like *ạ-dzed-pa, b-zed, g-zed* 'to hold out, forth' where we have equal right to consider *dz-* as the original initial, in so far as a cognate with a prefixless *z-* initial is not forthcoming. The *b-z-* form is easily understood as weakening from *b-dz-*.

Prefix *l-*

23. *lk-*<*l-kh-*

l-kob 'fat, heavy, plump': *khob* 'fat, heavy, clumsy'

24. *ltś-*<*l-tśh-*

l-tśud-pa, l-tśus, l-tśu 'to turn round, to twist': *ạ-tśhu-ba* 'to be twisted'; *tśhu-ba* 'sinew'; cf. also *g-tśud-pa*

l-tśu-ba also *g-tśu-ba* 'screw', prob. related to the preceding stem

25. *lt-*<*l-th-*

l-tem-pa 'the state of being full': *them-pa* 'to be full'

l-tams-pa, b-l-tams, b-l-tam 'to be full, to be born': *tham-pa* 'complete, full'

26. *lt-*<*d-lh-* (?)

l-tuṅ-ba, lhuṅ 'to fall off'

27. *ld-*<*d-l-*<*ạ-l-* (?)

l-daṅ-ba l-daṅs or *laṅs* ———, *ldoṅ* 'to rise': *laṅ-ba, laṅs*, ———, *loṅs* 'to rise', *s-laṅ-ba* or *sloṅ-ba, b-s-laṅs, b-s-laṅ, s-loṅs*, 'to cause to rise'

l-dugs-pa, l-dugs or *b-lugs, b-lug, b-lugs* 'to pour, to cast metals'. cf. *lhug-pa* 'to pour', *lugs* 'the casting of metals'

l-dab-l-dib 'silly-talk': *lab-pa* 'to say, to talk'

l-dud-pa, b-lud, b-lud, b-lud 'to give to drink'

l-dum-pa 'round': *z-lum-pa* 'round, circular'

l-dog-pa, log, ———, *log* 'to return': *z-log-pa* 'to cause to return' *log-pa* 'to return', *s-log-pa* 'to turn around'

l-doṅ-ba l-doṅs or *loṅ* 'to become blind': *loṅ-ba* 'blind, to be blind'

l-don-pa 'to give back': *lhon-pa* 'to return, to give back'

l-dob-pa 'to apprehend quickly': *lob-pa* 'to learn', also *s-lob-pa*

Notice that in these two sections (25, 26) the *l-* is properly speaking not the prefix but the true root initial, while *d-* is the prefix. I suspect, however, that even *d-* is probably not the original prefix but goes back to some other form. Although there are verbs with *d-* prefix but their paradigms are different from those presented here, namely, *d-l-, l-* or *d-l-, b-l-, b-l-, l-* or *b-l-*. On the other hand verbs with *ạ-* prefix often present paradigms of this sort,

ạ-dź-, dź- or *ź-*, or	:	*d-l-, l-* or
ạ-dz-, b-ź-, b-ź ạ-dź-		*d-l-, b-l-, b-l-, l-* or *b-l-*

If we recall such developments as *a-s-*>*a-tsh-*, *a-z*>*-a-dz-*, *etc.*, we can easily understand that a development of *a-l-* into *a--dl-* and through metathesis into *l-d-* is highly probable.

Prefix *r-*

28. *rk-*<*r-kh-*

r-kam-pa 'to desire': *kham* 'appetite'

29. *rt-*<*r-th-*

rta 'horse': *tha-s-kar* 'Rossstern'

r-tuṅ-ba, b-r-tuṅs, b-r-tuṅs 'to make short': *thuṅ-ba* 'short'

r-ten-pa, b-r-ten, b-r-ten, r-ton 'to adhere to, to depend on': *a-then-pa* 'to lean, to repose on (in W.)'

b-r-tan-pa 'firm, steadfast': *a-than-pa* 'firmness'

30. *rts-* <*r-tsh-*

r-tsis 'counting', secondary form *tshis*

r-tsi 'all fluid of somewhat greater consistancy, paints, varnish': *tshi-ba* 'tough, viscous, sticky matter, clammy dirt'

31 *rdź-* <*r-ź-*

r-dźed-pa, b-r-dźed, b-r-dźed 'to honor, reverence': *źe-sa* 'reverence'

Conclusions

Above is but a preliminary study of the sandhi rules which govern the prefixes and the root initials. I have limited myself solely to Tibetan, without going into comparisons with other related languages. For I believe that thus far the comparisons of words made among this group of languages have unfortunately been less rigorous and less systematic than modern linguistics would like to demand. Words that have been suggested for comparison show at their best that they are in some way related but the exact line of correspondence and the exact relation have so far remained beyond our comprehension. This is not accidental for we have no good phonology for each of these languages to serve as control in making our etymologies. In Tibetan, however, where word-formation and derivation seem quite transparent, there is the possibility that certain phonological problems can be tackled from those words whose etymology is clear, and unless linguistic experience leads us astray, we are certain to find the phonetic reactions when different prefixes and initials are put together. The result of such a preliminary study has been given above and it is hoped that this will serve as a basis for further phonological study and if possible for comparison with other languages.

One feature comes out distinctly from the above study, namely, the consonantal alternation. It is true that change of consonant has been observed long ago, and Conrady has even definitely stated that *g-*, etc. are

originally intransitive and *k-* and *kh-*, etc. transitive in force. We shall have to modify his observation both as to the consonants themselves and their functions. In the first place, the distinct consonantal alternation is sonant: aspirate, the unaspirated surd does not come in. Conrady's transitive *k-* derived from *s-k-*, *b-k-*, *d-k-* etc. are shown to come from *kh-* through a purely mechanical influence of the prefix. It is interesting to observe that in the schemes of transitive and intransitive initials he has only *g-* and *kh-* for the intransitive and although he gives *k-* in addition for the transitive, the *k-* is invariably preceded by *s-* (given in his scheme as *s-k-*) or *b*, rarely *d-* (not stated in his scheme) (p. 54). Such *k-* is all tracable to *kh-*. Further if *kh-*, an original transitive initial, can be used as an intransitive, why *k-* does not figure at all in the intransitive scheme? Conrady has given some forms with *k-* which seems to alternate with *kh-* or *g-*, but such cases are rare and seem to be largely adjectives and particularly associated with reduplicating adjectives such as *koṅ-koṅ* 'concave, excavated': *khoṅ* 'inside', *kor-kor* 'round': *kho-ra* 'circle', *kyag-kyag* 'thick, run into clots': *khyags-pa* 'frozen, ice', *kyag-kyog* 'curved': *khyog-po*, *kyom-kyom*: *khyom-khyom* 'of irregular shape', *tob-tob smra-ba* 'to talk confusedly': *dob-dob smra-ba* 'to talk nonsense', *tsoṅ-tsoṅ=tshoṅ-tshoṅ* 'straight', etc. It is conceivable that some phonetic peculiarity may be connected with the reduplicated forms of descriptive words such as these[1] and from this creep in other forms of *k-*, etc. alternating with *kh-*, etc. On the whole the unaspirated surds do not as a rule take part in the derivation of words in Tibetan. The alternation is between *g-* and *kh-*, *d-* and *th-*, *b-* and *ph-*, *dz-* and *tsh-*, *dz-* and *tsh-*.[2] Conrady's transitive *k-* initial does not exist.

Now as to the functions of such consonantal alternation. Whether *kh-* is a really transitive and *g-* an intransitive initial, no sufficient evidence can be offered from Tibetan alone, and I can hardly agree with Conrady in thinking that the nominal *kh-* forms are all of transitive origin. Tibetan material abounds in *kh-* intransitives and *g-* transitives and it is hardly necessary to think that such simple nouns or adjectives as *tśhu* 'water', *khu* 'liquid', *thuṅ-ba* 'short', *tshod-mo* 'vegetable', etc. are transitive in origin while *gaṅ-ba* 'full', *gad-mo* 'laugh', *gegs* 'obstacle', *gor-mo* 'round', *riṅ-ba* 'long' represent the original substantival initial. Denominatives can be formed from both types with the same prefixes *s-*, *r-*, etc. and moreover strictly according to the phonetic rules formulated above. If *kh-* really represent the transitive and *g-* the intransitive, we

1). Cf. the reduplicated forms in Colloquial Pekinese with a change of tone, 好 (3): 好 (3) 好 (1) 的, 快 (4): 快 (4) 快 (1) 的, etc. It seems that reduplication has a peculiar phonetic feature different from the usual tone-sandhi.

2). We may add some rare instances of *ź-*: *ś-*, *l-*:*lh-*, etc., such as *a-aźig-pa b-źig g-źig*, *b-śig* 'to destroy; to be ruined' (*źig*: *śig*), *lugs* 'the casting of metals' *lhug-pa* 'to pour', etc.

should have *a-khens-pa* meaning 'to fill' and *a-gens-pa* meaning 'to be full' instead of just the reverse as found in Tibetan. Conrady's roundabout way of explain these is distinctly unsatisfactory.

But he has gone a step further and maintains that *kh-* comes really from *sk-* or *sg-* without, however, giving how and under what phonetic conditions *kh-* arises while *sk-* and *sg-* are found still existing. It is plain that we have to guard against all such over-simplifications. In the first place we are not justified to assign a transitive function to *kh-* and an intransitive function to *g-*, and, secondly, we have equally no evidence to show that *kh-* really comes from *sk-* or *sg-*. Colloquial Tibetan may present such a type of *g-*: *kh-* as intr.: tr. (Jäschke, *Tib. Gr., Addenda* p. 139-140) as well as some other languages, but before the phonological problem is cleared up, we are not to conclude that such has been the original state of affairs.

Such an alternation of sonant and aspirate appears most clearly in the transitive verbs with *a-* in the present. The present and the future have sonants and the perfect and imperative have aspirates, for examples see 7-10. There are some other formal distinctions which seem to favor such a classification: both the perfect and the imperative take the negative *ma-*, while the sonant group takes *mi-*; and both of them sometimes take the suffix *-s*. The difference in meaning of these two groups as suggested by Francke and Simon is that the sonant group is more durative in force and the aspirate group represents more the active part of the verb. But such a distinction is only observed from transitive verbs of this particular type and cannot be generalized for all initials in the Tibetan language.

For this type of verb, Bacot's observation on the prefix *b-* is important. This prefix, according to him, denotes perfect active but present passive. This is but two modes of looking at the same fact; looking at it actively, we get, for instance, 'one has filled up something', and at it neutrally (or medio-passively) 'something is in the state of being filled up'. It happened that for transitive verbs a passive translation 'something is filled up' corresponds to the active. But this is equally true of the intransitive active verbs, where the active perfect is also taken to denote a mere state—neuter voice—, and therefore largely used as an adjective or as a substantive, for example:

> *khol* perf. of *a-khol-ba* 'to boil, intr.', taken in the active voice means 'it has boiled', but taken in the neuter voice (=an adjective or substantive), we have *khol-pa* 'boiled, bubbling', *khol-ma* 'anything boiled'. The actual trend of thought is that something having boiled is therefore in the state of being boiled, and it is not correct to derive *khol-pa* as a passive from *s-kol-ba* 'to boil, tr'.

gril perf. of *ą-gril-ba* 'to be twisted' (the original idea is probably to get twisted, not passive). Cf. *gril* 'a roll, rolled' denotes as a neuter the state of being rolled up, not as a passive to *s-gril-ba* 'to wrap, to wind'.

grib perf. of *ą-grib-pa* 'to grow dim, to get dark', also used as a noun 'shadow' (<what has become dark).

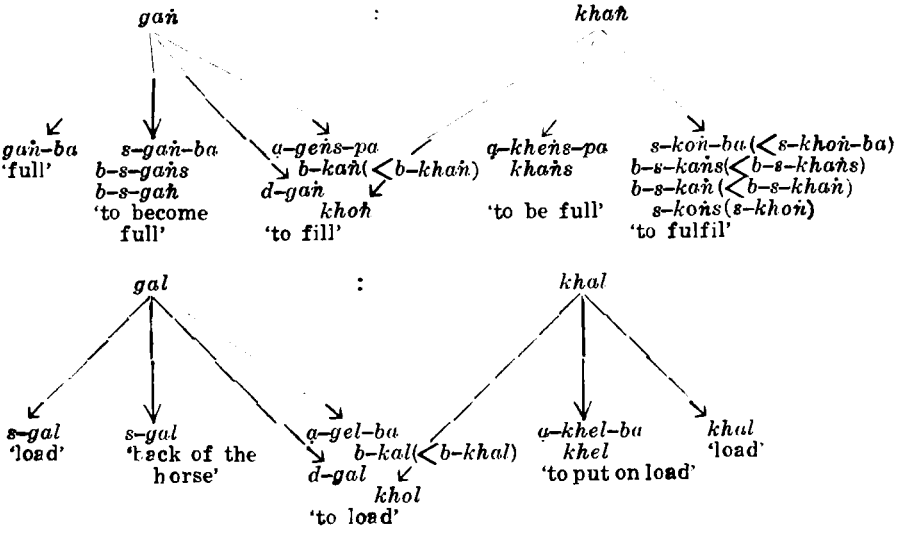
tśhad perf. of *ą-tśhad*-pa 'to be cut, to decay', *tśhad-po* 'torn, rent'.

tshogs perf. of *ą-tshogs-pa* 'to assemble', used as a noun 'an assemblage' (=what has gathered together).

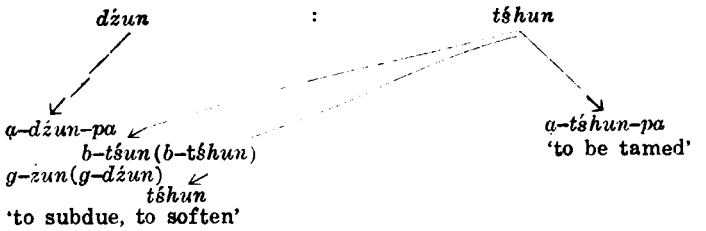
These examples can be readily increased, but it seems clear that not only in the transitive verbs but also in the intransitives the perfect functions in two ways either as the perfect in the active voice or as an adjective or substantive in the neuter voice. This distinction of voice is more foundamental than that of the active and the passive, for we can hardly speak of a passive of the intransitive. The active or passive in Tibetan is largely determined by the the meaning of the verb and by the so-called case particles (really postpositions) but the active or neuter function belongs to the perfect proper and not, as indicated by Bacot, to the prefix *b-*, which probably represents an acting subject as suggested by Wolfenden.

Further, the prefixless perfects and substantives, it seems certain, represent the primary form from which a verbal or a substantival idea can be developed, and there it makes no distinction of sonant or aspirate. The function of this interchange of consonants remains still in the dark, but from this investigation we shall be able to trace the rather complicated derivation of words. The following types can be observed:

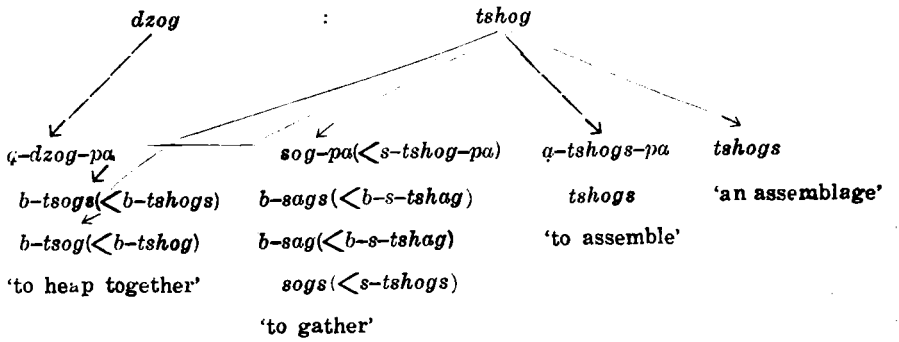
Type I. *g-* : *k-* (<*kh-*) : *kh-*



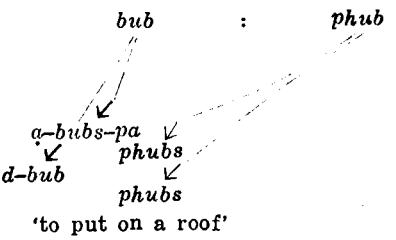
Sub.-Type a.

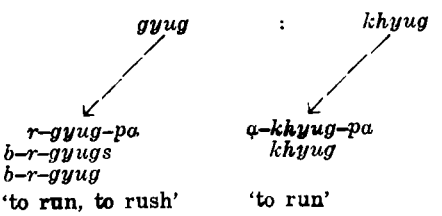


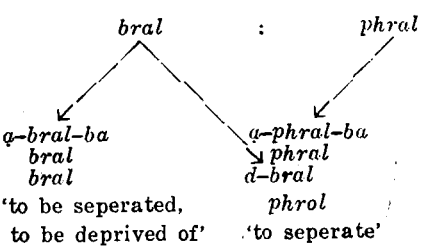
Sub.-Type b.

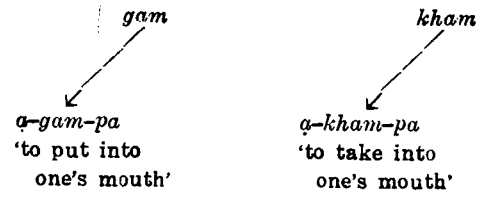


Type II. *g-* : *kh-*

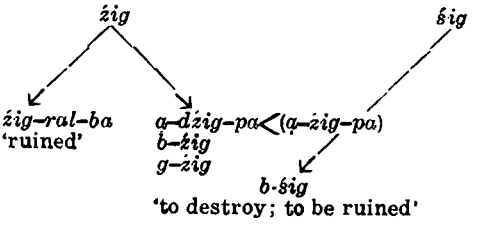




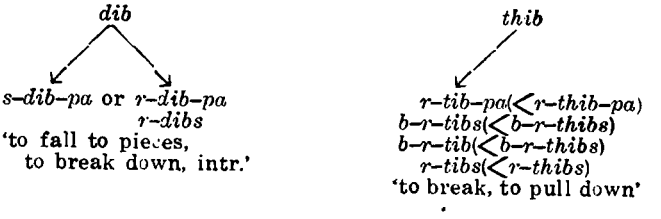




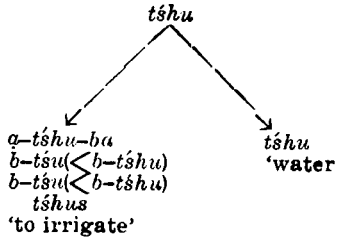
Sub.-Type a.

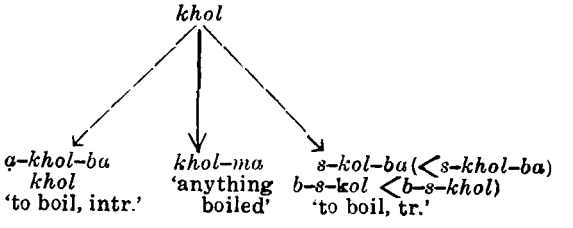


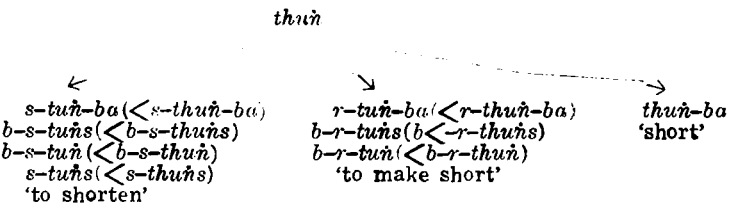
Type III. *g-* : *k-*(<*kh-*)



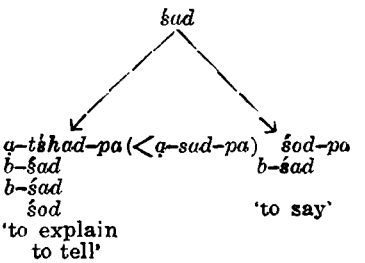
Type IV. *k-* (<*kh-*) : *kh-*



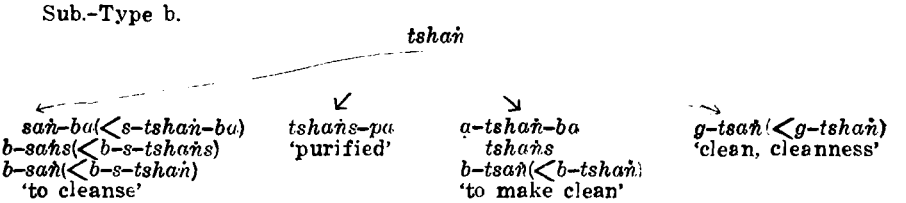




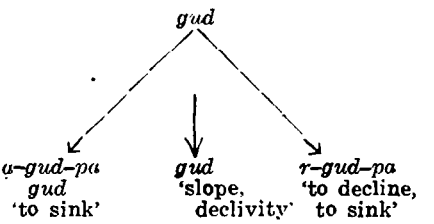
Sub.-Type a.

