JOURNAL

of the

WEST CHINA BORDER

RESEARCH SOCIETY

Vol. V, 1932

Editor: L. G. Kilborn

Editorial Committee:

R. O. Jolliffe

D. L. Phelps

L. G. Kilborn

Price to non-members of the Society, $3.00
Szechwan Currency

Printed by the
United Church of Canada Mission Press
Chengtu, Szechwan,
China

CONTENTS

FOREWORD

Volume V of the Journal of the West China Border Research Society is the first volume to bear the title of "annual." In the Spring of 1933 the Society decided that its publication should henceforth appear as an annual instead of once in two years, and although this volume is late in appearing, it nevertheless bears the date of only one year. A considerable amount of manuscript is now on hand for Volume VI, 1933, and its publication will be proceeded with at once.

Once more the Society wishes to record its appreciation for assistance received from the Harvard-Yenching Committee of the West China Union University. Through its generosity the inclusion of a considerable number of photographic plates has been made possible. A number of these represent articles in the museum of the university, and we expect to include a still larger number of these pictures in future numbers of the Journal. Plans have been initiated by the university for a closer degree of cooperation between the university and this Journal, and these will be laid before the members of the Society at its next annual meeting for consideration.

The editor wishes to thank Mr. John Kitchen and other members of the Canadian Mission Press for their courteous assistance in the production of this journal. Their help has considerably reduced his labors. He also wishes to thank Mr. Lewis C. Walmsley for his production of the cover design for this issue, and Dr. Harrison J. Mullett for his design for Volume IV. Both these have increased the attractiveness of the Journal's outward aspect.

The attention of members and others is called to the statement on the back cover regarding the special supplement to Volume V, now in the Press. This will be sent only to those members and others who specifically order it, as on account of its technical nature, its cost of publication is not included in the regular membership dues.

L.C.K.

PROGRAM OF OPEN MEETINGS

1932—1933

Oct.	15	Buddhist Mysticism Chinese Temple Architecture *(Illustrated)*	Dr. Reichelt Dr. Prip Moller
Nov.	5	The Badi-Bawang	J. H. Edgar
Nov.	26	A Survey of Endemic Goiter in Kinchuan District with Notes on the Geologic and Ethnologic Factors and Meteorlogic Conditions. *(Illustrated)*	S. H. Liljestrand
Dec.	17	An Excursion into Nosu Land *(Illustrated)*	F. Dickinson H. J. Mullett
Jan.	7	Chinese Medicine—Acupuncture *(Illustrated)*	W. R. Morse
Feb.	18	West China Union University Beginnings	J. Beech
Mar.	4	My Omei Pilgrimage *(Illustrated)*	D. L. Phelps
Mar.	25	The Revolution of 1911-12 in Szechwan	S. C. Yang
Apr.	8	Some Missionary Experiences on the Indian and Tibetan-Chinese Borders	J. Neave
Apr.	22	A Year's Research in the Department of Physiology and Pharmacology *(Illustrated)*	L. G. Kilborn
May.	6	A Study of Chinese Music	C. Blanche Brace Charles Chiu

OFFICERS OF THE SOCIETY

1922-1923

President	W. R. Morse
Vice-President	G. G. Helde
Secretary	E. Dome (resigned Dec. 8, 1922)
	A. J. Brace (from Dec. 8, 1922)
Treasurer	D. L. Phelps
Fifth Member of Executive	J. Hutson (resigned March 10, 1923)
	J. Beech (from March 19, 1923)

1923-1924

President	G. G. Helde
Vice-President	J. Beech
Secretary	A. J. Brace
Treasurer	D. L. Phelps
Fifth Member of Executive	E. C. Wilford

1924-1925

President	G. G. Helde
Vice-President	J. Beech
Secretary	D. S. Dye
Treasurer	D. L. Phelps
Fifth Member of Executive	———

1925-1926

President	W. R. Morse
Vice-President	G. M. Franck
Secretary	D. S. Dye
Treasurer	H. D. Brown
Fifth Member of Executive	G. G. Helde