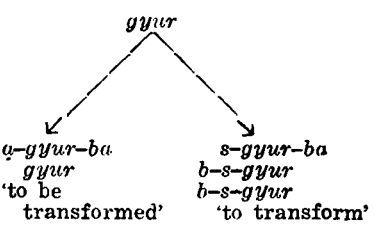


Sub.-Type b.

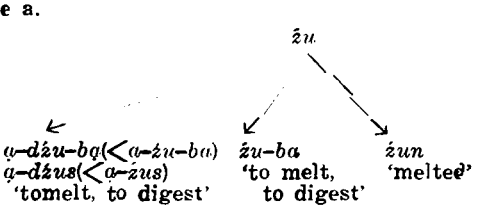


Type V. *g-* invariable

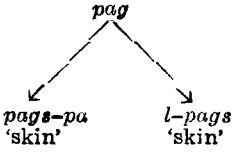




Sub.-Type a.



Type IV. *k-* invarible



In the above types only the initials are taken into consideration, the suffixes, the *da-drag*, and the vocalic changes are temporarily left out. It is clear that in the first three types the stem shows an alternation of the initial consonant and its appearance in Tibetan as having a sonant, an unaspirated surd, and an aspirate as in type I, or as having only sonant and unaspirated surd or aspirate as in type II and III, depends upon mere chance. Type I represents more or less the complete set of derivation, while type II and III have certain forms of initials missing. In the last three types although they may present certain change of initials, the stem goes back to an invariable initial. I have also listed some of the words with affricative or sibilant initials under sub-types because of certain special sandhi changes which these initials have undergone.

譚『譚』

董作賓

一，『譚』之異文

譚，古城卽今城子崖，爲上層文化遺物之主人翁。　其字見於記載中者，有四種異文，分述於次：

1. 譚　春秋魯莊公十年左氏傳『齊師滅譚，譚無禮也。』　詩衞風『譚公維私。』皆作譚，爲鄲之借字，玉篇譚訓『大也，誕也，著也。』
2. 鄲　說文解字邑部『鄲，國也，齊桓公所滅，从邑，覃聲。』　而言部無譚字。　玉篇『鄲，在濟南平陵縣南，通作譚。』
3. 覃　白虎通，爾雅郭注，引詩『覃公維私。』皆作覃。
4. 郯　史記齊太公世家『桓公二年，伐滅郯，郯子奔莒。』索引『春秋魯莊十年齊師滅譚，是也。』　集解『徐廣曰一作譚。』　段玉裁說文注云『齊世家譌作郯。』　按說文『郯，東海縣，帝少昊之後所封。』　則與鄲爲兩地，不可通假，史記實譌。

譚之異文，除了郯是譌字之外，鄲爲本字，譚爲借字，覃爲『省形存聲』之字，實則相同。　今因詩與春秋習用之字，仍作譚。

二，　城子崖卽古譚國

譚國故城，卽今城子崖，最可靠之證據爲春秋左氏傳杜預注，杜注『譚國在濟南平陵縣西南。』　今城子崖正在平陵故城之西南，是確卽譚國故城。　齊乘亦載『東平陵城在濟南東七十五里，春秋譚國，齊桓公滅之，古城在西南，龍山鎭相對。』今城子崖在龍山鎭東，隔武原河與龍山相對。　正卽譚國古城。　是由記載上已足證明城子崖卽古譚國。　此外尙有兩證，一爲山城村名的因襲，二爲武原水道之經流，

分見于次節。

三， 山城村名的因襲

在城子崖之東南隅，有村名曰山城。 據李袞所撰新建襄城村關聖帝君廟記，則以爲應改稱襄城，碑云：

> 襄城村居龍山鎮河之正東，去平陵城西南隅三里許，後有土阜，傳呼爲城子崖，舊以山城名村者幾何年矣。 余田數頃環其野，乾隆戊午，余工人治場取土，誤及古塚，諦視銘誌，乃故隋開皇間齊州刺史唐公名恭之墓，誌載『三爲刺史，善琴，有惠政，卒葬任所襄城之南，鴻溝之北，』鴻溝不識其舊址，而襄城之爲此村名，無疑也。

由這一段碑文，可知：一，山城，在隋時稱襄城；二，城子崖之名見于此；三，山城之爲村名，由來已久；四，墓出今城子崖南，而曰『襄城之南，』是城子崖卽是所謂襄城，亦卽山城。

碑之立，在乾隆三十四年，是已據誌改山爲襄了，但是在土人傳呼，仍曰山城。國朝山左詩彙鈔，載謝焜（字問山，嘉道間人）龍山早行詩，仍稱此村爲山城。 詩云：

> 五更殘月上，樹外曉風輕，犬吠聞人語，鷄聲送客行。
>
> 微茫分野路，隱約近山城，漸覺晨光動，炊煙處處生。

這首詩確能寫得出旅客早行之感。 我們由這詩可以看出謝焜是向東三府去的，從濟南起身，第一個宿站就是龍山鎮。 而且可以知道李袞儘管把山城復了襄城之古，而土人却仍稱 Shan（山）城。 本來，城子崖不是山，不該叫他山城，也同龍山鎮沒有山是一樣。 記得我們初計劃發掘龍山時，倩人測量，一個測繪專家寫了一篇計劃，開頭一句就是『龍山多山，』測繪如何困難云云。 這山城名村，並不是山上或山邊之城，所以也是容易惹起人誤會的了。

我覺得，今之山城，卽水經注所稱之古城（見下節），亦卽隋時所稱之襄城，實皆指城子崖而言。 山襄都是隨便標音之字，初非本字，而本字却卽是譚，山城今讀

Shan 城，疑卽譚城之音變。

由上節，可知譚之字，在古書中卽有四體，是假借之字，多只以爲標音之符號而不計其含義。 吾人但聞其呼村名爲 Shan(卽尸马)城，而不問其書字用『山』或『襄』，據今音以求 tan（卽去马，譚之音） shan 的關係，卽聲母 t 與 sh（去與尸）之能否轉變。 以諧聲字之同一聲母者爲例，則此種轉變正多。 列如下表：

t（勿、去）聲之字		聲母	sh（尸）聲之字	聲母
	壇檀(去马)	亶	擅羶(尸马)	亶
憚(勿马)	彈(去马)	單	禪	單
當 勿尢)	堂(去尢)	尙	賞(尸尢)	尙
坫(勿 马)	站(去一廿)	占	苫(尸马)	占
眈(勿马)		冘	沈(尸ㄣ)	冘
	譚(去马		山(尸马)	

此只能以方音之互通者爲準，故取今之國音，不能以古韻書繩之。 如譚本附 m 之韵，襄又附ng之韵，山又附n之韵，在韵書固格格之不能相入，但以今山東人讀之，皆變爲附 n 之韵了。 又如知，徹，澄，與端透定，精淸從，照穿牀，在韵書皆有嚴密之區別，而於方音中，則ㄓ，ㄔ，ㄉ，ㄐ，與ㄗ，ㄘ，ㄊ，ㄑ之可以互相通變，便毫不足異了。 所以在方言的轉變上，字音的演化上，這聲母之去變爲尸，是很可能的，所以譚便可以變爲山，譚城便可以變爲山城了。

四， 武原水道的經流

武原水今經流城子崖與龍山鎭之間，俗謂之東巨野(野亦作冶見康熙卅九年碑)，又曰東巨河(見光緒四年碑)，皆緣巨合亦稱巨野，在龍山鎭西，而誤以此爲東河。水經注濟水條述武原水云：

水出譚城南平澤中，世謂之武原淵，北逕譚城東，俗謂之古城也。 又北逕

東平陵故城西。 ……其水又北逕巨合城東，……其水合關盧水西出注巨合水。

武原水自發源至入巨合，經流不過數里之遙，而所經古城凡三：一，譚城，二，東平陵，三，巨合城，今平陵巨合遺址皆赫然在其北，則城子崖自非譚城莫屬了。 所異者北魏時武原經譚城東，今則徙道經譚城（城子崖）西，而北可不與關盧水合（關盧今改道入繡江河）逕入巨合而已。

所謂武原淵，卽武原發源處，余與李濟之先生曾親履其地，地名白穀堆，去城子崖之南不數里，發源處成一大方塘，塘之西溝渠從橫，泉源湧出，汩汩泛珍珠顆，時已深秋，夾岸草木森茂，頗極清幽。 白穀堆村西有廟，當武原水經流處，廟有碑云：

歷邑東去七十里，有邨曰白穀堆，其右有白衣大士，關帝，土地神祠三所，由來久矣。 閒嘗暢懷于此，覽其勝狀；南顧則雞山崔嵬可望也；北顧則龍山萬姓聚處也；西望則趙山巍峨可觀也。 ……又嘗凝目於其前，見有混混焉，如星宿之浩瀚者，非源溝泉耶？迴望於其後，見有滾滾焉，如琤琤之燦爛者，非珍珠泉耶？……

碑爲乾隆二年立，李欽撰文。 所謂源溝泉，珍珠泉，皆吾人所游處，而此地在龍山（城子崖同）之南，鷄山之北，卽水經注『譚城南平澤中』，亦卽『武原淵』了。 相傳武原發源鷄山，伏流至白穀堆而出，故龍山鎭重修永固橋薛家橋碑記云：

龍山鎭東巨河自鷄鳴山蜿蜒而來，經白穀堆而泉源湧出。……

東巨河卽武原水，雞鳴山卽鷄山，碑爲光緒四年立，梁玉池撰，已沿俗名而失于考證。

城子崖俗呼鵝鴨城，吾友吳禹銘先生以爲卽武原城之音訛，其說甚可信，武原之音，龍山人呼之，近於鵝鴨。 惟以武原名此城，不見記載，或土人傳呼如此，猶之城子崖之不見記載，尙待考證。

五， 譚世家

譚之先與商同姓，姓子氏[1]，商之故國[2]也。 周武王滅商，封師尙父于齊營邱[3]，世爲其東鄙。

（1）顧棟高春秋大事表列國爵姓及存滅表列譚國爲子姓，是爲商同姓之國，梁履繩左通補釋云『通志氏族略以譚爲周不得姓之國，而路史云嬴姓，諸家不取。 顧氏表以爲子姓，未知何據。』按顧氏以譚爲子姓，必有所據，三齊記以平陵爲殷帝乙之都，有此傳說，足見譚與殷商之關係。 羅泌以譚爲嬴姓，實誤譚爲鄑，說文繫傳『鄑，東海縣，帝少昊之後所封，從邑炎聲。臣鍇按杜預曰，嬴姓國也。』 路史蓋據史記以譚爲鄑，故有此誤。

（2）顧表於譚國不著始封，按周初多殷商以前故國，譚又有商同姓及帝乙關係，故疑爲商之故國。

（3）史記齊太公世家『于是武王已平商而王天下，封師尙父于齊營邱。』正義云『營邱在青州臨淄北百步外城中。』 臨淄在今城子崖東。

宣幽之世，周道衰微，東國困于役而傷于財，譚首當其衝，譚大夫作大東七章以刺亂，兼以告病[4]焉。 大東之詩曰『有饛簋飧，有捄棘匕，周道如砥，其直如矢，君子所履，小人所視，睠言顧之，潸焉出涕！ 小東，大東，杼柚其空，糾糾葛屨，可以履霜，佻佻公子，行彼周行，既往既來，使我心疚！ 有洌氿泉，無浸穫薪，契契寤歎，哀我憚人！薪是穫薪，尙可載也；哀我憚人，亦可息也。 東人之子，職勞不來；西人之子，粲粲衣服；舟人之子，熊羆是裘；私人之子，百僚是試。 或以其酒，不以其漿，鞙鞙佩璲，不以其長；維天有漢，監亦有光，跂彼織女，終日七襄。雖則七襄，不成報章；皖彼牽牛，不以服箱；東有啓明，西有長庚，有捄天畢，載施之行。 維南有箕，不可以簸揚；維北有斗，不可以挹酒漿；維南有箕，載翕其舌，維北有斗，西柄之揭[5]。』

（4）毛詩序『大東刺亂也。東國困于役而傷于財，譚大夫作是詩以告病焉。』漢書卷二十，古今人表中一欄有譚大夫。

（5）見毛詩小雅谷風之什。

東周初，譚公[6]娶齊女[7]，乃與齊爲婚姻國。 詩衞風碩人所以有『譚公維私[8]』之詠也。

(6) 王夫之詩經稗疏云：『譚本子爵，春秋「譚子奔莒，」其稱公者，白虎通曰「伯，子，男，臣于其國中褒其君爲公。」 尚書「公曰嗟，」秦伯也。詩「譚公維私，」譚，子也。』 按此譚公不詳其名，時代則當在東周平王初年，詩，碩人乃詠衞莊公夫人莊姜事，譚公夫人當是莊姜姊妹。 史記衞世家稱衞莊公五年『取齊女爲夫人，』衞莊公五年爲西元前753，周平王十八年，齊莊公四十二年，詩所謂『齊侯之子』之齊侯，當卽莊公，是譚公夫人，亦齊莊公女了。

(7) 詩稱『譚公維私，』爾雅『女子謂姊妹之夫爲私。』 釋名『姊妹互相謂夫曰私。』 可知譚公夫人與莊姜爲姊妹行。

(8) 詩，衞風，碩人首章云『碩人其頎，衣錦褧衣。 齊侯之子，衞侯之妻，東宮之妹，邢侯之姨，譚公維私。』 序云『碩人，閔莊姜也。 莊公惑于嬖妾，使驕上僭，莊姜賢而不答，終以無子，國人閔而憂之。』

春秋齊襄公時，公子小白出亡過譚[9]，譚不禮。 及襄公死於亂，小白入，立爲桓公，諸侯皆賀，譚又不至。 桓公二年齊師伐滅譚，譚子以莒爲同盟，乃奔莒[10]。

(9) 史記齊太公世家『初襄公之醉殺魯桓公，通其夫人，……羣弟恐禍及，故次弟糾奔魯，其母魯女也。 管仲召忽傅之。 次弟小白奔莒，鮑叔傅之。』

(10) 春秋莊公十年經『冬十月，齊師滅譚，譚子奔莒。』 左氏傳『齊侯之出也，過譚，譚不禮焉。 及其入也，諸侯皆賀，譚又不至。 冬，齊師滅譚，譚無禮也。 譚子奔莒，同盟故也。』 史記齊太公世家桓公二年，伐滅鄑，鄑子奔莒。 初桓公亡時過鄑，鄑無禮，故伐之。』

齊師圍譚三年，滅而仍存之[11]。 齊桓公謂鮑叔曰：『寡人欲鑄大鐘，昭寡人之名焉，寡人之行，豈避堯舜哉！』 鮑叔曰『敢問君之行？』桓公曰『昔者吾圍譚三年，得而不自與者，仁也；吾北伐孤竹刳令支而反者，武也；吾爲葵邱之會，以偃天下之兵者，文也；諸侯抱美玉而朝者九國，寡人不受者義也。 然則文武仁義，寡人盡有之矣，寡人之行，豈避堯舜[12]哉！』

(11)惠士奇春秋說云：『春秋書滅，非盡有其地；又有滅而仍存者。 宣十二年，「楚子滅蕭，」蕭者宋附庸 ， 蕭滅于宣十二年，復見于定十一年，「宋公之弟辰，入於蕭以叛，」是蕭仍爲附庸于宋，楚未嘗有其地也。……昭十三年「吳滅州來，」昭二十二年傳 ，稱吳人伐州來 ， 楚遽越奔命救州來。 ……然則楚之州來，猶宋之蕭，雖滅而仍存也。』 按譚亦滅而仍存者，一證爲齊桓公語，此語在葵丘之會（齊桓公三十五年）以後，是周襄王時尙有譚國存在。 一證爲戰國時尙見譚子(詳註14)，

(12)見說苑卷九，正諫，(四部叢刊本第九十葉。)

戰國之際，孟嘗君逐于齊，見反，譚子迎於遝[18]，曰『君怨于齊大夫乎？』 孟嘗君曰『有。』 譚子曰『如竟則殺之乎？ 夫富貴則人爭歸之，貧賤則人爭去之，此物之必至，而理之固然也。 願君勿怨！ 請以市論，朝而盈焉，夕而虛焉，非朝愛之而夕憎之也，求在，故往，止，故去。』孟嘗君曰『謹受命！』 於是削所怨者名而已。

(13)遝，水名，在山東臨淄縣西北二里。 齊乘，『遝水俗謂之泥河，北逕臨淄城北，系水入焉。』 又邑名，方輿紀要作晝邑 ， 引『孟子去齊宿于晝，』按四書釋地，曰『晝當作晝。』 卽此地。

(14)見風俗通義卷七 (百子全書崇文書局本第四葉)

譚亡無考。 子孫以國爲氏，望出弘[15]農。

(15)見姓譜。

六， 譚國戰禍之一幕殘影

1,譚國城垣之存留及北牆之發現。 城子崖之得名，就是因爲這崖上舊有一個城子，所謂崖的，高出平地有數尺乃至一丈餘者，這懸崖陡岸間，還留着成層的版築遺痕，從西面，南面都可以看得到的。 城的建築，早或者已在黑陶時代，而晚却只能晚到譚。 所以這城基我們可以說他是譚城。 譚城，大小約當今城子崖的全面積(參閱城子崖發掘報告。)而能見城牆遺蹟的，只有西面和南面，還有東南隅關帝廟後的一小段。 所以在第一次發掘時，我們就注意到東和北兩邊城牆的探求，因爲這兩邊都

已漸與地面平了。 在橫中40及41兩坑，已找到東牆的基礎。 在從中44，及45兩坑，又發現了北牆的基礎。 北牆，據發掘日表郭寶鈞先生的記載，牆厚約 13.8 公尺，每版築層約 0.12 至 0.14 公尺，因此，我們更向西平行開了兩個坑，就是從西1,44,45 兩坑，45 坑恰開在城牆基址之上，是城牆的南半。 在這裏，就發現所謂戰爭的慘劇了。

2,北城基旁之三個墓葬。 所謂慘劇，乃是由兩個墓葬推測出來的。 這城基旁的墓葬共有三層，共有三個，他們的關係和地層，約如下表。

這縱西 1,44,45 兩坑，是作者經手開掘的，所以當時的情形，還能記得個彷彿。現在分別敍述之。

(1) 第一個墓葬。 在版築層間，乃是打破了城基而埋葬的，距地面0.5公尺，就發現了陶器殉葬物兩件，一豆，一瓿，人骨在深 0.9 公尺處，頭東脚西，殉葬物在脚下。 由這個墓葬，可以保證以下的兩個墓葬是在秦漢以前，而這墓葬則在譚城廢棄之後，所以破城基埋之。 陶器也非漢以後之物。

(2) 第二個墓葬。 第一個墓葬下，在 1.8 公尺間又發現了一個墓葬，于是這戰禍的慘劇開幕了。 這墓葬共有四副人骨；上面兩副在仰着，下面一副在俯着，俯者左邊一副不滿五尺的小孩子的骨骸，四副骨骸都頭西脚東。 據說這三副大人骨中，有一副是女的。 這不是合葬，又沒有棺木和明器，很顯然是忙亂中忽忽蓋葬的。 這男女三人和一個小

三個墓葬之地層

土層	墓葬所在
0.0（以上地面）	
黃土	
0.5米（耕土）	
（版築層自此起）	
	0.9
	第一個墓葬1.0
灰黃土	
（版築）	
	1.8
	第二個墓葬2.0
2.2（版築層至此止）	
灰土	
鬆	2.9
	第三個墓葬3.0
3.2（以下生黃土）	

孩，說不定都是在喪亂之際死于非命的啊。

（3）第三個墓葬。 第二個墓葬下，在2.9公尺下又發現了一個墓葬，這也不是正式的埋葬。 這墓葬是兩人抵頭長眠在地下的，一個在西邊，側臥而屈着腿肢；一個在東邊伸足俯身。 這俯身的一位，脊骨上有銅的箭頭一個，正中在脊骨，銅的銹把脊錐骨都染綠了。 這樣，確成了一個耐人尋味的問題。 這人既是中箭而死的，他死在何時？ 何以會被箭射死？ 他同死的一位又如何？ 他和上面伴他們而死的四人，有無關係？ 這墓葬已深入城基之下了，他們又何以要埋在這城下？ 這些問題，一定包涵着一件可恐怖的慘案。

3，慘劇的推測。 三個墓葬，都有相當的關係，第一個好像一層帳幔，揭開來才發現下面兩重墓葬的慘劇，因爲他可以證明時代，證明這下面的乃是秦漢以前的慘劇。 下面的兩層，時期相去不會很遠，第三墓葬較早，這彷彿是有了敵國外患時的兩個執干戈衞社稷的戰士，西邊那一位不知是怎樣的犧牲了性命，而東邊這一位，却明明是不提防後面來的一條冷箭，正中脊髓，因此喪生，當時別的弟兄們便把他兩位抬下城來，掩埋在城基的下面。 大戰過去了，死亡衆多，于是在這兩位戰士的上面，又掩埋了四副骨骸，所以都互相枕藉，草草蓋覆。 後來城牆日益廢毀，才有上面的第一個墓葬，有這個有殉葬物品的正式的墓葬，可以襯映出下面兩個墓葬是在如何忽促之際而潦草完事。