1926-1929

President	W. R. Morse
Vice-President	T. E. Plewman
Secretary	D. S. Dye
Treasurer	H. D. Brown
Fifth Member of Executive	L. G. Kilborn

1929-1930

President	D. S. Dye
Vice-President	T. Torrance
Secretary	L. G. Kilborn
Treasurer	O. G. Starrett
Fifth Member of Executive	A.W. Lindsay

1930-1931

President	D. S. Dye
Vice-President	A.W. Lindsay
Secretary	L. G. Kilborn
Treasurer	O. G. Starrett
Fifth Member of Executive	T. Torrance

1931-1932

President	D. S. Dye
Vice-President	S. H. Liljestrand
Secretary	L. G. Kilborn
Treasurer	D. L. Phelps
Fifth Member of Executive	F. Boreham

1932-1933

Honorary President	J. H. Edgar
President	W. R. Morse
Vice-President	S. H. Fong
Secretary-Treasurer	A. J. Brace
Editor	L. G. Kilborn
Member of Executive	F. Boreham

1933-1934

Honorary President	J. H. Edgar
President	S. H. Liljestrand
Vice-President	S. C. Yang
Secretary	D. C. Graham
Treasurer	W. B. Albertson
Editor	L. G. Kilborn
Member of Executive	W. R. Morse

Picture of a Tibetan wheel of life in the West China University Museum. It might also be called the wheel of transmigration or the wheel of existence. According to Sorensen,* the wheel is held in the clutches of a monster representing the clinging to existence. It is kept in continuous revolution by three figures in the inner circle, a pig, a dove, and a snake, representing lust, anger, and stupidity. The six possible kinds of existence for a soul are represented as gods, demons, human beings, beasts, ghosts, and beings in hell, and also the ways of suffering during the various kinds of existence.

*Theo. Sorensen, Work in Tibet, China Inland Mission, Tatsienlu, West China, 1919-20.

SOME INTERESTING ANIMALS OF SZECHWAN.

F. T. SMITH.

West China is, as the Roosevelt Brothers have very truly stated in their book, no big game hunter's paradise. But among the larger animals there are a number in this part of the world that make the country west of Chengtu and north of the Yangtze river a most interesting zoological region.

In an article titled "Wild Animals that are Never Seen in Zoos," Dr. Hornaday—the "builder" of the Bronx Zoological Gardens—includes, as such, the giant and lesser pandas, takin, serow, golden haired monkey, okapi, bongo and a ard vark. Among these he places the giant panda in first place for rarity, with the bongo and okapi following. The last three—two antelopes and an ant eater called "earth hog"—belong to Africa only, but the first five are all to be found in the region we have under consideration, while three of them occur nowhere else. And it is with these five distinctly unique beasts that this short article will deal.

The giant panda (Ailuropus melanoleucus) stands in a class by itself among these animal curiosities. Until Kermit Roosevelt's sporting forbearance permitted him and his brother to fire simultaneously at the one they secured no white man had ever set eyes on a living specimen, and until then the few stuffed specimens on exhibition had been made up from bought—and more or less imperfect—skins. The British Museum alone had secured some bones, which adorn a section of wall, placed side by side with the corresponding bones of a bear.

But the rarety of Ailuropus is not his only claim to distinction. In markings he is one of the most peculiar of creatures, being white all over except for black legs, a black band over the shoulders, black eyes, black ears and a black snout. Also he might well have featured as a "What is it? Name it and you can have it" exhibit in one of P. T. Barnum's earlier "Wonder Shows" before the "Greatest Show on Earth" was born. But his identity and range had better be left for consideration along with those of his cousin, the lesser panda, or Ailurus fulgens.

This little animal somewhat resembles Ailuropus in the general scheme of coloring, in that all four legs are black. But there the resemblance pretty well ends, for the whole of the lower half of the body is also black and the whole of the upper part a deep reddish brown. Also instead of a bear tail—which is pretty much no tail—he boasts a very respectably long and beautifully

bushy adornment, and his sharp nosed,-hollowed-out face suggests all the perkiness of the raccoon.