這兩個墓葬所表現的一幕戰爭的慘劇，應該在什麼時候？ 這是很可以知道的，一個是第一墓葬證明了這慘劇不在秦漢以後。 一個是射在脊骨上的銅矢，可以證明這慘案是在殷商以後。 殷商的銅矢，乃是屬于雙棱式中雙脊類的丁種倒鬚式的（參看李濟之先生族的分類，安陽報告 234 葉，）殷虛出土物品有這一種，而這一種一直用到春秋戰國之際，到漢朝才變了形狀。 這銅矢正和殷虛出土的相似，所以時代至少在殷商以下，以至周末。 在這期間，這地方的大戰爭，見于記載的只有一個『齊師滅譚，』這次齊譚之戰，爲期乃至有三年之久，也可見戰禍之烈了。

因此，我們可以說這譚國北城下的兩層墓葬，乃是譚國亡國慘劇中的一幕殘影，到現在偶然被發現了。

七， 譚文化遺存之一斑

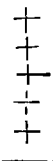
1，陶器上的文字。 陶器上，尤其是器蓋和豆的邊沿上，刻劃文字或數碼作記識的習慣，是殷商時代已經有的。 在殷虛出土的陶片上，我們已發現了不少的文字。城子崖的上層文化，一譚文化，由兩次的發掘，也得到些有文字刻劃的陶片，還有一塊劃着成行的文字。 現在分述于次：

(1) 單字的刻劃。 刻在陶器邊緣外的有兩塊，一個是子字，一個是犬字。子字和甲骨文的子字相近，犬字也類于甲骨金文。 茲列表比較之。

城子崖陶文	編號	甲骨文	金文
子	620	前.7.15	傳卣
		後.下.24	召伯敦
		前.3.7	父丁鼎
犬	1639	前.1.46	箕季子白盤（獻字偏旁）
		前.5.4	伯貞鼎（獻旁）
		前.3.23	

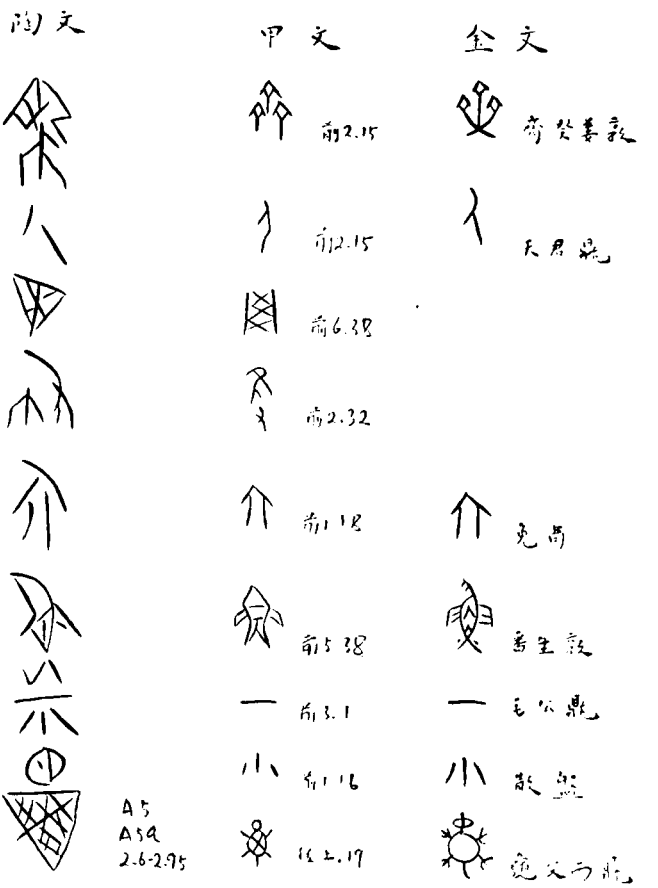
觀上表，子字到了金文，完全同甲骨文的後期字形相近，而譚之陶文，則與甲骨文早期爲近；又犬字像形，尤似甲骨文字，由此兩字，可知譚文化與殷文化是一個系統，至少是很接近的。

(2) 數字的記載。 陶器的底上或口緣上，往往有數字一個，這也許是一種特別的記號，這種記號有七，十，十二，二十，三十五種，也都和甲骨金文相近，再列爲一表，以資比較。

數字	陶文	編號	甲文	金文
七		66 109 140 716 1152	十前3,1	十孟鼎
十		17 46	丨前3,23	孟鼎 秦公敦
十二 (合文)		783 64	(十五合文) 前3,23	
二十 (合文)		872	前2,19	宗周鐘 頌壺
三十 (合文)		335 596 499 707	山後上,23 前1,35	曶鼎 格伯敦

觀上表所列，各種數字，以七與三十爲多，似有疑問 ， 何以記數多用此兩種，而十以內的數反少？ 但是不如此解，則十或爲甲，因爲有子字可證，但證據仍覺薄弱。 若以十爲十，以山爲山 ，以丨爲一 ，則時代當在漢以後，不能相當于殷周之世了。 姑如此釋，以待他證。

(3)『六魚一小龜。』 二十年冬季第二次龍山發掘，發現了一塊刻字的陶片，文曰『齊人網獲(？)六魚一小龜，』前四字認得不大清楚，後五個字却不錯。 就字體比較，也和甲骨金文爲近，表如次：



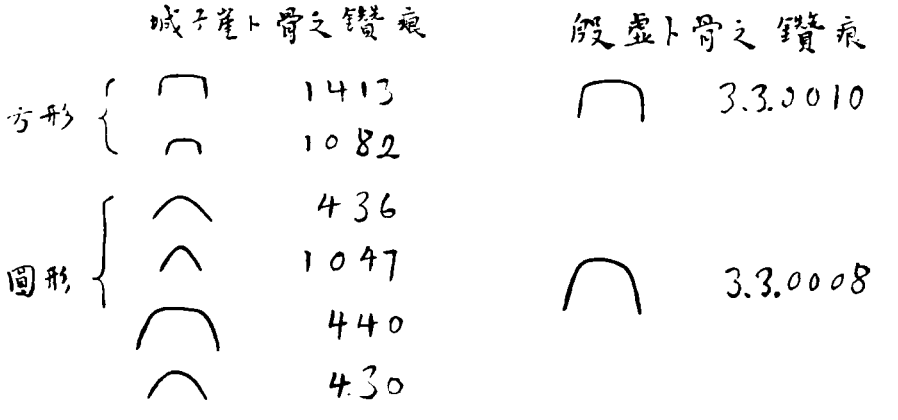
『齊人網獲』四字，近于臆度，獲字有釋此者，亦不似。 姑如此釋之，待將來考訂。 這字是在大陶盆的裏面，又是成器之後以物刻劃的，劃的痕跡極淺，似金屬器所劃筆畫有光澤，乃一時記事的文字。 這大概是器的主人，得了六魚一龜，置此器中，一時高興，便寫了出來。 從這，我們可以知道譚文化的大略，他們有文字的使用，像陶器上的刻文（那是未燒成時刻的），記識，和這一段記載，很可以見他們使用文字已經甚便，而且這文化是在古文篆書時代，卽殷周之世，也可以爲譚國時期的一個佳證。

2，卜骨。 貞卜用龜甲牛骨之習，無疑的是盛行于殷商之世。 周以後，簽漸行，卜漸廢，龜卜已經日少，更不見所謂骨卜了。 譚如果是殷商的故國，他便是抄

襲殷人的骨卜而得其皮毛，遺其精髓。 何以言之？我們可以把城子崖的卜骨和殷虛的比較一下看：(參下葉附圖)。

	殷虛的卜骨	城子崖的卜骨
材　料	牛胛骨，(1,5,6,7,8)間用鹿骨	牛胛骨(4,11,12,13)及羊骨(9,10)
攻　治	經過鋸，錯，刮治精細，面背光滑。	僅經粗略的刮治，(1,12,13)有未經刮治者(11)
鑽　鑿	有鑽鑿並施者(1,5,6,8)有僅鑽不鑿者 (7)	但鑽不鑿(3 4,9,12,13,)有不鑽而灼者(11)
灼　兆	鑽鑿而後灼	鑽而後灼 有不鑽而灼(11)
文　字	有有卜辭者 有無卜辭者	全無卜辭

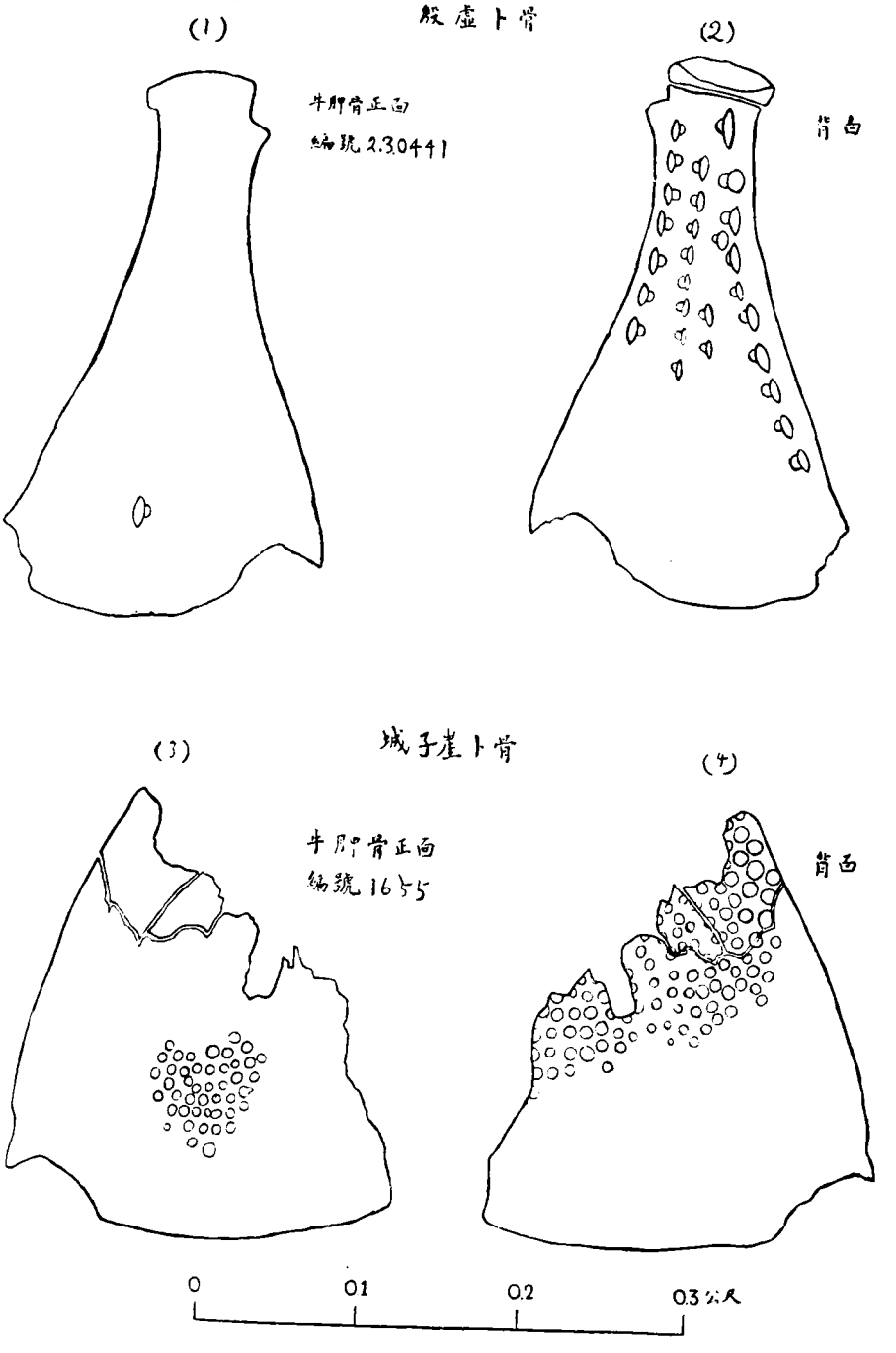
就材料說，我們看了城子崖卜骨鑽之密，可以知道他們材料的缺乏。 半塊牛胛骨，竟鑽了一百四十六(正面45背面101)次，這樣的密集，還如何能夠分得出每一卜兆的吉凶？ 試一比較殷虛卜骨，便可見那是多麼疏朗而清晰的。 殷虛貞卜龜骨並用，這裏已沒有所謂『大寶龜』了，僅僅用牛骨，既多不刮治者，又參用羊骨，可見小國之規模是如何的褊狹了。 城子崖的卜骨，是應屬于上層的文化，即譚國的文化，從這裏也可見譚與殷的關係。 城子崖卜骨所用的鑽，和殷虛的相近，大概都是尖端，漸漸磨成圓端，用的久了，又近于方形，這是從鑽之處可以推知的。 試看這兩處的鑽痕：



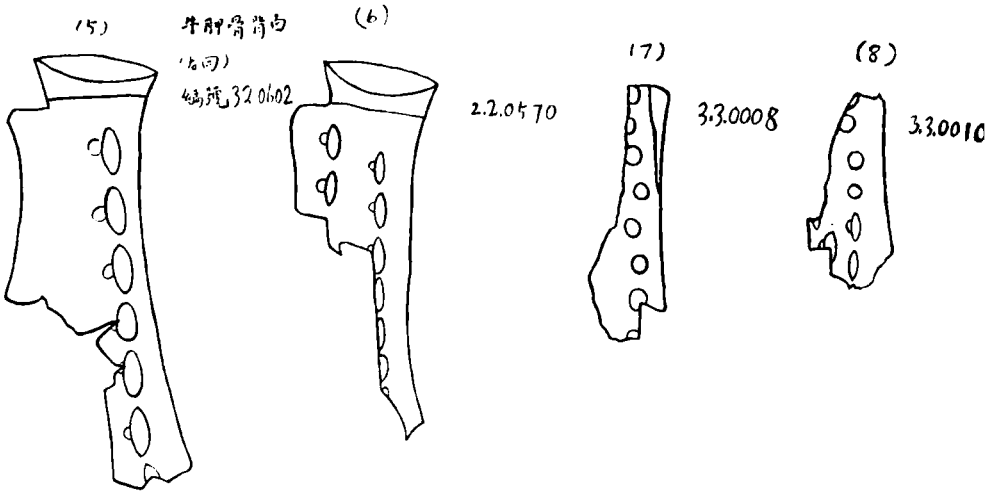
由此看來，城子崖的鑽痕是由尖而圓而方的，殷墟的鑽痕也有些相類，不過圓痕較多。在用具上，也可見一點彼此因襲之跡。

從灼兆上，更看出譚人貞卜知識的弱稚與馬虎，不但卜兆稠得彼此不分，有好些簡直是灼不見兆。這樣的太卜，殷人是決不用的啊。

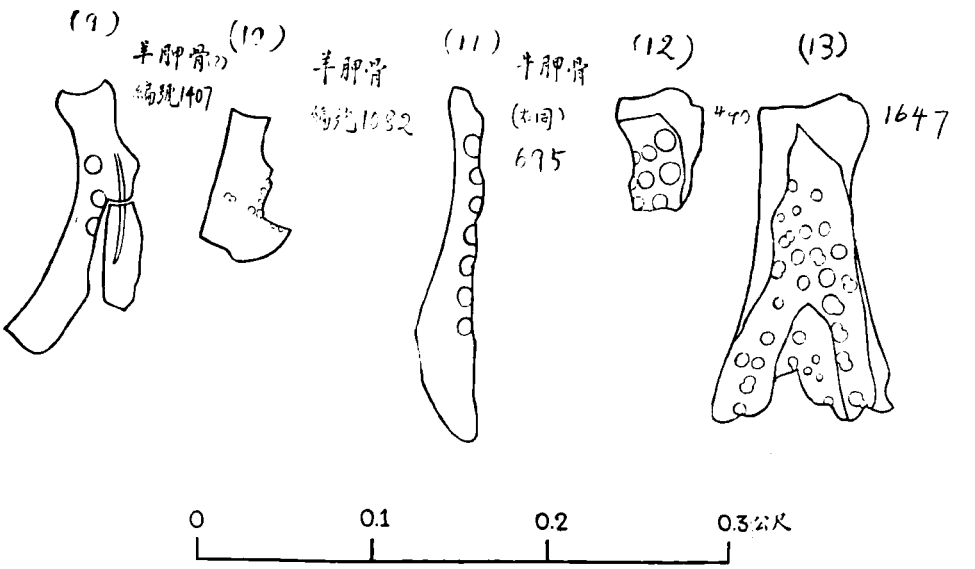
3,銅矢及刀貨。譚文化的遺存，銅器只有矢鏃是射中人身上的，已見上節所述。此外只有一個殘的刀貨，類于齊刀，可惜，所餘者只是無文字之一端而已。這都足以證明譚文化的時代，是在殷周之際的。遺物雖少，却甚重要。


殷虛卜骨
(1)
牛胛骨正面
編號 2.30441
(2)
背面
城子崖卜骨
(3)
牛胛骨正面
編號 1655
(4)
背面
0
0.1
0.2
0.3公尺

殷虛卜骨


(5)
牛肿骨背面
(右同)
編號320602
(6)
2.2.0570
(7)
3.3.0008
(8)
3.3.0010

城子崖卜骨


(9)
羊肿骨
編號1407
(10)
羊肿骨
編號1382
(11)
牛肿骨
(右同)
675
(12)
440
(13)
1647
0
0.1
0.2
0.3公尺

羅羅太上清淨消災經對譯

楊 成 志

(一)

引 言

此經原名爲[illegible] tɕi fou ŋɔi wɔ di dza,譯名爲太上清淨消災經，係我於民國十九年春在雲南調查民族時，在昆明縣東鄉散民族（卽羅羅族支名）的大蔴苴村翻譯得來的，我的羅羅文教師張正"覡爸"是一個有心氣病而鴉片烟癮很重的老人，承祖傳的遺業，除受人聘往設壇唸經，專做禳祓或解災的巫術外，復在家裏操算命，占卜和開方的勾當，每天附近漢夷的村婦愚夫們踵其門求醫問卜的，眞有其門如市之勢，他確是一個很有名聲而驕傲的"覡爸"了！ 他能說很清晰的漢話又能讀寫漢字，惟其方術與經典素來是絕對守秘密而不肯苟且傳授外人的。 當我得了昆明師範散民學生李本霍和楊宙兩君介紹給他的時候，他馬上表示不滿意並懷疑我究竟藏有甚麼惡意來跟他學習經典，後來屢經我誠懇的解釋和證明，才能得他的諒解勉强收我爲徒。他所有的經典，卜書，卦辭和符咒共有數十種，可把漢語來翻譯的只有十種而已，其餘的都是他們自己族裏的遺寶，其中雖有些明白地可以譯出來，然而要完全弄成漢文，確是一樁困難的事情。 固然張覡爸自己有許多極守秘密的寶貝，不肯苟傳，究其實，我深察其眞能認識經典的程度，完全徒靠口唸不求甚解罷了。 所以，我簡直可以斷定覡爸的認識羅羅經與和尙或道士的認識佛經或道經，蓋同出於只靠口誦不求意解的一途。

我譯成此經差不多費了半月的時間，因爲張覡爸旣忙於算命占卜，整天整夜又繼續其吹鴉片的慣習，而且有時心氣一發卽輾轉於睡床上而呻吟不止，那末，當我處此情況之下，只有天天隨其左右，靠在他骯髒的烟床上，乘着他的空暇或感到興趣時，

便一字一字慢慢地翻譯下去，直至全經完成時已過了兩星期的時光，現在把這部的秘密宣佈出來，自己覺得十二分高興，國內外學者想研究雲南羅羅族的，也未始不可以此爲一種研究的資料，這便是我翻譯此經的緣由和希望了！

（二）

本經的內容和釋略

我得譯此經的沿革既如上述，到底羅羅族的由來是怎樣[1]？羅羅的語言和文字又是怎樣[2]？　羅羅經的內容又是怎樣[3]？　及雲南羅羅族的概狀如何[4]？　……我前後已略有所論及，在此不必贅述，現在所要分晰的便是本經的問題，聊分述如下：