On the other hand there can be no doubt that these two are distinctly, and perhaps closely, related to one another. The American Museum of Natural History describes both as identified with the raccoons, while the British Museum exhibits the bones of the Ailuropus with those of a bear for comparison of similarity, and one of the common names for this animal has been the "particolored bear". Superficially the giant panda looks altogether like a bear, and any layman, not concerned with such details as teeth, skull measurements and features of internal anatomy would, beyond doubt, unhesitatingly pronounce it "some kind of a bear". And exactly the same may be said of the lesser panda in its superficial resemblance to the raccoons. And yet the close relationship between these two cannot be doubted.

As a matter of fact, the exact place that these two creatures should occupy in the animal world cannot be said to have been at all satisfactorily determined, and one of the especial desiderata of Field Museum is to obtain a complete carcase of both for the purpose of dissection and careful examination of the internal anatomy. When this has been done the determination of exact classification may be attempted with greater confidence, and the digestive organs may prove to be of very particular significance. For both of these animals are—as far as investigation to date has been possible—very highly specialized feeders. Also at that time it may, perhaps, be found that both bruin and the coon may lay claim to kinship, not only with the panda cousins but, through them, with one another. That is to say, if a link between the lesser panda and the raccoons is established at the same time as a similar link between the greater panda and the bears, and these two are already linked together, a complete chain of evolutionary relationship may stretch from the caoti mundi of South America to the Kodiac bear of Alaska. But this, of course, is but wild—if interesting—speculation.

As far as is yet known the giant panda eats nothing but the leaves and smaller stems of scrub bamboo. From the report of natives in places where they occur it seems pretty certain that the lesser panda also eats a good deal of tree moss, and it is certain that the few that have been kept in captivity will eat, and can thrive on, corn and several other herbs and vegetables. But it is equally certain that he is a strict vegetarian, and that, in the wild state, the bamboo leaf is his bread and butter, and his first choice at meal time wherever he may be.

It also seems certain that these two animals select exactly the same environment, and probably the chief factor in that selection is the supply of scrub bamboo food. At any rate wherever scrub bamboo is found at a sufficiently high altitude the giant panda may be confidently looked for. And wherever the giant panda can be found his smaller cousin is sure to be about,

though it is not at all sure that the certainty of association works the other way. And also the smaller animal is invariably more abundant, wherever they may be found. And, apart from physical evidence, these facts concerning occurrence would seem to but further confirm the belief that Ailuropus is limited to a strict diet of bamboo only.

The golden haired monkey—rejoicing in the euphonious name of Rhynopethecus roxaelana—is chiefly characterized as curious by its very long golden colored hair and a snub nose, and is another oddity confined to the same zoogeographical area as the two pandas. A few of these animals have been exhibited in a few of the larger museums of the world, but the Roosevelt brothers' fortunate "round up" of nine at the same time afforded the first opportunity for the setting up of a group in natural surroundings.

And these three animals should have a particular interest for members of the Border Research Society since they may, perhaps, properly be claimed as the sole and distinctive property of Szechwan. The range of all of them is in the mountainous region of the west. They may all probably extend as far north as the Kansu border. They are also found near the Tibetan frontier, and may possibly extend as far south as Yunnan. But it seems rather improbable that any specimen of any one of them may ever be found on the further side of any one of these borders.

The takin and serow—and particularly the latter—are far less confined in range. But it may be said, with probable truth, that both are far more abundant in western Szechwan than in any other part of the world, and Szechwan may, at least, lay sole claim to one species of takin.

Both of these animals belong to the group known as "goat-antelopes", for lack of a better and more exact designation, and share this distinction with the goral of Asia, the rocky mountain goat of North America, and the European chamois. They are not, as a matter of fact, either goats or antelopes, nor any other sort of hoofed animal to which group names have been given. But—though differing very considerably from one another, and from all of the other three "cousins" mentioned—they both show characteristics of both the goats and the antelopes, and the name may, therefore, by justified as a convenient and forgivable misnomer.