A.宗教的崇拜——原始人的文字應用，大部分是拿來供宗教儀式的崇拜的，看埃及的楔形文（hierogly phic）的五十七個神名，便是例證，羅羅族如昆明的散民，雖深受了漢化的陶冶，數千年來其文字的傳遞，仍然由祭師（卽覗爸）保存着，其文字的應用，聽說從前覗爸很多常用其己族文字來書寫契約，文告和信札……：然而時至今日，覗爸日見絕傳減少，如散民族四十八村中的人口約二萬二千餘只得張家和楊家操其專業，無論何種人既不懂得其經文是怎麼樣的一回事，所以其唯一的應用便復原於唸經而已。　況我考察過的蠻經，夷經，子君經，白夷經的百餘本經典，多是屬於祈禱，請神，安壇，祭獻，禳祓，消災和祈福占卜符呪一類的東西，雖有的屬於歌謠，故事，傳說和禮制，然極占少數，因此叫羅羅經是屬於宗教的經典，誰也該承認的。

B.字音和字數——本經的翻譯，不是字義却是字音，雖羅羅語與漢語的發音有許多不能同出一轍，然而從前的覗爸竟能選擇出其土字的土音，來適合漢字的雲南音，取其最精確而近似者而譯之，這是他的一點聰明處。　如忠字讀爲"金"，"今"和"君"；乩字讀爲"恩"，"雲"和"元"；㊀字讀爲"關"，"垂"和"切"；……其例頗多，

(1) 見拙著羅羅說略——嶺南學報第三期

(2) 見拙著羅羅文的起原及其內容一般——廣州中山大學語言歷史研究所週刊文字專號

(3) 見拙著雲南羅羅經數　新亞細亞第二卷第一期

(4) 見拙著雲南民族調查報告

這是因爲羅羅的文字不夠用，不得不借來使用，讀者自己可從下頭的譯文找尋，我在此只提出一個說明罷了。 還有一層這完全是一種音譯，與字義沒有一點相干的，例如ㄣ(si-)本作"蛇"字解，然借讀爲"聖"字；ㄢ(na-)本作"黑"字解，然借讀爲"納"字，這也是應當說到的。

至本經不相同的字數，總計有四百個之多，約占其總字數（因我曾從其各經書摘出不相同的字有一千五百餘個）四分之一，讀者若能再把其字形分析起來，或許可得到有趣味的發見或比較。 試舉一例，如☺，☹，⊕，☺，⊖，☺，……等字，統通都用一圓圈，圈內增減其筆畫，而得到其殊異的音義，這可見羅羅字的組織，也可供文字學家做一種參考了。

C.神的數目和分類——我在上頭所以說到本經是以羅來譯漢的原因，簡直是因爲本經的一切神名都是漢族所信仰的罷了。 本經共有神名二百四十餘個，分析起來，一爲神的領域，一爲神的諡號，列表如下：

（A） 神的領域

神的領域	神名
天神	(1) 天皇，(2)玉皇，(3)三十六天，(4)初查，(5)四查，(6)天曹部衆，(7)無量億天，(8)吐明天宮……等等
星神	(1)二十八宿，(2)南斗六司，(3)北斗七元，(4)紫微，(5)文曲，(6)金，木，水，火，土，(7)十方，(8)四聖……等等
雷神	(1)三十六雷神，(2) 上元十二雷神，(3)五方雷神，(4)四序雷神，(5)中元十二雷神，(6)下元十二雷神……等等
山神	(1)東岳，(2)西岳，(3)南岳，(4)北岳，(5)中岳……等等

海　　神	(1)滇池龍王，(2)有感龍王，(3)水官閘口一切龍王，(4)水府部衆一切龍王，(5)東西南北五色龍王……等等
地　　神	(1)七十二地府，(2)閻羅王，(3)田公，(4)地母……等等
生 命 神	(1)六十甲子本命星君，(2)長生保命星君……等等
家　　神	(1)家堂香火三教福神，(1)司命土地禁忌六神……等等
道教之神	(1)太上元始天尊，(2)太上道君，(3)太上老君……等等

(B)　神的諡號

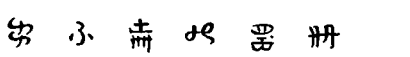
1　天尊，	12　上帝，	21　郎君，
2　星君，	13　羣仙，	22　田公，
3　眞君，	14　大夫，	23　地母，
4　天衆，	15　天官，	24　土主，
5　金闕，	16　龍王，	25　土地，
6　福神，	17　眞宰，	26　六神，
7　大王，	18　天龍，	27　道祖，
8　大帝，	19　夫人，	28　尊神，
9　天王，	20　官衆，	29　天星，
10　星官，	21　哪叱，	30　眷屬。
11　天帝，	21　童子，	

以上拉雜地解釋好多了，要知仔細，還是看看下列的譯文。

(三)