The takin is a heavily built, clumsy looking animal, in appearance more like some peculiar sort of ox than anything else, but with very distinctively shaped horns. The forequarters are high and massive, and slope backward and downward to a fairly diminutive and tailless hind quarters which, viewed from behind, has been likened to the rump of an overgrown teddy bear.

The species found in Szechwan is Budorcas tibetanus. In southern Shensi is another species, called Budorcas Bedfordi, and in the Himalayan region is still another named Budorcas taxicolor. And because this was the first "discovered", English writers

sometimes refer to the Szechwanese animal as Budorcas taxicolor tibetanus.

The Himalayan species is of quite dark color (almost a greyish black) and is fairly evenly colored all over, while the Shensi representative is an almost uniform yellowish cream white, and the member from Szechwan somewhat combines the two, being darker in front and lighter behind, with more sharply cut color contrasts, especially on the head and neck.

Just why this species should have been called "tibetanus" is not clear, as it does not occur in Tibet—or at least beyond what the maps indicate as the political boundary of Tibet. It lives within—and probably only within—the boundaries of Szechwan and, it would seem, would far more fitly have been named after that province than for a ragion in which it is not known.

The serow is rather less interesting than any of the animals already mentioned, because its range is so widely extended and it is, therefore so well known, that any description here seems superfluous. It is found in Sumatra, and as far away from there as the Provinces of Fukien and Chekiang in East China, but it's extreme range and the distribution of species—are but imperfectly understood.

An interesting species—that is also distinctly an oddity—is the "white maned" serow, an animal with general markings similar to other species but with a fairly long white mane atop it's neck and shoulders. I have secured specimens of these in Kansu, just north of the Szechwan border, but, as yet, have found nothing in the parts of Szechwan where we have worked that could be positively identified as the "white maned" variety.

But our collections contain some dozen or more serow, and I think it may probably be determined—as soon as all the material has been classified at Field Museum—that there are in Szechwan at least two species, one of which is very much larger than the other.

Whether or not the province of Szechwan may eventually be able to boast "exclusive rights" for any one distinct species it is too early to say. But at the same time the serow may be said to be particularly identified with Szechwan through the fact already mentioned—and of which I feel assured—that the animal is far more numerous within its four borders than in any other locality where it is found. All the western mountains that afford the broken cliff formation that the serow love—and west Szechwan is full of them—are, themselves, litterally full of serow.

At the same time—and to forestall over optimistic enthusiasm, and possible subsequent criticism (if no more than) in the mind of some reader of keen sporting instincts—I should not neglect to mention that this abundance is not at once apparent. The serow of Szechwan lives in country about as difficult to negotiate as any I have ever known and—I may add with all earnestness—they take "*some* getting".

A COLLECTING TRIP TO THE ROOF OF THE WORLD.

D. C. Graham.

During the summer of 1930 I made my second trip through Tachienlu into Tibet, and my sixth summer collecting expedition for the Smithsonian Institution. My objects were first, the collection of natural history specimens; second, the securing of artifacts; third, the taking of pictures, and fourth, the study of the social and religious customs of the Tibetans.

Leaving Suifu on June twenty-sixth, we traveled by boat to Kiating, where we arrived on July first. The next day we went overland to Kia Kiang, where I intended to leave the collecting outfit and the collectors for a few days while I attended a conference on Mt. Omei. However, there was no safe place to leave the collecting outfit, so on the next day we proceeded overland toward Yachow. In spite of exceedingly hot weather, we reached Yachow on July fifth. Here we found Dr. Crook and a party of foreigners, including Dr. Leslie Kilborn, Dr. Mullett Mrs. Crook and the Misses Thexton and Streeter, who were about to start for Tachienlu. With me were four Chinese netters, two hunters, and a taxidermist. Our two parties joined, and remained together for nearly three weeks.