羅羅經原文對譯

稽首納思眞法經，



祭祀海會衆神！

我今開啓恩洪儀，

萬聖慈悲垂加護！

戒香定香，

惠香解脫香，

解脫知見香，

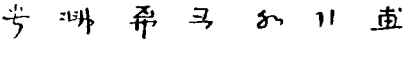
光明恩台，

周遍世界！

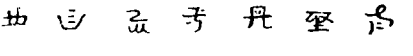
香花燈燭，

上獻供養，

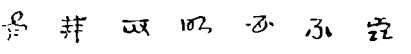
弟子虔誠，一心奉請！



天地三界十方萬靈眞宰，

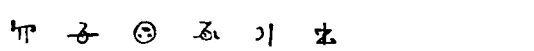


萬範開章四歲大夫，

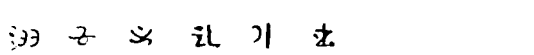


從官考較福壽羣仙，

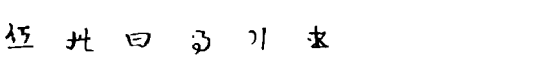
四官大帝，



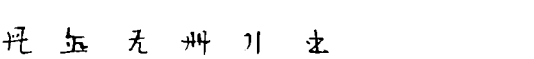
南斗六司星君，



北斗七元星君，



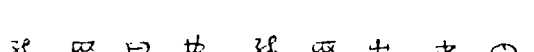
二十八宿星君，



十二宮神星君，

東方八天東方朝金闕，

南方八天南方朝金闕，



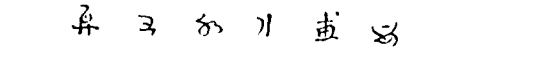
西方八天西方朝金闕，

北方八天北方朝金闕，

中央一天中央朝金闕，

週遍法界，

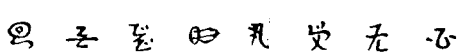
香花燈燭，上獻供養，弟子虔誠，一心奉請！

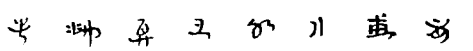


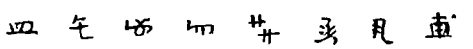
十方無量，

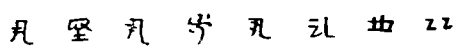
今當召請，

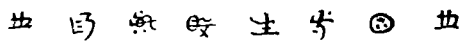
心初來臨，靈就壇中，安座天壇，

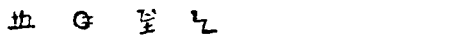

香花燈燭，上獻供養，


弟子虔誠，一心奉請！

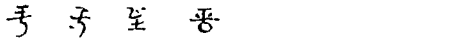

稽首賀納，百拜上奉。


上方上界上元天官，


天曹部衆慾界六天，


天中之聖，

一切眷屬，

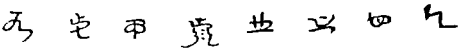

色界之內，

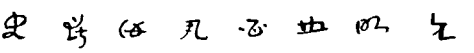
一十八天，

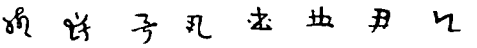
無色界中，

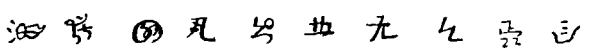
四天眷屬，

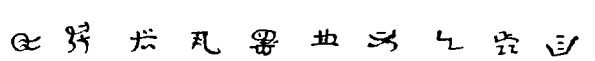
又當奉請！

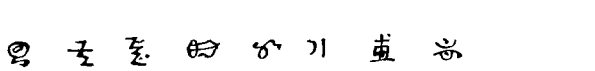

東岳泰山天齊仁聖大帝，


南岳衡山司天昭聖大帝，


西岳華山金天順聖大帝，


北岳恆山安天玄聖大帝，


中岳嵩山中天崇聖大帝，


香花燈燭，一心奉請！

色界救境三十六天星君，

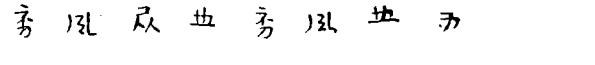
初查三天初查天帝，

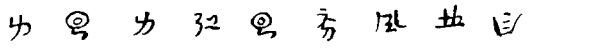
三查三天三查天帝，

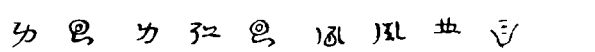
無量億天果實天象，

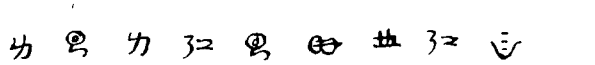
無量果實無處天象，

初查三天初查天象，


非想非非想初查天帝，

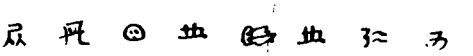

非想非非想四查天帝，

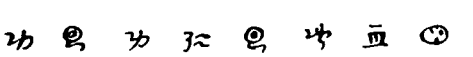

非想非非想諸天天帝，

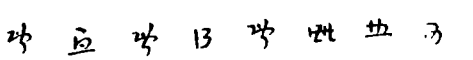

四查四天四查天帝，

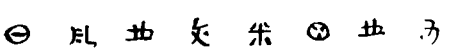
無辱無惱無辱天衆，

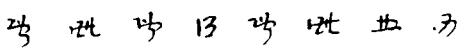
無想無非廣果天衆，

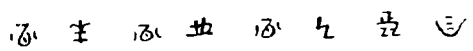

三十六天諸天天衆，


非想非非想無邊處天衆，

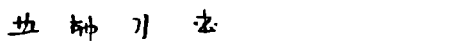

無邊無惱無辱天衆，

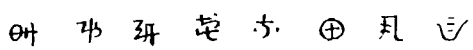

吐明天宮一切天衆，

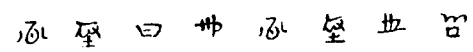

無辱無惱無辱天衆，

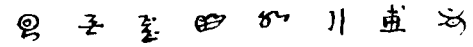

四岳四天四聖大帝，

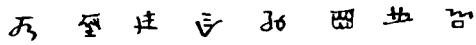
五明皇后，


天子星君，


普耳福壽轉輪上帝，


四方八命四方大王，

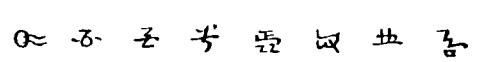

香花燈燭，一心奉請！

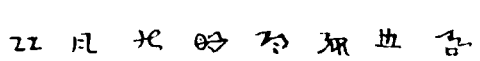

東方青帝持國天王，

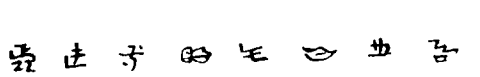
南方赤帝增長天王，

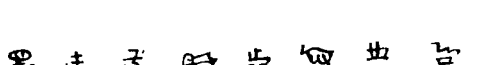
西方白帝廣目天王，

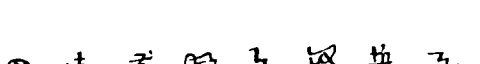
北方黑帝多聞天王，


中央黃帝大梵天王，


光明會主護法天王，


大千界主閻羅大帝，


中千界主大梵天王，


小千界主聖梵天王，

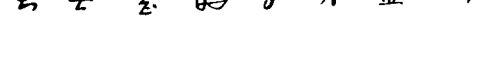
雲南至尊能仁天王，

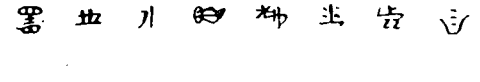
星南辰天天星上帝，

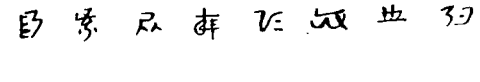
上下天主，四方天王，

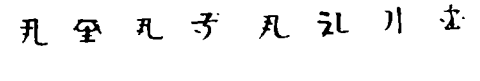
光天道祖，元央上帝，

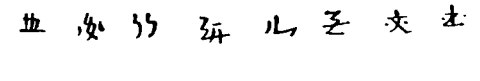
香花燈燭，一心奉請！

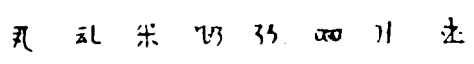

中天星主紫微大帝，


曹歲三寶護法天龍，

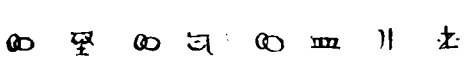

上方上界上元星君，


天宮慈父太華星君，

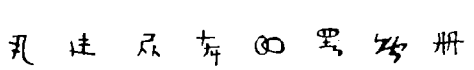

地上慈母玄皇夫人，



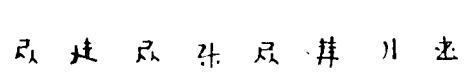
上元一品賜福星君，



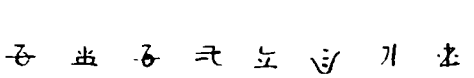
五方五老五氣星君，



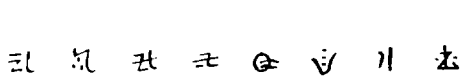
上清三洞五雷經神，



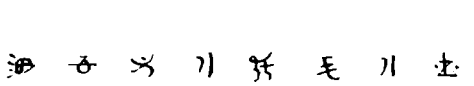
三千三境三寶星君，



斗父斗母二帝星君，



元明道母中帝星君，



北斗七星文曲星君，

斗上三台華蓋星君，

日宮月府二殿星君，

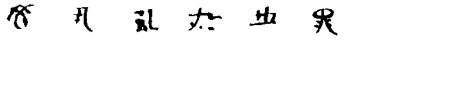
日宮太陽天子星君，

月宮太陰皇后星君，

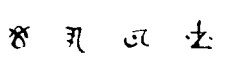
本星重華神道星君，

天家眷屬部衆星君，

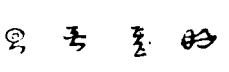
太上元始天尊，



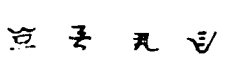
太上道君，



太上老君，



香花燈燭，上獻供養，一心奉請！



玉皇上帝，

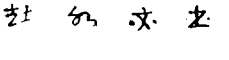
天皇上帝，

北極大帝，

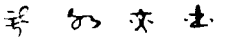
紫微大帝，

註生大帝，

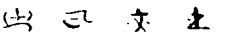
左翼眞君，



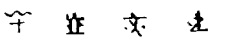
右翼眞君，



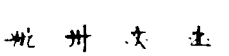
修羅眞君，



獨降眞君，



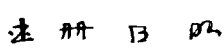
保命眞君，



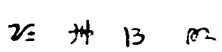
消災眞君，

三官眞君，

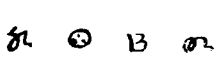
四聖眞君，



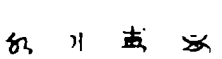
金神哪叱，



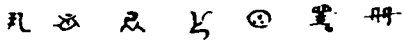
護命哪叱，



一切哪叱，



一心奉請！



上請三十六雷神部衆天尊，

一心奉請！

鄧天君忠良天尊，

辛天環天尊，

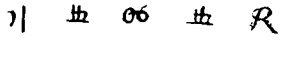
張天節天尊，

陶天榮天尊，

龍大洪天尊，

劉天甫天尊，

荀天章天尊，



畢天王天尊，

程天王天尊，

趙天江天尊，

董天全天尊，

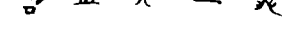
元天角天尊，

李天德天尊，

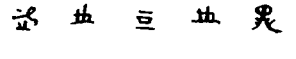
孫天良天尊，

白天理天尊，

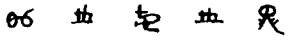
王天變天尊，



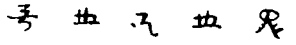
姚天寶天尊，



張天詔天尊，

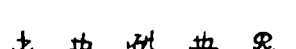


黃天庚天尊，



吉天立天尊，

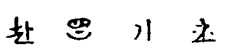
金天素天尊，

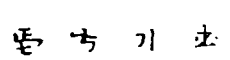


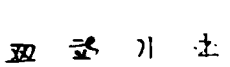
余天諱天尊，

閃電金光聖母天尊，

一心奉請：


左輔星君，


右弼星君，


九曜星君，

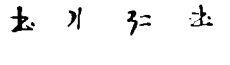
太陽星君，

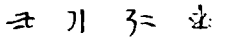
太陰星君，

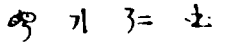
羅猴星君，

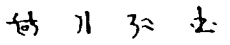
計都星君，

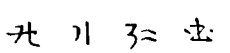
金星星君，

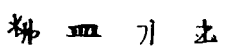

木星星君，

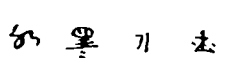

水星星君，

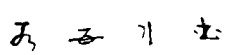

火星星君，


土星星君，

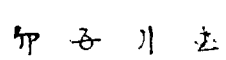

紫氣星君，


月孛星君，

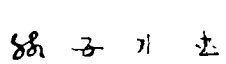

五斗星君，



東斗星君，



南斗星君，



西斗星君，

北斗星君，

中斗星君，

南斗六司星君，

北斗七元星君，

二十八宿星君，

十二宮神星君，

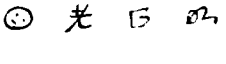
本命元神星君，

十方星君，

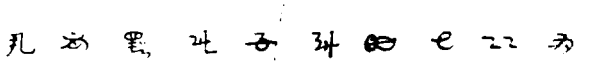
長生保命天尊，

弟子虔誠，一心奉請！

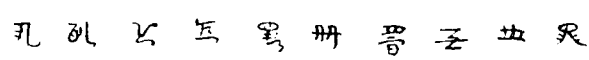
六丁哪叱，

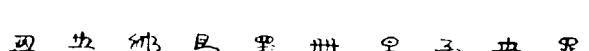


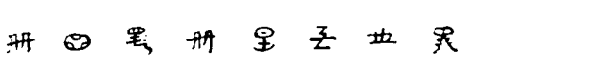
六甲哪叱，


上請雷陀藏福主理官衆，

一心奉請！


上元十二雷神普化天尊，


九天應元雷神普化天尊，


神霄雷神普化天尊，

五方雷神普化天尊，

行雨雷神普化天尊，

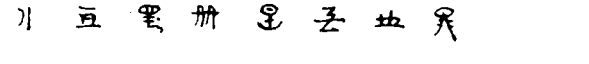
行風雷神普化天尊，

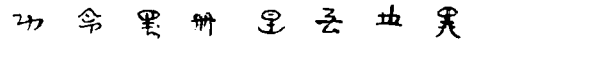
行雲雷神普化天尊，

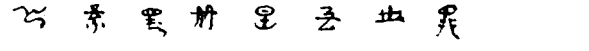
布澤雷神普化天尊，

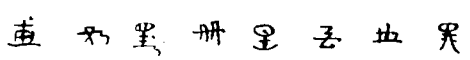
行雪雷神普化天尊，

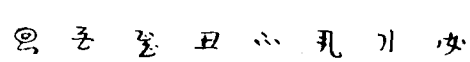
行冰雷神普化天尊，

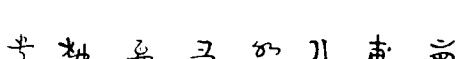

飛沙雷神普化天尊，


食卒雷神普化天尊，


吞鬼雷神普化天尊，


伏魔雷神普化天尊，

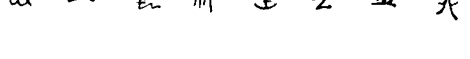

香花燈燭設果上獻供養。

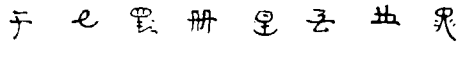

弟子虔誠，一心奉請！

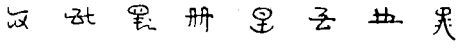
中元十二雷神普化天尊，

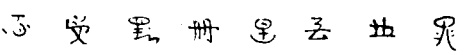
糾善雷神普化天尊，

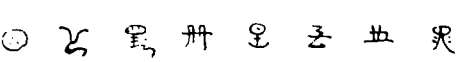
罰惡雷神普化天尊，

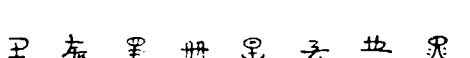

杜靈雷神普化天尊，

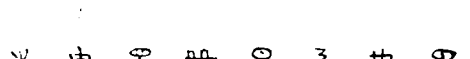

發稻雷神普化天尊，


四序雷神普化天尊，


六十雷神普化天尊，

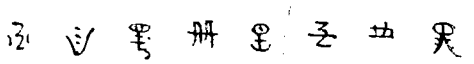

收毒雷神普化天尊，

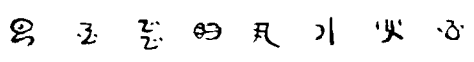

救病雷神普化天尊，

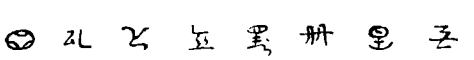

扶危雷神普化天尊，

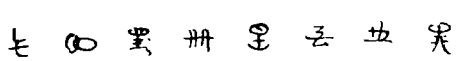
太上雷神普化天尊，

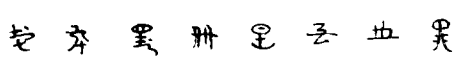
天地雷神普化天尊，

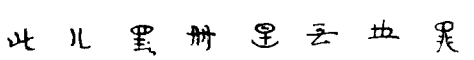

察地雷神普化天尊，

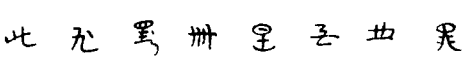

香花燈燭，上獻供養，一心奉請！

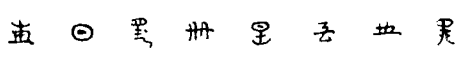

下元十二雷神普化天尊，

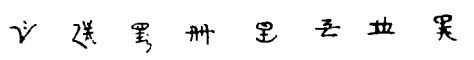

收瘟雷神普化天尊，

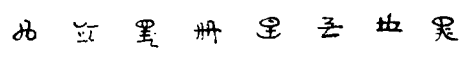

攝毒雷神普化天尊，

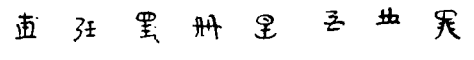

除害雷神普化天尊，

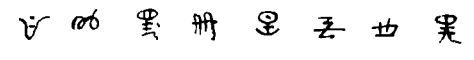

除狂雷神普化天尊，

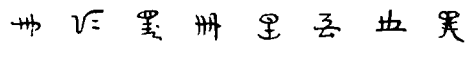

封山雷神普化天尊，

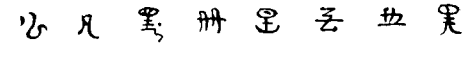

破？雷神普化天尊，

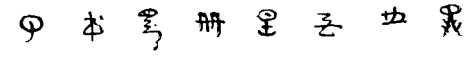

打鬼雷神普化天尊，

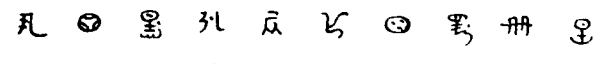

伏虎雷神普化天尊，

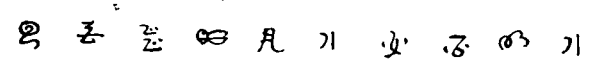

破瘴雷神普化天尊，

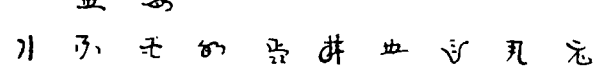

滅風雷神普化天尊，

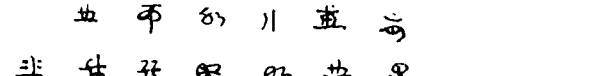

統怪雷神普化天尊，


管魄雷神普化天尊，


上下中元三十六雷神普化天尊，


香花燈燭，上獻供養，一心奉請！


信士某日答報天地，上請天壇，一心奉請！

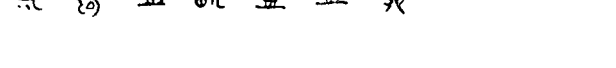

尾火虎珠招天尊，

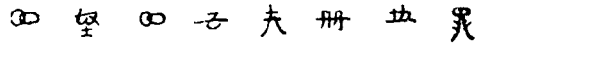
寶火猪高霄天尊，

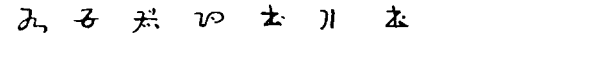
嘴火方猴昔天尊，

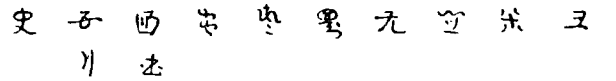
翼火蛇王蛟天尊，

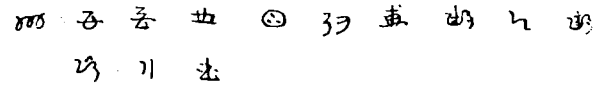
接火天劉奉天尊，

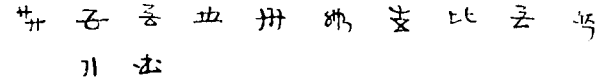

五方五斗正神天尊，

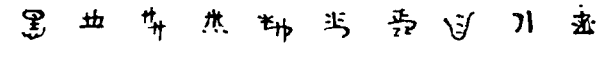

東方蘇護金奎星君，

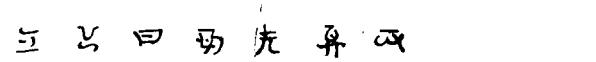

南斗周紀，胡雷，高貴，余成星君，


西斗黃天六，龍奉，胡升，胡鵬星君，

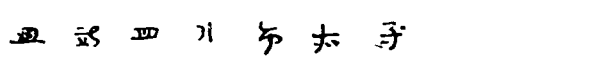

北斗黃天祥，殷比干，黃星星君，


中天北極紫微大帝星君，

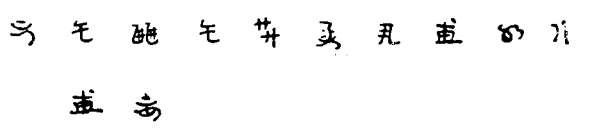

五方五斗萬象生羅，



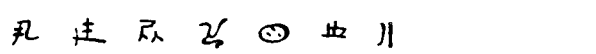
二十八宿鎮乾坤，



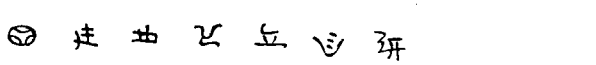
九曜七星安世界，



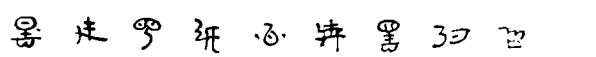
稽首頓首百拜上奉，一心奉請！



上請三十六天星，

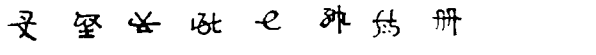


下請七十二地府，

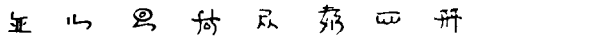


中請水府四海衆龍王，

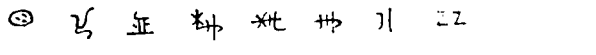
水官來解厄，本境土主大？天神，



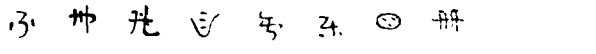
當方得道靈元之神，



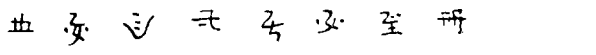
家堂香火三教福神，



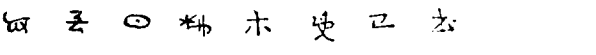
六十甲子本命星君，



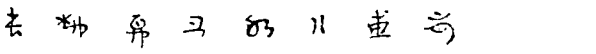
司命土地禁忌六神，



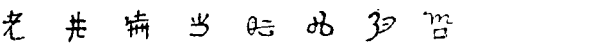
田公地母五穀之神，



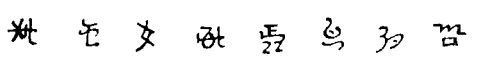
開花童子，結秀郎君，

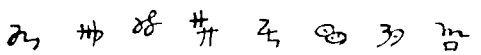


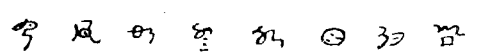
弟子虔誠，一心奉請！

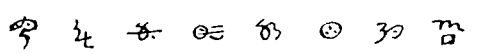


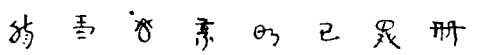
滇池海內諸大龍王，

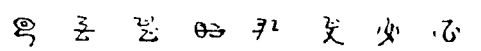

本境得道有感龍王，

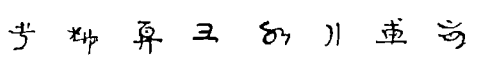

東南西北五色龍王，


水官閘口一切龍王，


水府部衆一切龍王，

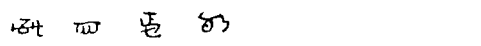

鎮年太歲掌齡尊神，


香花燈燭，上獻供養，


弟子虔誠，一心奉請：

好道得道，

求神得神，

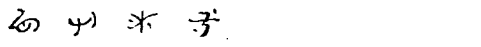

若復有人，

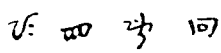
某某祭祀，

所願者得，

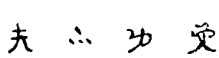
所爲者成，

天上人間，

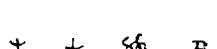

人生今世，



獲福無量，



證果非虛，



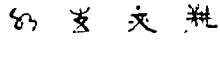
於世須空，

金錢細馬，

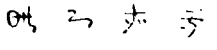
淨課香燭，

奉詔上昇，

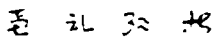
以此眞科，



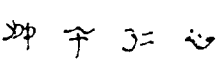
流傳世界，



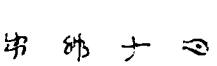
有緣緣會，



自度度人，



酌願相同，



酌神祭祀，

答報天地，

請背白羊一只，

白紅花鷄，

領生在前，

同熟在後，

金錢銀錠，

名燭寶香，

香花燈燭，

上獻供養。

二十年二月二十日脫稿于國立中山大學
文史研究所編輯室

花月痕的作者魏秀仁傳

容肇祖

引言

花月痕，舊傳爲江南名士作，謂"著者爲江南名士，游幕秦中，主人某太守，擁宦囊極豐，又耽於聲色，慕名士詩才，延之幕中，命侍姬及女公子輩，從之學詩。然每日祇授課一二小時，且亦有數日不至書室者，故名士從容唫歎，頗有餘閒，星晚露初，客懷寂寞，則往往譔小說以自遣，命名曰花月痕。書成及半，太守偶至書房，無意中翻檢得之，讀而狂喜，促名士速竣其事，謂成書一卷，立贈五十金，并設筵一席，蓋知名士性落拓，不如是，恐半途而廢，永無殺青時也。名士勉從所請，不半年而書成，有人攜之南中，不及鏤版，卽以鉛字印行。"（雷顚隨筆，引見蔣瑞藻小說考證卷八。）這說不可信者，可證明的有兩點，一作者魏秀仁爲福建侯官人，却非江南名士，花月痕中的主角韋癡珠亦說係東越人（見第二回）；一作者所依爲陝西巡撫王慶雲，却不是太守。雷顚要證明江南名士爲何人，引謝枚如題魏子安所著書後五絕三首，一爲石經考，一爲陔南山館詩話，一卽花月痕小說，謂"謝枚如名章鋌，福建長樂人，光緒丁丑進士，官內閣中書，著有賭棋山莊詩集若干卷，魏君既與同時，或亦係同光朝人云。"（雷顚隨筆，見同上。）不知魏子安是福建人，非江南名士；雖長謝章鋌一歲，而却卒于同治之末，未到光緒時。花月痕作者自序作于咸豐戊午暮春，書當卽成于這年。小奢摩館脞錄說道，"花月痕一書，相傳爲湘人某作，非也。蓋實出於閩縣魏子安晚年手筆。子安早歲負文名，長而游四方，所交多一時名士。喜爲狹邪遊，所作詩詞駢儷，尤富麗瑰縟。中年以後，乃折節學道，治程朱學最邃，言行不苟，鄉里以長者稱。一時言程朱者宗之。晚歲則事事爲身後誌墓計，學行益高，唯時念及早歲所爲詩詞，不忍割棄，乃託名眠鶴主人，成花月痕說部十六卷，以

前所作詩詞，盡行塡入，流傳世間，卽今所傳本也。子安與謝枚如章鋌同時，故卷首有枚如題詞。友人林浚南爲枚如所最稱賞，親侍聲欬，曾爲余言及此。”（引見小說考證卷八。）這說亦有不盡然的。證以謝章鋌賭棋山莊文集卷五魏子安墓誌銘，便知這裏所說的話，根本可疑的有兩點，一則云“治程朱學最邃，……一時言程朱者宗之，”何以墓誌銘裏絕不提及？一則云“晚歲爲身後誌墓計……念及早歲所爲詩詞，不忍割棄，……成花月痕說部十六卷，”以墓誌銘所記，考定魏秀仁之年歲，以花月痕的自序所紀的歲月證知這書著作的年月，那時魏秀仁不過四十歲，他共活着五十六歲，不能說爲晚年？此外花月痕前有棲梧花史小傳，紀歌妓劉栩鳳事，花月痕裏所寫的劉梧仙字秋痕，卽是這人，書末的一段戲曲，總括大意，也是爲這人寫的。全書便是從棲梧花史小傳演出，雖然內裏的詩詞堆塞太多，有衒賣文彩之譏，然而根本幷不是爲着保存早歲詩詞而作，是很顯然的。雷顛隨筆又說，“書中韋癡珠或言影李次青，然事跡殊不合。韓荷生，或謂卽左宗棠，雖有相似處，亦未能畢肖。要之小說結構，大都眞僞雜糅，虛實互用，興之所之，自爾成文，固不必膠柱鼓瑟以求也。”影李次青與左宗棠之事，由確知作者魏秀仁的生平，可以證明絕沒有這回事。魯迅中國小說史略說道：“卷首有太原歌妓劉栩鳳傳，謂‘傾心于逋客，欲委身焉’，以索値昂中止，將抑鬱憔悴死矣，則秋痕蓋卽此人影子，而逋客實魏。韋韓，又逋客之影子也。設窮達兩塗，各擬想其所能至，窮或類韋，達當如韓，故雖寓一己，亦遂離而二之矣。”我以爲這話雖然說的很象，但是作者所處的時代，正在洪楊割據的時期。作者所依倚者爲王慶雲，爲人醇謹，由順天府尹而授陝西巡撫，歷山西巡撫，四川總督，僚幕相隨多年，曾未得一官半職。而曾國藩及他人等的僚幕，飛揚騰達者正多，其得意正如所說的韓荷生。謝章鋌魏子安墓誌銘所謂“其抑鬱之氣無所發舒，因遁爲稗官小說，託於兒女子之私”，是也。然則韋以自喻，韓喻別人，魯迅所說設窮達兩途以寓一己，未必然也？魯迅中國小說史略又說道，“子安名未詳，福建閩縣人”然而子安名秀仁，籍侯官而非閩縣。至今相去不過百年，而姓名籍貫已難詳如此，故詳考魏秀仁的生平而

爲之傳。　民國二十二年二月肇祖記。

魏秀仁，字子安，一字子敦，福建侯官人。

以上據謝章鋌魏子安墓誌銘（賭棋山莊文集卷五。　以下簡稱"墓誌銘"。）

嘉慶二十四年己卯（公歷1819），秀仁生。

肇祖案墓誌銘說，"年二十八，始補弟子員，卽連舉丙午鄉試。"　丙午爲道光二十六年（1846），以是年年二十八推之，卽生於嘉慶二十四年。

父本唐，號又甁，以這年中鄉試己卯科第一名解元。　而秀仁實爲其長子。

墓誌銘說，"父本唐，歷官教職，有重名，世所稱爲魏解元者，君其長子。"

同治修本福建通志卷百六十四選舉，嘉慶二十四年己卯魏本唐榜，福州府魏本唐下注云，"第一名。　直隸知縣，改任臺灣訓導，永安，上杭教諭。"

謝章鋌賭棋山莊文集卷二有"魏又甁先生愛卓齋集序"，說道，"先生舉鄉試第一，謁選得縣令，不就，歸爲學官，持師道自重，尤勤於讀書，九經三史，點注屢徧。　發之於文，博而不見其雜也，容而不見其靡也。　氣勁而言有物有則，於劉蕺爲近。　彼貌襲者烏足以知之。"

道光元年辛巳（1821），秀仁年三歲。

道光十六年丙申（1836），秀仁年十八歲。　父官於外，任永安縣訓導，上杭縣教諭。秀仁盡傳家學，而獨不利於童試。

福建通志卷百十二職官永安縣訓導"魏本唐"下注云，"道光十六年任。"

福建通志卷百十五職官上杭縣教諭"魏本唐"下注云，"道光十六年任。"

墓誌銘說，"盡傳其家學，而獨權奇有氣，少不利童試。"

道光二十年庚子（1840），秀仁年二十二。　父改任臺灣縣訓導。

福建通志卷百十七臺灣縣訓導"魏本唐"下注云，"道光二十年任。"

又卷百十二永安縣訓導魏本唐下有劉偕封，注云"二十一年任。"　卷百十五上杭縣教諭魏本唐上有何鄉武，注云"二十一年任。"　可證魏本唐兼任永安縣訓導，上杭縣教諭兩職，至道光二十年，五年任滿，故兩職皆易人繼任。　而魏本唐則遷任臺灣縣訓導也。

道光二十五年乙巳(1845)，秀仁年二十七。　父任臺灣縣訓導五年，至這年任滿。謝章鋌墓誌銘所謂"當是時，教諭君官於外，失人持家務，諸婦佐饔飧，兄弟抱書，互相師友，家門方隆盛。"　即指這時。

福建通志卷百十七臺灣縣訓導魏本唐下有陳景蕃，注云"二十五年任。"　則魏本唐以這年任滿可知。

道光二十六年丙午(1846)，秀仁年二十八，始進縣學，即連中丙午科鄉試舉人。

墓誌銘說道，"年二十八，始補弟子員，即連舉丙午鄉試。……家門方隆盛，君復才名四溢，傾其儕輩，當路能言之士，多折節下交，而君獨居深念，忽高視遠矚，若有不得於其意者。"

道光二十七年丁未(1847)，秀仁年二十九。　是年舉行丁未科會試。

道光三十年庚戌(1850)，秀仁年三十二。　這年正月，清宣宗崩。　舉行庚戌科會試。　洪秀全舉兵起義，亦在這年。　王慶雲以曾國藩保薦，由通政副使擢詹事，署順天府尹。

咸豐元年辛亥(1851)，秀仁年三十三。　洪秀全稱太平天國天王在這年。　王慶雲授戶部侍郎，仍署府尹。

咸豐二年壬子(1852)，秀仁年三十四。　是年舉行壬子恩科會試。

咸豐三年癸丑(1853)，秀仁年三十五。　是年舉行癸丑科會試。　洪秀全據金陵。十一月，王慶雲爲陝西巡撫。

肇祺案墓誌銘說，"既累應春官不第，乃遊晉，遊秦，遊蜀。　故鄉先達與一時能爲禍福之人，莫不愛君重君，而卒不能爲君大力。"　疑道光丁未，庚戌，咸豐壬子，癸丑各科，秀仁皆參與會試，不第。

文壇百話說道，"閩縣王文勤慶雲撫晉，子安客幕中，花月痕即其時所作。"(見范烟橋中國小說史引。)　肇祺案福建通志卷百六十四，載王慶雲爲嘉慶二十四年魏本唐榜舉人。　魏秀仁會試入都，想當以同鄉及父親同年的關係往見王慶雲？　王慶雲爲順天府尹時，疑秀仁或在其幕府中？　此後慶雲爲陝西巡撫，爲山西巡撫，爲四川總督，疑秀仁皆客其幕中？　謝章鋌墓誌銘所謂"乃遊晉，遊秦，遊蜀，"疑遊秦在遊晉之先，語略倒轉。　謝章鋌賭棋山莊詩集

卷十二哭子安詩第二首自注云，"子安客川陝十數年"，實在是先陝後川，語亦先後倒轉。所云川陝十數年，縱使不是在王慶雲作順天府尹時爲幕客，想亦是這年隨王客陝西。由這年到咸豐十一年回閩，不過九年，所云十數年，疑舉大數言之？或者自道光二十七年或三十年會試不第後，旅京未返閩，作客十數年，謝章鋌舉其旅居最久之川陝爲目，而略去燕晉兩地？實則併燕陝晉川四處作客，纔可計得十數年也。

咸豐四年甲寅(1854)，秀仁年三十六歲。十一月，王慶雲遷任山西巡撫，秀仁客其幕中。

文壇百話說，"閩縣王文勤慶雲撫晉，子安客幕中"，語頗可信。故據以列入。

咸豐七年丁巳(1857)，秀仁年三十九歲。六月，王慶雲擢任四川總督，秀仁隨幕入四川。

肇祖案上述王慶雲任職年月，皆據清史稿卷二百一十本傳，及疆臣年表所載。秀仁既客王入晉幕，則入四川爲隨王作幕可知。文壇百話說花月痕爲秀仁客晉幕時所作，語似有據。案花月痕卷首有棲梧花史小傳，所敘劉栩鳳流轉太原爲歌妓，如果是事實，則是他在山西幕府時所聞；或者逋客是影寫自己時，則又是在這時期的親身經歷。花月痕一書，疑由這年寫起，入蜀後次年方完成。眠鷗山人自序題爲"咸豐戊午暮春之望"，棲梧花史小傳亦題"戊午暮春望前一日定香主人撰"，皆在秀仁離山西後的一年，可證他在山西幕時，或者眞的是多情善感之時也？

咸豐八年戊午(1858)，秀仁年四十。主講成都之芙蓉書院。三月，花月痕小說成，自爲之序，並爲棲梧花史小傳。

墓誌銘說，"君見時事多可危，手無尺寸，言不見異，而充牣抑鬱之氣無所發舒，因循爲稗官小說，託於兒女子之私，名其書曰花月痕。其言絕沈痛，閱者訝之，而君初不以自明，益與爲恫悅詼譎，而人終莫之測。最後主講成都之芙蓉書院，於是君年四十矣。"

咸豐九年己未(1859)，秀仁年四十一。是年王慶雲兼署成都將軍。四月，王慶雲

遷兩廣總督，行次漢陽，以病乞罷，得免職。

咸豐十年庚申(1860)，秀仁年四十二。 英法聯軍破天津，入北京，清帝避難熱河。疑秀仁這幾年的境遇頗不好。

墓誌銘說，"劇賊起粵西，蹂躪湖南北，盤踞金陵，浙閩皆警。 聞問累月不通，君懸目萬里，生死皆疑。 既而弟殉難，既而父棄養，欲歸無路，仰天椎胸，不自存濟。 而蜀寇蠢動，焚掠慘酷，資裝俱盡。 挾其殘書稗妾，寄命一舟，偵東伺西，與賊上下。"

咸豐十一年辛酉(1861)，秀仁年四十三。 是年歸至閩。 始授徒自給。

謝章鋌墓誌銘說道，"咸豐中，子歸自永安，羸病幾死。 稍間，或言曰，'魏子安至自蜀矣。' 子躍然，乃就君而謁焉。 君時困甚，授徒不足以自給，而意氣自若。 一見如舊，踪跡日益親。" 又案謝章鋌賭棋山莊文集卷二與烟甫書說道，"今年四十有三矣，……舊年寄跡永安大嶺，其地四山環抱，甕居穴處，瘴氣塞戶牖，不及百日，一病幾死。" 謝章鋌生於嘉慶二十五年，少秀仁一歲。 謝四十三歲時爲同治元年(1862)，所云舊年，則咸豐十一年也。 上云咸豐中，卽指這年，可從謝章鋌之病在永安證之，由此可證秀仁歸至閩之年爲咸豐十一年。

同治元年壬戌(1862)，秀仁年四十四。

謝章鋌賭棋山莊文集卷二有與魏子安書，列在與烟甫書之後，與烟甫書作於這年，疑與魏子安書亦作於這年。 又與魏子安書論及秀仁之父的文集，與烟甫書前有魏又槭先生愛卓齋集序，卽序其父的文集也，疑都作於這年。 序末有云，"子安與余皆窮約不得志，果何術以張先生之業，因相與太息而不能已也。" 則魏本唐的愛卓齋集在當時是沒有能力去刻印的。

謝章鋌賭棋山莊詩集卷七有贈魏子安（秀仁）詩，說道，"一代才名魏子安，奇書百斛快傳觀。 如何長向風塵下，不遣文章付寫官？"

又同卷七夕寄子安云，"杼柚何因唱大東，蕭疏星月暗寒空。 天孫自抱支機石，不管人間雨又風。 洗車何意見滂沱，孤負秋雲薄似羅。 借問九張機畔錦，折枝花樣近如何？" 這些詩，疑在這兩年中作。

同治二年癸亥(1863)，秀仁年四十五。　謝章鋌有留別魏子安詩。

賭棋山莊詩集卷八留別魏子安詩說道，"張劉俱盡後，破涕忽逢君。　茅屋十年月，琴臺一片雲。（原註：子安前年自蜀歸。）　得歸同養拙，此去忍離羣。　寸管猶除熱，登堂憶論文。　所恨非年少，平生缺憾多。　何方堪負米，近日少狂歌，試問他山石，誰迴滄海波，　冰心貯熱血，噴勃待如何？"

同治八年己巳(1869)，秀仁年五十一。　就館建甯之小湖？

賭棋山莊詩集卷十一有寄子安詩，序云，"時君就館建寧之小湖。　君昔游秦，其故舊若陳梅莊刺史，王蓁生司馬，今皆作古人矣。　君書來，感慨及之。"　詩云，"關門紫氣昔崢嶸，十載憐君叱馭行。　累次干戈鎖往蹟，無多故舊識高名。　何由倒屣迎王粲，且去當壚涸馬卿。　太息小湖煙水闊，迢迢離夢話平生。"案這詩後第二首題爲"己巳五十初度"，疑秀仁以這年就館建寧之小湖。

同治十三年甲戌(1874)，秀仁年五十六歲。　挈家之延平，卒于延平。

墓誌銘說道，"今年春，予之漳州，君挈家之延平。　予與君約，予幸得早歸，當買舟西上，作十日歡。　乃君解裝不及旬而竟長往矣。　悲夫！"

又說道，"君既歸，益寂寞無所向，米鹽瑣碎，百憂勞心，叩門請乞，苟求一飽。　又以其閒修治所著書，晨抄暝寫，汲汲顧影若不及。　一年數病，頭童齒豁，而忽遭母夫人之變，形神益復支離，卒年五十六。"

賭棋山莊詩集卷十二哭子安詩說道："蓋棺長已矣，八口命孤懸。　莫恃文章貴，長祈子弟賢。　勞生原不樂，相見更何年。　同作泉比客，龍蛇夢獨先。　憂樂兼家國，千夫氣不如。　亂離垂死地，功罪敢言書。　將母情初盡，還山願竟虛。　幽光終待發，試看百年餘。（原注：子安客川陝十數年，身經喪亂。　其咄咄錄，詩話，等書，皆草創於是時。　君歿時尚在母喪。）"

秀仁"性疏直，不齷齪，既數與世齟齬，乃摧方爲圓，見俗客亦謬爲恭敬周旋，惟恐不當。　顧其人方出戶，君或譏誚隨之。　家無隔宿粮，得錢輒置酒歡會，窮交數輩，抵掌高論，君目光如電，聲如洪鐘，嬉笑諧謔，千人皆廢。遇素所心折者，則出其書相質證。　或能指瑕蹈隙，君敬聽唯唯，退卽篝燈點竄，不如意，則盡棄其舊。

蓋其知人善下，精進不吝，有如此者。"（墓誌銘。）

秀仁著書頗多，除花月痕小說外，謝章鋌魏子安墓誌銘記其所作，有三十三種，茲列于下：——

隊南石經考四卷
熹平石經遺文考一卷
正始石經遺文考一卷
開成石經校文十二卷
石經訂顧錄二卷
西蜀石經殘本一卷
北宋石經殘本一卷
南宋石經殘本一卷
洛陽漢魏石經考一卷
西安開成石經考一卷
益都石經考一卷
開封石經考一卷
臨安石經考一卷
隊南山館詩話十卷
咄咄錄四卷
塞塞錄二卷
彤史拾遺四卷
三朝讜論四卷
放我論詩錄二卷
論詩瑣錄二卷
丹鉛雜識四卷
榕陰雜掇二卷
蠶桑瑣錄一卷
湖壖閒話一卷

懲惡錄一卷

幕錄一卷

巴山嘵音錄一卷

春明摭錄四卷

銅仙殘淚一卷

陔南山館文錄四卷

陔南山館駢體文鈔一卷

陔南山館詩集二卷

碧花凝唾集一卷

關於上述的著作，謝章鋌所說及的，茲更彙記于下：——

咄咄錄：墓誌銘說，"君憤廉恥之不立，刑賞之不平，吏治之壞，而兵食戰守之無可恃也，乃出其閒見，指陳利弊，愼擇而謹發之，爲咄咄錄。"

陔南山館詩話：墓誌銘說，"復依準邸報，博考名臣章奏，通人詩文集，爲詩話，相輔而行。" 又賭棋山莊詩集卷八題子安所著書後云："詩史一筆兼，孤憤固無兩。 扁舟養鸝魂，亂離憶疇曩。 匪惟大事記，變風此其響。"

石經考：題子安所著書後云："夥哉石經考，煌煌美而備。 排比畢千年，刮摩極一字。 亭林雖大儒，奪席不敢異。"

花月痕小說：題子安所著書後云："有淚無地灑，都付管城子。 醇酒與婦人，末路仍如此。 獨抱一片心，不生亦不死。" 又題詞云："二十年來想見之，每聞淪落感蹙眉。 傭書屢短才人氣，稗史空傳幼婦詞。 天下傷心能幾輩，此生噩夢已如斯。 閒階積葉蟲聲急，昂首秋風獨立時。"（案這詩賭棋山莊詩集中未錄，祇見于通行本花月痕前。 花月痕前又有梁鳴謙及符兆綸題詞，梁與秀仁爲同科舉人，閩縣人。 符亦與謝章鋌以詩相贈答者。 並記於此。）

陔南山館詩文集：賭棋山莊詩集卷十二爲子安商定詩文集卽題其後云，"天地居然闢小湖，市門淵跡養眞吾。 風雲卽遂三升意，富貴由來一字無。 始曉彼蒼培碩果，肯因濁俗泣窮途。 參苓珍重相如病，長遣靈光上畫圖。

熱腸冷手苦鬚眉，况復牢騷滿肚皮。　誰使馬遷成謗史，非關宋玉有微詞。
雞蟲得失何須料，蛩蠁相憐各自知。　太息卅年供笑罵，古愁拉雜一肩持。”

釋內外轉

——等韻發疑二，釋詞之三——

羅常培

(一)四聲等子及切韻指掌圖中之辨內外轉例

鄭樵通志藝文略載无名氏切韻內外轉鈐及內外轉歸字各一卷，其書久佚，內容無從探究。通志七音略及韻鏡所列四十三圖，各標以內轉外轉，而亦絕無解說。至四聲等子，切韻指掌圖及切韻指南雖已併轉爲攝，然猶兼存內外之稱；等子及指掌圖且釋其義曰：

> 內轉者，脣舌牙喉四音更無第二等字，唯齒音方具足；外轉者，五音四等都具足。今以深曾止宕果遇流通括內轉六十七韻；江山梗假效蟹咸臻括外轉一百三十九韻。(四聲等子辨內外轉例)[1]

> 內轉者，取脣舌牙喉四音更無第二等子，唯齒音方具足；外轉者，五音四等都具足。舊圖以通止遇果宕流深曾八字括內轉六十七韻；江蟹臻山效假咸梗八字括外轉一百三十九韻。(切韻指掌圖辨內外轉例)[2]

兩書所釋，除攝次不同，文字微異外，固皆以二等字五音具足與否爲區分外轉內轉之準則。然齒音獨具二等者何以謂之'內'？五音皆具二等者何以謂之'外'？仍未有明確之解釋。若即其所釋而推繹之，則凡正齒音獨具二等者，其反切下字並與同韻之三等通，所異者惟在反切上字(例如：韻鏡第十一轉魚韻正齒音二等，'莊'，側魚切，同韻三等，'諸'，章魚切；第十二轉虞韻正齒音二等，'側'，莊俱切，同韻三等，'朱'，章俱切)；以視五音具足之二等與三等聲韻俱異者，迥不相同(例如：韻鏡第二十五轉，二等肴韻正齒音'爪'，側交切，三等宵韻正齒音'昭'，止遙切；第二十四轉，二等咸韻正齒音'詀'，阻頑切，三等仙韻正齒音'專'，職緣切。)。蓋一在三等韻'內'因

1. 據思適齋叢書本

2. 據十萬卷樓叢書本。

聲母之硬化而轉等[1]，一出三等韵'外'因元音之不同而轉等也。此但就兩書之辨例望文引申，至其是否得內外轉之眞義？是否按諸韵鏡及七音略而皆合？後當詳論。惟自元以降，卽對於等子指掌圖所釋亦往往發生誤解。切韵指南後附門法玉鑰匙第十三云[2]：

內外者，謂脣牙喉舌來日下爲切，韵逢照一[3]，內轉切三，外轉切二，故曰內外。如：'古雙'切'江'字，'矣殊'切'熊'字之類，是也。

是又專指反切下字之屬於正齒二等者如何取字而言，與辨內外轉例之本旨復異。明清治等韵者，或引申辨例之說而猶豫兩可：

袁子讓字學元元曰：

等子有內八轉，外八轉，共十六轉。其內外之取義，從二等之盈縮分也。(凡例十六)

等子內外各八轉。……其謂之內外者，皆以第二等分：二等牙舌脣喉下無字，惟照一[3]有字者，謂之內轉；二等牙舌脣喉下皆有字，不獨照一有字者，謂之外轉。以二等字限於照一內，故謂之內；字浮於照一外，故謂之外：此其義也。或謂：二等發聲，發者爲外，故照一切二謂之外；三等收聲，收者爲內，故照一切三謂之內。其說亦通。(卷一，頁十八，十六轉內外)

呂維祺音韵日月燈曰：

案內外之分，以第二等字論也。二等別母無字，惟照二[4]有字，謂之內，以字少拘於照之內也；二等各母俱有字謂之外，以字多出於照之外也。

又曰：

二等屬發，故謂之外；三等屬收，故謂之內。

或沿襲門法之說，而不擇其究竟：

---

1. 正齒音二等爲'齒上音'(Supradentals)。齒上音聲母每與i介音不相容，故在此類聲母後，三等韵母之i介音往往爲其硬化而消失，因而在聽感上遂與二等元音之音彩相近。
2. 據明弘治九年仲冬金臺釋子思宜重刊本。
3. 此所謂照一卽指照母二等。
4. 日月燈所謂照二，實卽門法玉鑰匙與字學元元之照一，亦指照母二等而言。

袁子讓字學元元於前所引之內外轉解釋外，更於門法玉鑰匙之內外門下附註云：

此明十六攝其八名內轉，又其八名外轉者，謂各攝脣牙喉舌來日之切，若韵逢齒中照一等，在內轉攝中便切第三等字，在外轉攝中便切第二等字。蓋內轉之攝，牙舌脣喉下四音皆無二等字，惟齒音二等照一有字，故雖逢二等之韵而他音下無二等字可切，故只切第三，以二等字域於照一內也，故謂之內；外轉之攝，不獨齒中有照一，而牙舌脣喉四音俱有二等字，故通可切二等，以二等廣於照一外也，故謂之外。此門皆專以二等字之多寡而分也。如：'矣殊'切'熊'，'矣'喉切，而內轉喉下無二等，故切三之'熊'；'古雙'切'江'，'古'牙切，而外轉牙下有二等，故切二之'江'：是其例也。自是內外切法，如：'香楚'切'許'，'王所'切'雨'，'呼士'切'喜'，'古崇'切'弓'，'九數'切'句'，'公士'切'几'，'元初'切'魚'，'鄔阻'切'父'，皆從內轉切三；如'江卓'切'玨'，'牛要'切'瓦'，'亡爪'切'卯'，'古梢'切'交'，'戶生'切'行'，'漁沙'切'牙'，'古生'切'更'，皆從外轉切二：學者詳之。至於果假同攝，古謂之'內外混等'，謂果內而假外，二門互相切也。然此門法，予有疑于果，并有疑于臻焉。夫內轉韵逢照一切三，而果止轄一等，照一三等皆非所轄，何以謂之內？外轉逢照一切二，而臻攝脣牙喉下並無二等字，何以謂之外？此則袁生所未識也。內外不定，其此之謂乎？（卷三，頁十一，十二）

續通志七音略門法解云：

內三者，謂見溪郡疑，端透定泥，知徹澄孃，幫滂並明，非敷奉微，曉匣影喻，來日，此二十六母一二三四爲切，韵逢內八轉照穿狀審禪第一者，並切第三：

薑居疆切　　金居森切　　玉牛數切　　做甫爽切

外二者，謂見溪郡疑，端透定泥，知徹澄孃，幫滂並明，非敷奉微，曉匣影喻，來日，此二十六母一二三四爲切，韵逢外八轉照穿狀審禪第一者，並切第二：

江古雙切　　麻宋沙切　　班布山切　　皆官齋切

謹案，內三外二門亦因古人切脚不合今韵而立，故以內轉外轉而分切法，猶

之通廣偏狹二門以通廣六攝偏狹八攝而分切法也。 或云：牙舌脣喉四音無第二等字，惟齒音方具足，爲內八轉；五音四等字皆具足，爲外八轉。 以其說考之：臻攝開合二呼牙舌脣喉四音皆無第二等字，亦名外轉，則二等字多少之說爲不可通矣。

周春小學餘論云：

案內八轉通止遇果宕曾流深八攝是也；外八轉江蟹臻山效假梗咸八攝是也。何以謂之內外轉？ 謂見溪羣疑，端透定泥，知徹澄孃，非敷奉微，曉匣影喻來日，此二十二母爲切，韵逢照穿牀審禪第一，內轉切三，外轉切二。 如：'居霜'切'姜'字，'夫殊'切'熊'字，是內三門；'古雙'切'江'字，'德山'切'襠'字，是外二門之類：是也。 此亦十三門法之一，乃檢查反切板法，但可因此悟入，若既悟之後，則亦無用矣。(卷下，頁八)

要皆望文生訓，未能澈底了解。 間有心知其意者，又以辨例本身已自相矛盾，主張，但云二等止有正齒則切三等，無庸別立內外名目'：

梁僧寶切韵求蒙云：

通止遇果宕流深曾八攝爲內轉；凡內轉者，牙舌脣喉無二等字，獨齒音具足四等也。 江蟹臻山效假咸梗八攝爲外轉；凡外轉者，牙舌脣齒喉具足四等也。 切韵指掌檢例說本如此，而按之諸家韵譜不盡符，且必數韵合爲一葉，其說始明，蓋所謂具足四等者，非專在一韵也；若每韵各分葉，則此說可姑置弗論。 又內轉惟正齒有二等，則用三等引韵，如'側吟'切'簪'，'仕兢'切'繒'，'簪''繒'皆二等，'吟'，'兢'皆三等，所謂內轉切三也。 然臻攝亦惟正齒有二等，如'側人'切'榛'，'所巾'切'詵'，'榛'，'詵'皆二等，'人'，'巾'皆三等，原同內轉切二之例，何以又屬之外轉？ 矛盾若此，不如但云二等止有正齒則切三等，說較合矣，無庸立內外名目。(頁六下小註)

蓋臻攝二等祇有正齒而列之外轉，果攝全無二等而列之內轉，皆與辨例顯然牴牾，無怪陳澧勞乃宣[1]輩互推求，每多齟齬，無從窺其條理'認爲'內轉外轉但分四等字之全與不全，與審音無涉，宜置之不論'也。

1. 勞乃宣等韵一得外編頁四十九，五十。 2. 陳澧切韵考外編卷三，頁十二下。

果內臻外之與辨例牴牾，袁子讓梁僧寶及續通志門法解均論及之。 即明釋眞空翔安玉鑰匙捷徑門法歌訣之內外門例亦謂：

> 通曾止遇宕流深，故號名爲內轉門，效假江山咸梗蟹，內三外二自名分。
> (篇韵貫珠集卷八)

獨於果臻兩攝存而不論。 又日人大矢透韵鏡考引古寫本切韵指掌[1]云：

> 內轉者，取脣舌牙喉四音更無第二等字，只齒音方具足；外轉者，五音四等都具足。 舊圖以東(？)[2]通止遇宕流深臻八字括內轉六十七韵，江蟹山效果假咸梗八字括外轉一百三十九韵。(韵鏡考頁八三引)

湯淺重慶韵鏡問答鈔所引亦同：

> 切韵指掌云：內轉者，取脣舌牙喉四音更無第二等字，唯齒音方具足；外轉者，五音四等都具足。 舊圖以曾通止遇宕流深臻八字括內轉六十七韵，以江蟹山效果假咸梗括外轉一百三十九韵。(韵鏡考頁八五引)

逕以臻屬內轉，果屬外轉，與刊本等子及指掌圖均異。 惟其所謂'古'者，究在何時，既無從確定；且內轉六十七韵及外轉一百三十九韵仍沿刊本之舊，亦與臻果互易後之韵數不符：故尙難資信據。 竊謂臻果兩攝所以致乖互者，則以臻攝雖祇有正齒二等，而臻韵獨立一韵，與其他附入三等者不同；果攝全無二等，必與假攝同列其轉別始顯：專據辨例之說，殊難判其內外。 然二等具足與否，實係併轉爲攝後之偶然現象，聚韵成攝，乃可知其所指。 今韵鏡及七音略中之第九，(微開)，第十(微合)，第十九(欣)，第二十(文)，第四十一(凡，七音略第三十三)五轉，全無二等而各成一圖，當其未併入止臻咸三攝以前，將何從判其內外？ 儘知內外轉之分，別有所在，而二等具足與否之說不盡足據，則非特果應屬外，臻應屬內，卽宕攝亦當自內移外也。(詳下文)