We left Yachow on the seventh of July. On July tenth we were delayed at Ch'in Ch'i Hsen (now officially called Han Yuan Hsien) on account of a heavy rain which transformed the streams into roaring torrents and washed away bridges. On the next day we continued our journey, reaching Tachienlu on July fifteenth.

We remained in Tachienlu only one day. All the collecting outfit had to be tranferred to skin boxes, for our bamboo boxes would quickly go to pieces on Tibetan pack animals. Coolies could not be depended upon to carry heavy loads over the high Tibetan roads. Guides and pack animals had to be engaged, provisions to be secured, and woolien clothing to be purchased for the collectors.

We left Tachienlu about noon on the seventeenth of July. In all I had seventeen riding and pack animals, mostly yak, besides two coolies carrying light loads. We were most fortunate in having with us as guide, manager, and interpreter Rev. J. Huston Edgar, F.R.G.S., F.R.A.I., who has traveled on the Tibetan border since 1902, and who has been guide and interpreter for several great scientists and explorers. His experience on the Tibetan

border and his knowledge of the Tibetan language and customs were a great asset. He was also a most pleasant and interesting companion.

The next day we passed up a 'U' shaped valley which is an old glacial bed, crossed the Jedo Pass, the altitude of which is slightly over fifteen thousand feet, and camped for the night at the altitude of fourteen thousand seven hundred feet.[1] During the day we were passed by about three hundred Chinese soldiers on foot. They were going towards the interior of Tibet to reenforce the Chinese army, for there was a war at this time between the Chinese and the Tibetans. One of their number died, and was left beside the road to be eaten by eagles or wild animals, and two others were seriously ill. This frightened our Chinese collectors, several of whom had mountain sickness, and it took considerable persuasion to keep them from turning back.

On the following day we reached Yin Kuan Tsai, where we remained several days. That afternoon we had a wonderful view of the great, snow-covered, pyramid-like Gangka, which is nearly twenty-five thousand feet above sea level. Covered by an eternal garment of pure-white snow, marvellously colored by the rays of the setting sun, it was a sight never to be forgotten.

At Yin Kuan Tsai we camped below an old fortress on top of a mountain, where Tibetan kings once reigned. It was conquered and destroyed by the Chinese under the emperor Kang Hsi.

Some of the crows at Yin Kuan Tsai make a peculiar sound that is very musical. I have been told that in the Chinese history of Tibet it is stated that one peculiarity of Li Tang is that in that locality crows make musical sounds resembling orioles. Mr. Edgar said that he had heard the crows make such sounds near Li Tang and the writer heard them do so at Yin Kuan Tsai.

While at Yin Kuan Tsai I witnessed a religious festival called by foreigners "The Devil Dance," and by Chinese and Tibetans "The Festival of the God." It was held in the great lamasery called Gu Lih Si, and lasted four days. The first three days were given over to religious ceremonies, and the fourth to horse racing. I had the good fortune of meeting and talking with several of the lamas, including the abbot, who is a Living Buddha and is worshipped as a God. He was very courteous, and I was allowed to take his picture. During the ceremonies he sat in the upper

1. On this expedition we used an aneroid barometer that registers up to twenty thousand feet. The way it has been set during the last three years it registers, in Szechwan, according to the weather, between seven and fourteen hundred feet higher than the right altitude of a given location. In order to minimize the possibility of overestimating altitudes on this expedition, I regularly subtracted thirteen hundred feet from what this barometer registered. D.C.G.

balcony, is plain view of all the spectators, worshippers, and performers, and all the prayers and prostrations of the faithful were directed toward him. While the primary purpose of the "Festival of the Gods" is the exorcising of demons, it is also the outstanding social event of the year. All the men, women, and children dress in their best clothes, and friends meet, talk, and drink wine together. I was surprised at the lack of harsh, unharmonious sounds in the music, which was generally soft, and alluring, and in harmony with the scene being enacted. Most of the lamas wore beautifully embroidered robes, and performed very graceful and artistic religious folk dances. The effect of the festival on the common people is to arouse the emotions of reverence, gratitude, awe, and wonder, and to cause the hearts of the Tibetans, more or less unconsciously, to be firmly, loyally, and devotedly attached to their religion, its priests, and its gods. The technique for accomplishing these results is wonderfully efficient, and is no doubt the result of centuries of thought and experience.