(二)關於內外轉之異解

明清以來，不慊於四聲等子及切韵指掌圖之辨內外轉而別抒新解者，實不乏人。

1. 大矢透云：'河井仙郎所藏岡本保孝手澤本。 十六攝考於切韵指掌圖注云"又，古抄本藏於予家者"，蓋謂此也'。

2. 大矢透云：'東爲曾之訛，由下引韵鏡問答鈔所舉切韵指掌作'曾'可知'。

舉其著者，則或以收音爲內，發音爲外：

袁子讓字學元元云：

或謂：二等發聲，發者爲外，故照一切二謂之外；三等收聲，收者爲內，故照一切三謂之內。(見前)

呂維祺音韵日月燈云：

二等屬發，故謂之外；三等屬收，故謂之內。(見前)

或以合口爲內，開口爲外：

戴震聲韵考云：

各等又分開口呼合口呼，卽外聲內聲。(頁五下)

鄒漢勛五均論云：

鄭樵七音略有內轉外轉之目，劉鑑切韵指南每攝有內外之辨，江愼修謂之侈斂，卽開口合口之說也。　大氏開口爲內言，爲外轉，爲侈；合口爲外言，爲內轉，爲斂：其名殊，其實一也。(八呼廿論一論內言外言卽開口合口)

或以開口爲內，合口爲外：

西人商克(S. H. Schaank)疑內轉或卽開口，外轉或卽合口。(*T'oung Pao* Ser. 1. Vol. IX, P. 36 note)

或以翕音爲內，闢音爲外：

方以智切韵聲原引邵子衍[1]：

多良千刀妻宮心　　開丁安牛牙魚男(外轉)

禾光元毛衰龍尋　　囘君灣侯瓜烏審(內轉)

(通雅卷五十，頁二十一)

或以闢音爲內，翕音爲外：

釋宗常切韵正音經緯圖云：

闢音開括：脣齒齊張而動，內轉成音；

闢音發括：脣齒略張而微動，內轉成音；

翕音收括：脣吻略聚而動，外轉成音；

1. 案邵雍皇極經世聲音圖但以'多開'等爲'闢音'，'禾囘'等爲'翕音'，其外轉內轉則爲方氏所註。

翕音閉括：脣吻相聚而微動，外轉成音。

或以吸音爲內，呼音爲外：

日人毛利貞齋韵鏡秘訣袖中鈔云：

一說內轉之字唱之必吸氣，外轉之字調和如呼息。(卷七，頁十五上)

日釋盛典韵鏡易解云：

或云內轉所屬字吟稱之有吸氣，外轉所屬字調和似呼息。(卷一，頁二十二上)

或以舌縮爲內，舌舒爲外：

湯淺重慶韵鏡問答鈔云：

內轉者，呼其字舌縮如沒內，通止遇宕流深臻曾八攝謂之內轉。　假令呼'東'字，舌聲轉於內，舌者聲音之總會也，故舌聲轉於內，餘聲亦轉於內，是名之爲內轉。　外轉者，呼其字舌舒如出外，江蟹山效假果咸梗八攝謂之外轉。　假令呼江韵之字，舌舒出外，舌聲轉於外，餘聲亦轉於外，名之爲外轉。(韵鏡考頁八五引)

毛利貞齋韵鏡秘訣袖中鈔云：

逐韵四十二轉中有內轉外轉之別。　內者，呼字音舌縮如入內者也；外者，唱字音舌舒似出外者也。　舌者音聲之總會也，故依舌之舒縮，如脣牙齒喉之餘聲亦有內外之異也。(卷一，頁三上)

日人河野通清韵鑑古義標註云：

內外轉者，聲音因舌展縮而內外互轉也。　轉者，圓暢流利爲義。(卷下，甲)

或以旋於口內者爲內，旋於口外者爲外：

日釋文雄摩光韵鏡索隱云：

雄案，轉，廣韵云：'陟衰切，旋也'。音旋於口內是曰內轉，通止等八字所屬之韵是也；音旋於口外，是曰外轉，江蟹等八字所屬之韵是也。　指掌及日月燈之說未穩，蓋爲圖以後之論也已。(頁十七下)

異說紛紜，莫衷一是。　然稽之宋元等韵諸圖，內轉不皆收聲(三等)，外轉不皆發聲(二等)，則袁子讓呂維祺之說不可通；內外轉各有開合或闢翕，則戴震鄒漢勛商克乃以智釋宗常之說不可通。　至於吸音呼音，舌縮舌舒，內旋外旋之類，尤嫌玄而不

實，難以質言：要皆未能豁然貫通，怡然理順也！

(三)內外轉與主要元音之關係

閒嘗徧考宋元韵譜，證以切韵音讀，竊謂內轉外轉當以主要元音之弇侈而分。此說清儒江永已能言之。古韵標準云：

> 二十一侵至二十九凡，詞家謂之閉口音，顧氏合爲一部。 愚謂：此九韵與眞至仙十四韵相似，當以音之侈弇分爲兩部。 神珙等韵分深攝爲內轉，咸攝爲外轉，是也。(第十二部總論)

惟始發其緒，語焉不詳；且但舉咸深兩攝示例，未能通考諸攝。 日本之韵鏡家亦有知內外轉與元音之關係者：

津高益奧韵鏡諺解大成云：

> 一說，內轉者，字之始有ツ假名；外轉者，字之始有アイエヲ四假名。(卷一，頁五下)

其說至疏，按之各轉，多不相合。 至大島正健及大矢透乃推闡加詳，後出轉精：

大島正健韵鏡音韵考云：

> 內轉者，指在一等爲o(オ)元音，或一等缺位，在二等以下爲 o(オ)，u(ウ)，i(イ)等元音者而言；外轉者，指一二等爲a(ア)元音，三四等爲 e(エ) 元音者而言。 開合兩轉對列時，內外之別同一，合轉以開轉爲定則。(頁十三；韵鏡新解同。)
>
> 對照內外兩轉所屬諸韵之性質，內轉其響輕而弱，外轉其響重而强。 內轉外轉之別，當與吸音呼音之別同：內轉之韵卽吸音，外轉之韵多呼音。 (頁十八；韵鏡新解同)

大矢透韵鏡考亦以內外轉之差別，由'體韵'之'撮口''張口'而定，並以假名示各攝等位之韵形如下表：

韵鏡考中之內外轉圖

攝口體韻類	攝目		果	遇	止	流	通	曾		臻	深
	體韻	一等	オ	ウ	○	オ	オ	オ		○	○
		二等	○	○	○	○	○	○		○	○
		三等	イヨ	ウイエ	イ	ウイエ	ウイエ	イヨ		イ	イ
		四等	○	○	ㇾ	ㇾエ	○	ㇾヨ		ㇾ	ㇾ
	音尾		○			ウ	ン			マ	ム

張口體韻類	攝目		假		蟹	效	宕	江	梗	山	咸
	體韻	一等	○		ア	ア	ア	○	○	ア	ア
		二等	エヤ		アエ	アエ	○	アエ	アエ	アエ	アエ
		三等	イヤ		エ	エ	イヤ	○	エ	エ	エ
		四等	ㇾヤ		ㇾ	ㇾ	ㇾヤ	○	ㇾ	ㇾ	ㇾ
	音尾		○		イ	ウ	ン			マ	ム

且謂：

> 讀者試連呼上下二段之各四等觀之：上段撮口呼，豈非自一等至四等口形次第狹小，同時發聲氣息亦恰覺有引入內方之勢？ 下段張口呼，豈非次第覺有向外方强呼之勢？ 若以此分類爲正當，而試釋撮口呼爲內轉，張口呼爲外轉，則應何如？ 自宋以來對此區區內外轉之意義問題迄無定論，豈非至此始得明快說明之耶？(韵鏡考頁九九)

惟於切韵音值既未考證盡當，而'呼音吸音'，'張口撮口'之稱，尤易滋人誤會：是皆有待於修訂者也。 至於果臻宕三攝之屬內屬外，兩人意見亦不一致。 大島正健認果宕兩攝之元音爲o，故仍列於內轉[1]；而於臻攝則謂：

> 韵鏡之古本中，有以第十七，第十八，第十九，第二十之四轉爲外轉者，其理由不可窺測。 第六，第七兩轉對第十七，第十八兩轉，及第九，第十兩轉對第十九，第二十兩轉，均係無尾韵對有尾韵之關係，應爲同性質之轉，故無尾韵方面與有尾韵方面當同屬內轉自不待言。 其作爲外轉者，殆誤記也。(韵鏡新解頁十八。)

故亦改列爲內轉。 大矢透以爲：'第二等有字無字，爲製圖上偶然之現象，其理由不可解，而學術上之分類自當以體韵之開合爲當然'。 於是既移臻攝屬內，復據切韵指掌宕江同圖例(第十三，第十四)及唐譯陀羅尼集梵語雜名之對音，改列宕攝爲外轉。 惟於果攝獨據明覺悉曇要訣之譯音仍列於內轉，'以使體韵之張撮與音尾之相同者兩兩對立'，則猶囿於內外各八之遺型，未敢使其偏畸[2]。 而不知果假兩攝切韵指掌亦合爲一圖(第十一，第十二，)果假之不能同圖異轉，正猶宕江之不能同圖異轉也。 逮其晚年，始自覺未安，故於隋唐音圖中決定以通曾流止臻深遇七爲內攝，以宕江梗效蟹山咸果假九攝爲外轉。 如附圖所示[3]：

---

1. 參閱韵鏡音韵考及韵鏡新解頁十六。
2. 參閱韵鏡考頁九三至九九。
3. 隋唐音圖於昭和七年出版，係震災後補修者。

隋唐音圖中之內外轉圖（上）

隋唐音圖中之內外轉圖(下)

轉外																							
呼口張																							
假		果		咸			山				蟹				效		梗				江	宕	
合	開	合	開	合	開	開	合	開	合	開	合	開	合	開	合	開	合	開	合	開	開	合	開
		合ア	ア		ア	ア	合ア	ア			合ア		合ア	ア		ア						合ア	ア
合ア	イヤア				ア	ア	合ア	ア	合ア	ア	合ア	ア	合ア	ア		ア	ア	ア	合ア	ア	ア		ア
合ア	イヤ			エア	エ	エ	合エ	エ	合ア	エ	合ア	ア	合エ	エ		エ		エ	合エ	エ		合イヤア	イヤア
	イヤア				エ	エ	合エ	エ	エ	エ	エ	エ	合エ	エ	エ	エ	エ	エ	合エ	エ			イヤ
		合ア	ア		ア	オア	口ア	ア			合エ		合エ	ア		オ						ア	ア
合エ	ア				ア	ア	エア	エア	合ア	エ	合ア	エ	合エ	ア		エ	ア	イヤ	口ア	イヤ	オ		イヤ
合エ	イヤ			エアオ	オエ	エ	合エ	エ	合オ	オ	合ア	エ	合エ	ア		エ		イヤ	イヤ	イヤ		口ア	イヤア
	イヤア				エ	エ	合エ	エ	エ	エ	エ	エア	合エ	エア	エ	エ	イヤ	イヤ	イヤ	イヤ			イヤ
				ム			マ				イ				ウ		グ				グ	グ	
				ン			ン										ク				ク	ク	
				ム			ン				イ				ウ		イ				ウ	ウ	
				ン			ン										キク				ク	ク	
				ム			ン				イ○				ウ		イヤア				ウ	ウ	
				ン			チ										ク				ク	ク	
三〇	二九	二八	二七	四一	四〇	三九	二四	二三	二二	二一	一六	一五	一四	一三	二六	二五	三六	三五	三四	三三	三	三二	三一
麻		弋	歌	凡	談銜嚴鹽	覃咸鹽沃	桓刪仙先	寒刪仙先	山元仙		佳		灰皆齊	咍皆咍齊	豪爻宵蕭		耕清青		庚清		江	唐陽	
馬		果	哿	范	敢檻儼琰	感豏琰黍	緩潸獮銑	旱潸獮銑	産阮獮		蟹		賄	海駭海薺	晧巧小篠		耿靜迥		梗靜		講	蕩養	
禡		過	箇	梵	鬮鑑釅豔	勘陷豔桥	換諫線霰	翰諫線霰	襉願線		泰卦祭		隊怪祭霽	代怪霽	號效笑嘯		諍勁徑		諍敬勁		絳	宕	
				乏	盍狎業	合洽業怗	末 易黠薛屑		鎋月薛		癈 寄託		夬 寄託				麥昔錫		陌昔		覺	鐸藥	

韵鏡諸本中，關於果臻宕三攝內外之判定，所補殊尠。其可稍資啓發者，則日本醍醐三寶院所藏嘉吉元年（卽明英宗正統六年1441）寫本以第二十七轉（歌）爲外[1]；寬永五年（明思宗崇禎元年1628）刊本以第十七轉至第二十轉（眞諄欣文等）爲內；又清乾隆十三年（1748）刊本通志七音略以第三十四轉（卽韵鏡第三十一轉唐陽開口）爲外，於參差錯落中正可窺見古本韵鏡之消息。若更就各攝所含之元音求得通則，以爲判定內外之標準，則愈可增加校勘上之佐證也。

今若假定內七外九之說爲可信，而就近人擬測之切韵音值以歸納其通則，則：

（甲）內轉七攝：

1. 止攝四韵[3]，其主要元音爲[i]：

脂[i]　之[i:]　支[iĕ]　微[ĕi]

2. 遇攝三韵，其主要元音爲[u]及[o]：

模[o]　魚[ĭo]　虞[ĭu]

3. 通攝三韵，其主要元音爲[o]：

東[oŋ]　冬[uoŋ]　鍾[ĭwoŋ]

4. 流攝三韵，其主要元音爲[ə]：

侯[əu]　尤[ĭəu]　幽[iəu]

5. 臻攝七韵，其主要元音爲[ə]及[ĕ]：

痕[ən]　魂[uən]　臻[(ĭ)ĕn]　眞[ĭĕn]　諄[ĭuĕn]

欣[ĭən]　文[ĭuən]

6. 深攝一韵，其主要元音爲[ə]：

侵[ĭəm]

7. 曾攝二韵，其主要元音爲[ə]：

登[əŋ]　蒸[ĭəŋ]

（乙）外轉九攝：

8. 果攝二韵，其主要元音爲[ɑ]：

---

1. 據韵鏡考頁二一一所引。
2. 本文所用切韵音值，除模魚東三韵外，皆依高本漢之擬測。
3. 此處所謂韵，皆舉平以賅上去入。

歌[ɑ]　　戈[uɑ]

9. 假攝一韵，其主要元音爲[a]：

麻[a]

10. 蟹攝九韵，其主要元音爲[ɑ]，[a]，[ɐ]，[æ]，[e]：

咍[ɑi]　灰[uɑi]　泰[ɑi]　皆[ai]　佳[ai]

夬[uai]　廢[ĭwɯi]　祭[ĭæi]　齊[iei]

11. 效攝四韵，其主要元音爲[ɑ]，[a]，[æ]，[e]：

豪[ɑu]　肴[au]　宵[ĭæu]　蕭[ieu]

12. 山攝七韵，其主要元音爲[ɑ]，[a]，[ɐ]，[æ]，[e]：

寒[ɑn]　桓[uɑn]　山[an]　刪[an]　元[ĭɐn]

仙[ĭæn]　先[ien]

13. 咸攝七韵，其主要元音爲[ɑ]，[a]，[ɐ]，[æ]，[e]：

覃[ɑm]　談[ɑm]　咸[am]　銜[am]　嚴[ɐm]

鹽[ĭæm]　添[iem]

14. 宕攝二韵，其主要元音爲[ɑ]，[a]：

唐[ɑŋ]　陽[ĭaŋ]

15. 江攝一韵，其主要元音爲[ɔ]：

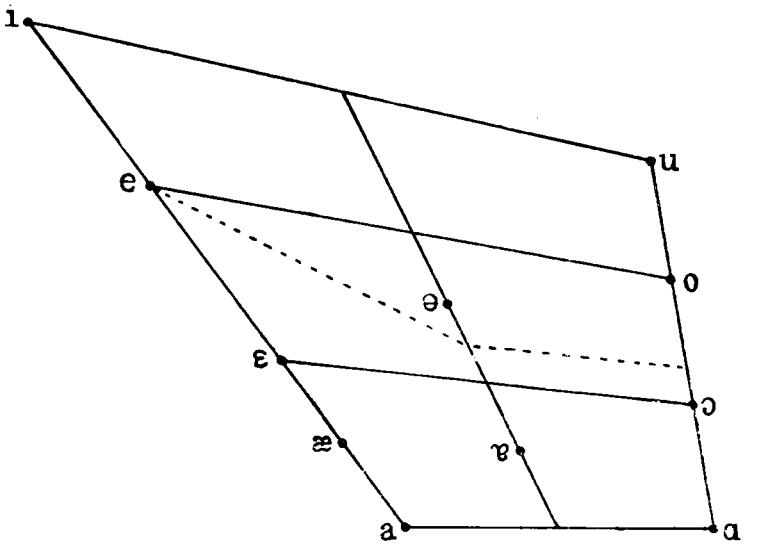
江[ɔŋ]

16. 梗攝四韵，其主要元音爲[ɐ]，[ɛ]，[æ]，[e]：

庚[ɐŋ]　耕[ɛŋ]　清[ĭæŋ]　青[ieŋ]

準是而論，則所謂內轉者，皆含有後元音[u][o]，中元音[ɔ]及前高元音[i][e]之韵；外轉者，皆含有前元音[e][ɛ][æ][a]，中元音[ɐ]及後低元音[ɑ][ɔ]之韵。　如自元音圖中第二標準元音[e]引一斜線至中元音[ə]以下一點，更由此平行達於第六標準元音[ɔ]以上一點，則凡在此線上者皆內轉元音，在此線下者皆外轉元音，惟[e]之短音應屬內，長音應屬外耳。　其分配如下圖：

內外轉元音分配圖



線以上之元音較後而高，後則舌縮，高則口弇，故謂之'內'；線以下之元音較前而低，前則舌舒，低則口侈，故謂之'外'。其理既明，而後知江愼修內弇外侈之說確有所見也。大矢透輩演繹其旨，推闡加詳，其功誠不可沒，惟竟謂支那不能瞭解內外轉眞義，必待彼而後明[1]！其亦知我國前脩固已早發其端，而日人拘守假名，審音尙未精密耶？

(四)內外轉之特徵

由上所論，可知二等字具足與否，乃內外轉之現象，而非內外轉之本體。四聲等子及切韻指掌圖之著者既併轉爲攝，求內外轉之意義而不可得，於是乃揭槩二等具足與否一端，以爲辨內外轉例。按諸實際，內外轉之特徵，固不止此。據大島正健韻鏡新解所舉：

內轉之特徵如下：

1. 二等祇能有正齒音，不得再有其他諸音；

2. 除第二十二轉(元)，第四十一轉(凡)及第十六轉之寄韵(廢)[2]外，輕脣音祇存

1. 參閱韵鏡考頁一〇〇。

2. 案韵鏡各本，廢韵多附內轉第十(微合)，惟七音略列於第十六轉(佳)內。

於內轉而不屬於外轉；

3. 匣母不現於三等，又除第十七轉(眞)外，亦不現於四等；

4. 除第三十七轉(幽)外，來母不見於四等。

(頁十三，十四)

外轉之特徵如下：

1. 脣舌牙喉半舌五音與齒音並得列於二等；

2. 脣音在二等全部爲重，在三等除第二十二(元)第四十一(凡)兩轉及第十六轉之寄韵(廢)外，皆爲重母；

3. 匣母不現於三等與內轉同，其所異者卽在能現於四等；

4. 來母得現於四等。

(頁十七，十八)

所指各點，除宕果兩攝外，大體皆然。 可知二等具足與否，實非內外轉惟一之特徵；且如驗諸音理而不合，則與其遷就表面之特徵，勿寧但求音理之通達。 大島正健對於宕攝既據和漢對譯，梵漢對譯之音讀，及正韵字彙陽江相通之事實，而疑其應屬於外轉，終以此攝性質悉合於內轉之條件，又斷定其應讀如江南之 ông 音[1]；對於果攝既知其在和漢對譯及梵漢對譯中韵響有 a，而亦不能從韵鏡發揮之說改列外轉，反謂韵鏡當時之音已同於現在中國各省之 o[2]：則皆不免瞻徇舊說，捨本逐末矣！ 至於脣音在外轉之變輕母者，惟限於元凡廢三韵，則因主要元音[ɐ]與內轉之[ɔ]相近，故得有此相同之演變也。

(五)附釋轉字義

案，河野通清韵鑑古義標註云：

轉者，圓轉流利爲義；(見前)

井上文雄磨光韵鏡要隱云：

廣韵，轉，陟兗切，旋也。(見前)