Leaving Yin Kuan Tsai, we forded a branch of the Ya Lung River, crossed the Zye Ha pass (altitude 15900 feet), and camped, on July twenty-sixth, in the Yü Long Shi valley, at the altitude fifteen thousand feet. Here Dr. Crook and his party left us, crossed the Ja Ze pass, and returned to Tachienlu.

From the Zya Ha pass we had an excellent view of the Tibetan grasslands, whose rolling, grass-covered hills extended westward as far as the eye could reach.

The Yü Long Shi is a 'U' shaped valley extending north and south. Above 13500 feet there are no houses, but in the summer there are to be seen the tents of Tibetan nomads, and herds of hundreds of yak and sheep. Below 13500 feet are flat-roofed stone houses, but in the summer few Tibetans and no grazing herds can be seen. Their owners are living in the tents and tending their flocks in the higher altitudes. In the autumn the owners and their herds go down to their houses, and during the cold winter months the Tibetans live in the stone houses while their animals feed on the grass in the valley and on the nearby hillsides.

We collected at Yü Long Shi on the twenty-seventh and the twenty-eighth of July, while waiting for provisions from Tatsienlu. We secured many insects and birds, but few mammals. Near us were several nomad tents, with large, fierce dogs, and great herds of yak and sheep. The Tibetans were quite friendly, and I was able to see the interiors of several of their tents.

The provisions arrived on July twenty-eighth, and on the following day we proceeded southward towards Gieu Long Shien. On July thirtieth we camped on top of a hill near a place called Mi Chih, among beautiful woods of fir and spruce, and in sight of the great Gangka, which was almost directly east of us. The wonderful, pyramid-like snow mountain, the nearby hills covered

with green woods, and the Tibetan houses and the stream in the valley below were a sight of unusual beauty. There were wild strawberries in abundance, and flowers of many varieties and colors. I killed a great white pheasant in a tree only a few yards from camp, and soon we had a much larger catch of birds than we could care for that night. We were in a naturalist's paradise.

The next day we passed through some wonderful country. There were high, rounded hills over a flat, 'U' shaped valley. Higher up were bare, limestone cliffs, a light turquoise in color, gigantic in size, and of all conceivable shapes, some resembling castles, fortresses, battlements, and towers.

On August first we made a hard day's journey, crossing the Wa Hu Pass, whose elevation is about 16400 feet, and arriving at T'ang Gu, a small Tibetan village at the elevation of 13500 feet. From the summit of the Wa Hu Pass we saw a great range of snow mountains to the southwest with high, rugged, sky-piercing peaks, some bare, and some covered with snow. There was one tremendous glacier, which must have been miles in width, and nearly a half mile in depth. The snow range to the east of us was hidden behind nearby mountains. Near Tang Gu is a snow-capped mountain with forests extending far up its sides, wide stretches of which were a bright red color because of millions of blooming rhododendrons. Between the Wa Hu Pass and Gieu Long Shien there are extensive virgin forests of great fir, spruce, and pine trees, many of which are covered with long white moss.

On August fifth, Mr. Edgar and I went to Gieu Long Shien to replenish our food supply. Although this village is the center of a county it has only a large lamasery, which is used as a yamen, and about fifteen rude wooden houses, which are used both as homes and as small stores or shops. Very few of the necessities of life are for sale, and we were unable to purchase either rice or matches. The magistrate, an intelligent, courteous, and friendly Chinese who spoke English fluently, invited us to dinner, and assisted us in securing pack animals.