1. 參閱韵鏡音韵考及韵鏡新解頁十六。

2. 同上。

余謂：前義差勝於後，然轉雖與囀同，而非卽'圓囀流利'。　淮南子脩務訓：

故秦楚燕魏之歌也，異轉而皆樂。

高誘註：

轉，音聲也。

廣韵去聲三十三線：

囀，韵也，又鳥吟，知戀切。

集韵：

囀，株戀切，聲轉也。

據雷浚說文外編：

囀，知戀切，鳥鳴也。　說文無囀字，祇可作轉。　周伯琦六書正訛曰：轉別作囀，非。

是轉與囀實卽一字，於此應訓唱誦。　等韵之學傳自沙門，其義當本於六朝經師之'轉讀'。　慧皎高僧傳第十三，論曰：

天竺方俗，凡歌詠法言，皆稱爲唄。　至於此土，詠經則稱爲轉讀，歌讚則號爲梵唄。

支曇籥傳云：

嘗夢天神授其聲法，覺因裁製新聲。　梵響清靡，四飛却轉，反折還弄。

智宗傳云：

若乃八關之夕，中宵之後，四衆低昂，睡眠交至。　宗則升坐一轉，梵響干雲；莫不開神暢體，豁然醒悟。

又道宣續高僧傳第四十，善權傳云：

每讀碑誌，多疏儷詞。……　及登席，列用牽引而囀之。

蓋皆以唱誦經文，宏宣教義，殆卽所謂：'此方眞教體，清淨在音聞，我昔三摩提，盡從聞中入'者也。　由此演變，遂成唐五代之'俗文'，'變文'，故敦煌石室所發現之民間唱本，如太子五更轉之類，猶以轉稱。　至於以聲經韵緯，縱橫成叶之圖爲一轉者，則源出梵音之'悉曇章'。　日本入唐求法僧空海所撰悉曇字母并釋義於所列五十根本

1. 據北京刻經處弘法大師雜著八種本。

字後，更舉迦(a)，迦(ā)，祈(i)，雞(ī)，句(u)，句(ū)，計(e)，蓋(ai)，句(o)，皓(au)，欠(am)，迦ㄨ(aḥ)十二摩多[1]，並謂：

> 此十二字者，一箇迦字之一轉也。從此一迦字母門，出生十二字。如是一一字母各出生十二字，一轉有四百八字。如是有二合三合四合之轉，都有一萬三千八百七十二字。(頁七)

七音略及韵鏡之四十三轉圖，當卽模仿悉曇型式而歸納切韵音類以演成者：其所謂'轉'，固應指唱誦言也。鄭漁仲謂：'釋氏以參禪爲大悟，通音爲小悟'[2]。後代釋子，有所謂'韵主'者，卽純以唱韵開悟後學。劉獻廷廣陽雜記中記虛谷大師事云：

> 虛谷大師本無錫秦氏，其祖爲長沙太守，遂流寓衡山，宗族間久不通音問矣。師年七十六，而精健如少年，視聽尙不稍衰。其教下法派，則本之二楞一兩，固賢首也。曾聽南華內七篇於耳觀師，有省，自此深好外典。爲人直逼前古，好學之誠，出於天性。更能誨人不倦，毫無覆藏，見處亦自超脫。嘗受等韵之學於語拙韵主。韵主眞定鉅鹿人，爲黃山第二代教授師。當明中葉，等韵之學盛行於世。北京衍法五臺，西蜀峨眉，中州伏牛，南海普陀，皆有韵主和尙，純以唱韵開悟學者。學者目參禪爲大悟門，等韵爲小悟門。而徽州黃山普門和尙，尤爲諸方所推重。語拙師幼不識字，年三十矣，入黃山充火頭，寒暑一衲，行住坐臥惟唱等韵。如是六年，一旦豁然而悟，凡藏典緐譯，無留難者。遂爲第二代韵主教授師。歲在丁卯，傳法南來，五臺顯愍和尙甚器重之。桂王聞其名，延入潞府，執弟子禮，學等韵。後養於南岳以終老焉。虛谷大師嘗從之學，深有所得，受付囑，迄今五十矣。嘗抱人琴俱亡之懼，遂人卽詔之學等韵。(畿輔叢書本卷三，頁三十五)

所記事蹟，雖涉神奇，然亦可見唱誦在等韵中之重要矣。今字母切韵要法中之內合四聲音韵圖及禪門日誦中之華嚴字母韵圖猶存'唱'字之迹，趙憩之先生已論及之[3]，余因詮釋內外轉之意義，更附論轉與唱之關係如此。

---

1. 原本列有梵字，今改爲羅馬字注音，以便印刷。

2. 通志七音略序。

3. 參閱趙蔭棠康熙字典字母切韵要法考證第四節，本所集刊第三本第一分，頁 101 至105。

泰興何石閭韵史稿本跋

羅常培

民國二十二年，五月，泰興鄭權伯（鼐經）先生以其鄉前輩何石閭先生所著韵史稿八十卷及總目四卷見示。余因卷帙浩繁，且勘暇暑，遷延數月，始獲卒讀。綜繹全書，雖間有可商，而體大功深，未嘗不令人心折也！

案，石閭名萱，號霅廬，道光歲貢。其先自皖之休寧移居泰興，六傳至石閭，以家業中落，徙如皋石莊，斌居湯氏廢圃，老屋數椽，蓬蒿沒人，而積書至數千卷，誦讀不輟。晚乃歸泰興，益屏棄舉業，杜門撰述。嘗與同邑陳東之（潮）往復商榷。東之潛心勾股四元之學，擬撰算鑑，未竟而歿。石閭乃發憤以成是書，其畢生精力萃於此，亦瘁於此矣！以清道光二十一年辛丑卒，年六十八（一七七四—一八四一）。其所著書，於韵史而外，有紅露館文集十卷，詩集一卷，琴法指掌二卷，均未刊行。當時碩學如武進李申耆，邵陽魏默深，江都汪孟慈，仁和龔定盦等皆與之友善，申耆於韵史尤多所商定；而大興徐星伯，臨桂吳百朋，壽陽祁醇甫亦並索觀其書，議付梓而未果。迄今百年，迭更事變，而全稿幸存，亦足珍矣！(1)

韵史纂述旨趣，具詳石閭答吳百朋書。蓋欲綜文字之形音義三端而一以貫之。收字以說文爲本而佐以玉篇廣韵；以說文爲正編，玉篇廣韵爲副編。其論字形則以篆隸同體者爲正，隸稍簡易而不悖乎篆意者亦爲正；其義同而字晚出者附見焉；義同而體俗陋者明辨焉。其論字義則以本義爲先，引申之義次之，皆以說文爲首而傳註箋疏次第隸焉。且以假借爲聲音文字之大用，故尤致意於正借之辨，欲使學者眞識字而無難。至其論字音也，則較形義爲獨詳，而尤斤斤於"形有定部，部有定形"之義。蓋據段懋堂古韵十七部以矯廣韵以下同部者瀆析離居之失，因形定音，援音求義，明古今之變，通音義之郵，亦足尚矣！然其改定字母，拘守五聲，誤解等呼之說，臆改反切舊法，則皆不可不辨也。

---

(1) 節采江陰鄭經擬石閭何先生家傳及光緒泰興縣志卷二十二，頁二十三。

石閻以爲：今所傳見溪郡疑等三十六母有複有漏，未爲精善，"非敷泥娘皆一誤爲二，複矣；見端等母有全無易，明微等母有易無全，扁矣；知徹澄三母之字，古音同於端透定，今音同於照穿牀，不必另出，另出亦複矣。"其說蓋本於潘次耕類音。然觀其所定："見起影曉，短透乃賚，照助耳審，井淨我信，謗並命匪未"二十一字母，則又本方密之說而別出影母，複雖已删，漏乃未益：實元明以來北音之聲系也。至於字母標目避免平聲，而謂"平聲有全有易，應以二十一爲四十二"，則與明李登書文音義便考私編"平則三十一母，仄則二十一母"之說立指相近：誤認"清濁"爲"陰陽"乃使聲母與聲調莫辨矣！惟清代治古音者，率多精於辨韵而疏於別聲，石閻生乎顧江戴段之後，古韵分部已具規模，古聲系統仍無定論，既未甘於守温舊譜，遂致惑於元明北音，誤雖須訂，情實可恕：此應辨正者一也。

四聲各有清濁，孫愐所論最爲明確。自"清濁"之辨不顯，而後"陰陽"之說乃興。周挺齋云："陰陽字平聲有之，上去俱無；"方密之承其說，更定爲啞噴上去入五聲：此皆元明以來之變音，治古音者固可存而不論也。而石閻謂："音之有清濁也，爲平聲言之也。全平爲清，易平爲濁，不容淆也。上去二聲各祇一音，無全易清濁之可言也；彊欲言之，亦姑曰上去相爲全易而已。……入聲每字皆含全易二聲，視水土之輕重而判：輕則清矣，其出音也，送之不足而爲全；重則濁矣，其出音也，送之足而爲易：韵史內入聲全易幷合者此也。"是於方音入聲本有陰陽之別者，亦寧過而合之，拘執方氏五聲之說，於考古審音兩無所當！竊謂治古音者非特無須分別陰陽，抑且不必囿於四聲。段懋堂云："古四聲不同今韵，猶古本音不同今韵也。考周秦漢初之文，有平上入而無去；洎乎魏晉，上入聲多轉而爲去，平聲多轉爲仄聲。於是乎四聲大備而與古不侔：有古平而今仄者，有古上入而今去者，細意搜尋，隨在可得其條理。"江子蘭亦云："段氏論音，謂古無去，故譜諸書，平而上入。今次說文，得聲以貫：來流爲麥，特出於之，而爲悤音，丕得不讀，古今音異，輕重難分。卽如譜中，來猷在入，夕惡在平，若以區分，必成矛盾，不如合之，以省穿鑿。"今石閻既據段氏十七部說以排比說文全部諸聲，而韵史序次，則"每類之中由平而上，而去入，而副編"，以致同從一聲散見數處（例如，第一部從亥聲者平聲"該晐垓荄賅侅陔豥核荄"及"晐陔豥"既分爲"艮哉""漢材"兩切，而"亥駭"則列入上聲，"核劾"則列入去聲：舉此一例，他可隅反。）

同部雖未蕩析離居，異韵仍難同條共貫：此應辨正者二也。

宋元韵譜，"等"與"呼"別。自"等"義失傳，而後韵法直圖捨"等"增"呼"，徒亂人意；潘耒類音減"呼"爲四，始就定型：雖與前軌有殊，實亦自成流派。今石閻謂："等韵之說，蒙向所不曉，私以爲可無庸，故韵史祇用四呼。開口合口兩呼其音侈，侈則洪矣；齊齒撮口兩呼其音斂，斂則纖矣。舉洪纖而等攝尖團在其中，不知後人何以必言等韵也！"是猶遵循明清人說，並未遠於知矩。然其分配等呼也，則以一等爲開口呼，二等爲合口呼，三等爲齊齒呼，四等爲撮口呼，昧於等呼交錯爲用之旨，遂致以肴爲合，以幽爲撮，於宋於清，皆未爲是！故其失不在屏棄等韵，而在誤解四呼：此應辨正者三也。

反切之有類隔，固爲舊法之弊，然古今音異，正可藉以考明：此錢曉徵古無輕脣舌上之論所以爲卓識也。石閻力闢類隔之法，於韵史悉改音和，上字則"每母每評各用兩字出切，一母四評，凡用八字，惟脣音不備"；下字則每韵每評亦用兩字行韵，惟平聲因陰陽而分爲四。其所操術雖與楊選杞李光地諸前後略同，而彼在革新，此則稽古，旨趣既異，得失遂殊。蓋以聲準近代，韵擬周秦，"海"，"駭"共爲一音(漢乃切)，"意"，"異"竟成同切(隱記切)；尙論說文舊讀既嫌枘鑿難合，推稽古聲遺跡亦復面目全非：此應辨正者四也。

然此書雖以"韵史"名，而其所以嘉惠來學者，乃在訓詁，不在音韵。段懋堂云："諧聲之字半主義半主聲。凡字書以義爲經而聲緯之，許叔重之說文解字是也；凡韵書以聲爲經而義緯之，商周當有其書而亡佚久矣"。戴東原答段氏論韵書亦云："諧聲字半主義半主聲，說文九千餘字以義相統，今作諧聲表，若盡取而列之，使以聲相統，條貫而下如譜系，則亦必傳之作也"。段氏頻年欲爲之而未果，至嘉慶十年乙丑(一八〇五)乃屬江子蘭譜之，歷四年而說文解字音均表成(一八〇九)。其書但以說文爲主，尙未旁及傳註箋疏也。韵史成書年月雖無明文，然以何氏卒年(一八四一)考之，則在段氏說文解字注(一七九四)後四十七年，在阮氏經籍纂詁(一七九九)後四十二年，在江氏說文解字音均表(一八〇九)後三十二年，故石閻晚年當已得見諸書。其能不墨守說文而旁羅傳註箋疏以明字義正借之辨者，蓋受阮氏之啓迪至大；惜誤於明清等韵家言未能盡沿江氏義例耳！並石閻同時而著書旨趣相近者，則有朱允倩

(一七八八——一八五八) 說文通訓定聲。 朱書經始於道光丁亥庚寅間 (一八二七——一八三〇)，乙未(一八三五) 而前半脫藁，戊申(一八四八) 而全書刻成；其於韵史當爲閉戶暗合，未嘗麗澤相取也。 以兩書體例觀之，朱則純以諧聲相統，何乃參用今音條貫，識見雖異，而功力實同。 然百年以來，朱書則傳誦士林，韵史則沈霾閭里，斯亦事之不平者已！ 儻有識者，授諸剞劂，俾後之學人耑知當時風尚所趨，前賢精力所萃，則其有功於清代漢學史者，豈淺鮮歟？ 是爲跋。

中華民國二十二年，十二月，六日，羅常培識於上海小萬柳堂。

附錄 何石閒畬吳百盉論韵史書

萱之撰韵史也，商推條例，多與舊韵書違異，惟吾友陳東之能匡其不逮。 自其遠遊，談古義者益鮮，不知閉門造車，出門果能合轍否矣！

書之大要有三：形也，音也，義也。 收字以說文爲本，而玉篇廣韵佐之；說文爲正編，玉篇廣韵爲副編。 一類中平上去入正副編皆竣，而後及於他類。 因倣段懋堂先生十七部之說而擴之。

篆隸同體者正也；隸稍就簡易而不悖乎篆意者亦正也。 其義同而字晚出者附見焉；義同而體俗陋者明辨焉：不扁亦不溷矣。 說文所無而見於玉篇廣韵者，概收於副編，亦一字不遺者，以其於字書韵書爲近古，所收之字，較集韵等書差覺謹嚴也。間有不合六書，其體繆盭，亦復過而存之，不徑薙去，所以猷學者之心也。

形有定部，部亦有定形，本不相溷也。 六朝人爲韵書未必盡昧乎此，而識不堅定，轉以後世流變之音定其部居，而形體與部分乃雜出而不相應矣。 故韵史先定其形，形定而音乃可言矣。 書契與聲歌皆起於皇古，則韵部之分由來已久。 父師子弟，沿襲率循；韵史象胥，整齊畫一；故不必特勒成書，而師儒墨守，自無越畔。春秋以降，象胥不行。 原伯魯之徒既多，五方又各爲風氣，音漸轉迻。 降及六代，天光分耀，音益多歧，韵之古今自茲判，而辨音之詳亦卽自茲而嶽。

許氏解字祇云某聲，鄭君注經祇云讀若某，至孫叔然始作翻紐，猶未有字母也。舍利三十字母，西域音三十六字母，金剛經五十字母，般若經四十一字母，華嚴經四

十二字母，蒙古音四十一字母，皆與今所行三十六字母——見溪羣疑——不同。三十六母行之既久，似爲近矣；然諦觀之，則有複有闕，未爲精善也。非敷泥娘皆一誤爲二，複矣。見端等母有全無易，明微等母有易無全，闕矣。知徹澄三母之字，古音同於端透定，今音同於照穿牀，不必另出，另出亦複矣。故吳草廬三十六字母，李如眞二十二字母，新安三十二字母，方密之二十字母，皆不用知徹澄。陳晉翁三十二字母存知徹澄而去照穿牀，其意亦同耳。方氏幷非敷奉爲一是也，然去影喻二母則闕矣。戴先生東原亦用二十母，而與方大異，惟其微母字別爲條，則非愚心所安也。故愚之韵史定爲二十一母；平聲有全易，則以二十一爲四十二也。舊時言字母者或云九音，或云七音，今細審之，祇須言四音耳。見溪影曉喉音也（見溪不必言牙音），端透泥來舌音也（來不必言半舌），照穿日審精淸疑心正齒齒頭音也（日不必言半齒疑乃鼻音非牙音也附齒頭差近），邦滂明非微脣音也（重脣三輕脣二）。萱之所擬廿一字母曰"見起影曉，短透乃貧，照助耳審，非淨我信，謗並命匪未"也。概不用平聲字，避平聲字有全易也。以四音廿一母統摄衆字，則音聲無不舉矣，不審舊來何以紛紛立法之多也。韵史每部每評卽以廿一母次第爲列字次第。同紐之中，又以形近系聯，不泥舊次矣。

音之有淸濁也，爲平聲言之也。全平爲淸，易平爲濁，不容淆也。上去二聲，各祇一音，無全易淸濁之可言也。强欲言之，亦姑曰上去相爲全易而已。舊乃有上濁最濁之說，非自擾歟？唐一行謂上去自爲淸濁，是也；自爲淸濁卽萱相爲全易之說也。入聲每字皆合全易二聲，視水土之輕重而判。輕則淸矣，其出音也送之不足而爲全；重則濁矣，其出音也送之足而爲易。韵史內入聲全易幷合者此也。舊韵書乃一一劃分，似未識此意。至上去二聲內又判別某爲易，某爲全，則近於罔矣！音之有四聲也，一以貫之者也。韵史每類之中，由平而上而去而入而副編，分別部居，不相雜廁。治六書者於一類四聲之全觀其會通，其於引伸假借之指，思過半矣。舊韵書乃以四聲劃分，恐未諧於音理也。

至於反切之法，後世必不能無，而有絕不可解者，則類隔是也。反切以雙聲爲用，故曰音和；類隔則不和矣，何反切之有！反切上一字既用一定之母，其下一字縱使本韵本評無字可用，亦豈無術焉以處此，而强立不甚通之法以惑後人乎？惟

字母有定位，故反切有定法。 若定位仍可游移，則定法豈爲準則？ 故韵史專用音和也。 且所謂字母者，姑借此數十字以定位，非謂此數十字外皆不可爲母也。 惟字字可爲母，故其定位也雖一成而不變，而其出切也自循環而不窮矣。 若兼用類隔，則是借此位之母切彼位之字，其於切本母本位者，何以別乎？ 故斷不可用也。

又等韵之說，蒙向所不曉，私以爲可無庸。 故韵史祇用四評： 開口合口兩評其音侈，侈則洪矣；齊齒撮口兩評其音歛，歛則纖矣。 舉洪纖而等攝尖團在其中，不知後人何以必言等韵也。 呂介孺韵鐸，江脊修古韵標準四聲切韵表經之以四等，析之以開合，緯之以三十六母，逐紐排列，詳且明矣；然萱終以其紙上所談，不敢信，故不敢從，若以己所不信者餉後人，平生所尤戒也！

韵史之形與音既定，而後詳其訓釋。本義爲先，引伸之義次之，皆以說文爲首，傳注箋疏次第隸焉。 至叚借爲六書之一耑，是聲音文字之大用也。 注家或不明言，學人宜知辨別。 乃釋文兼蓄並收，注疏望文生說 正借之分陸孔輩不盡悟也，無論邢叔明以下矣。 韵書會稡古今，立爲通法，自當專收正體，而叚借各附於本字，其無字可歸，終古叚借者，方可特出。 乃廣韵以下，不辨正借，往往一字數音，亂人神智。 集韵類篇汎濫益甚，甚至半簡之中，非族屢收；一字之下，譌體叢出；其晚近無用之字不堪掇拾者，又不足辨也，識字豈不難哉？ 凡韵史之作，將使學者眞識字而無難也；苟學者眞識字而無難，則萱之精力盡於此書而不悔也。

ACADEMIA SINICA

BULLETIN
of
The National Research Institute
of
History and Philology

Vol. IV, Part 2

CONTENTS

Tone and Intonation in Chinese — Y. R. Chao

Certain Phonetic Influences of the Tibetan Prefixes upon the Root Initials — Fang-kuei Li

on "譚" — Tung Tso-pin

A Lolo Transliteration of *T'ai-Shang-Ch'ing-Ching-Hsiao-Tsai-Ching* — Yang Ch'êng-chih

Biography of Wei Hsiu-jên—the Author of *Hua Yüeh Hên* — Jung Chao-tsu

An Explanation of the Chinese Phonological terms "內轉" and "外轉" — Lo Ch'ang-p'ei

Notes on the Manuscript of Ho-Hsüan's *Yün-Shih* — Lo Ch'ang-p'ei

Shanghai

1933