One of our main difficulties on this expedition was the securing of provisions. In spite of careful planning, there were days when we were without bread, fruit, vegetables, or cookies. The Chinese could not get along without rice, so we had to carry plenty of that with us. One supply of provisions arrived several days late, and the Chinese collectors had to live on Tibetan butter, tea, and tsamba.

August fourth we began our return journey towards Tatsienlu. On August eleventh we camped fifteen li above our first camp in in the Yü Long Shi valley, near the last and highest nomad tents, at an elevation of fifteen thousand and six hundred feet. This is one hundred feet higher than Mount Blanc in Switzerland, and nearly three miles above the sea level. None of the Chinese collectors suffered that night, but the netters worked with the gasolene lanterns for several hours, securing a fine catch of night moths.

The only person with us who became ill was a half-breed Tibetan who nearly went "out of his head," and who was so weak next day that he had to ride on a horse.

Next morning we ate our breakfast before breaking camp, then crossed the Ja Ze Pass, which we found to be seventeen thousand one hundred and fifty feet above sea level. On the top we found buttercups, dandelions, and wild onions. There were numerous insects and a few fossils, but no mammals and few birds. There is a snow-covered peak just to the east, but its top was covered with fog, and we could see only the drifts of snow in the valleys.

Passing down a very rough road, we camped, on August thirteenth, at Yu Long Gong. Here one can enjoy hot water mineral baths rivaling any to be had in the world. That night we met Dr. Heim, a Swiss scientist who is professor of geology in Son Yat Sen University. He and two other Swiss scientists who are experts at climbing, drawing, and measuring mountains, and who had the best instruments that had yet been invented, were going to measure, photograph, and draw diagrams of the Gangka and of the entire range of snow mountains near Tatsienlu.

We reached Tatsienlu next day, and with few hardships, aside from getting drenched in downpours of rain. In due time we reached Yachow, Kiating, and Suifu. This year our collection probably exceeded any previously secured in one summer, and included about one hundred boxes of insects, with a total of one hundred and thirty boxes of specimens and artifacts.

The journey we made into Tibet in 1930 was unusual because of the high altitudes traversed and at which we collected. Some of the districts covered are not actually pictured, with even approximate accuracy, on the maps of the world. For the success of the trip, much credit is due Mr. Edgar, who made the following statement:—"The territory we have passed over is unsurveyed and practically unknown. Altogether, it is the highest route of any extent on the frontier. Two, at least, of the passes are among the most elevated in this part of Tibet. Travelers have rarely recorded such high camps. The road on this side of the Ja Ze La might easily find a place among the worst on earth." To me, the trip is one never to be forgotten. The days of fellowship with Mr. Edgar, the numerous contacts with the Tibetans, and the glorious views of mountains and grasslands were extremely pleasant and profitable.

NOTES ON THE WEST CHINA ABORIGINAL TRIBES

T. TORRANCE

That there are in West China in the provinces of Szechwan, Kueichow and Yunnan, and on the far side of the Szechwan border, different aboriginal tribes or races is well known. Since the days of Cooper, Baber and Gill they have repeatedly been discovered and announced afresh to the world. Nearly every globe-trotter who comes West prospecting does that. The discovery is the easier where their territories lie adjacent to a well-beaten track and its greatness in no way lessened if some poor criticised missionary has been at hand to provide information or explain what otherwise could not have been understood. Many accordingly can produce passably accurate maps of the haunts of the "wild hill-men" and tell us where to find them. Who has not heard of the terrible Lolos, the meek and patient Miao, the hefty skin-clad Hsifan, the industrious Cheeang-min, the intrepid Heh-shui men and the prowling robbing Bolotsze? The only thing remaining to be done to acquaint us fuller with these folks is to collect a few live specimens from each and cage them into a specially built human menagerie where the scientist at his ease may study all by measuring their skulls, comparing their chatter, studying their habits, recording their diseases and noting their religious tendencies. But as there is no appearance of this being done for some time yet, perhaps a few casual notes, culled, collated or personally acquired here and there, may not be out of place.

In West China the foreign resident more than anywhere else if he is to understand his ethnographic environment, requires to think historically. From whence came these various peoples he hears about? Wherein do they differ one from another? How is it the Szechwanese are so dissimilar to Chinese in other parts of China? In seeking the answer to these questions he finds that Szechwan has not always been a Chinese possession. There was a time when it was peopled with other races, some of them showing a culture not inferior, but perhaps superior, to their more numerous conquerors. It is true that the Chinese came a long time ago; yet it is only comparatively recently, as history flows, that they have come to occupy as much of the Western part of the province as they do now. And still there are respectable remnants of those races who once owned the land living in the mountains and around the borders where they defy absorption, change or extermination. If they are poorer to-

Two Ch'iang women at Chiutszeteng near Lifan. They are of mixed blood, the Chinese predominating.

A Christian Ch'iang family near Wenchuan.

day by force of circumstances than their overlords, they are none the less interesting. No one despises a piece of beautiful old porcelain though its colour may have lessened in brightness or it shows a crack at the edge or has a few brass rivets to prevent its falling apart. Each of these races represents an ancient civilizaion of its own. While much of their early learning and skill in arts has been irretrievably lost in the resistless submerging tide of Chinese aggression, some things of worth and beauty remain. Every race has its peculiar contribution to offer to the common good. Even the degraded Australian blacks, as a recent informative article in the Overseas Magazine shows, can teach us something no other people can. It is ours therefore not to kill or hurt, not to destroy or despise, but to go humbly and patiently, learning from all, admiring and profiting by the various gifts of the Creator to His people. This we can do the better by manifesting our love to them through offering first our contribution of things material, mental and spiritual to their good.

To begin with the province of Kueichow: the best English work to consult on the aborigines there is "Among The Tribes In South West China" by the Rev. Samuel Clark. He worked for many years as a missionary among them, if not specially to them, and obtained first hand information. What he says, as far as it goes, is intimate and accurate.

We have also in our possession a Chinese Work called, "Miao Fang Pi Lan" (苗防備覽). It gives a painstaking description of the lands, habits and life of the tribes in this province. Within its two large volumes there is a great amount of useful information. But since it was compiled as a directory, as its title shows, to help the Chinese to be on their guard against the tribes it does not give the exhaustive details of tribal customs we should so much like to have. Yet it serves as a good introduction.

From the two work swe learn that in Kueichow there are the Miao, Keh-lao or Keh-liao, Chong-chia, I-chia, T'u-umann, T'u-min and Yao tribes. (苗,犵狫, or 犵狫,仲家,夷家,土蠻,土民,猺)

Of the Miao there appear to be as many as seven different branches. In the West China Union University library there is an illustrated work giving drawings of their various costumes which well repays the students' examination.

The Keh Lao are said to be the oldest of all the provincial races. Though now fewer in numbers they were once numerous and were to be found near to Szechwan. During the Tsin dynasty many were brought to Szechwan to fill districts vacated through a large exodus of the people to Hupeh.

According to the "Miao Fang Pi Lan" they worship a god called Yang Kong. To him they offer sacrifice at the hands of a priest and seek his help especially in times of drought and calamity. Yang Kong they fear as much as the Miao stand in awe of the Peh Ti T'ien Wang (白帝天王), the White Ruler, King of Heaven.

The Chong Chia are said to be numerous in Yunnan and Kwangsi as well as Kueichow. Their social standing is one between that of the Miao and the Chinese. The Chinese regard them as superior to the other tribes in the province--hence their name, the middle people. Their main interest to us is that they are said to be akin to the old Ti or Tai race who were driven in large numbers southwards from Pa or Central Szechwan when the Ts'in armies annexed that ancient kingdom. And we should exceedingly like to see their religious customs carefully investigated if haply they gave us another clue to these as they existed in ancient Pa and Shuh. It is useless to tell us in the same breath that they observe certain sacrificial customs and yet worship no deity. The statements are self-contradictory.

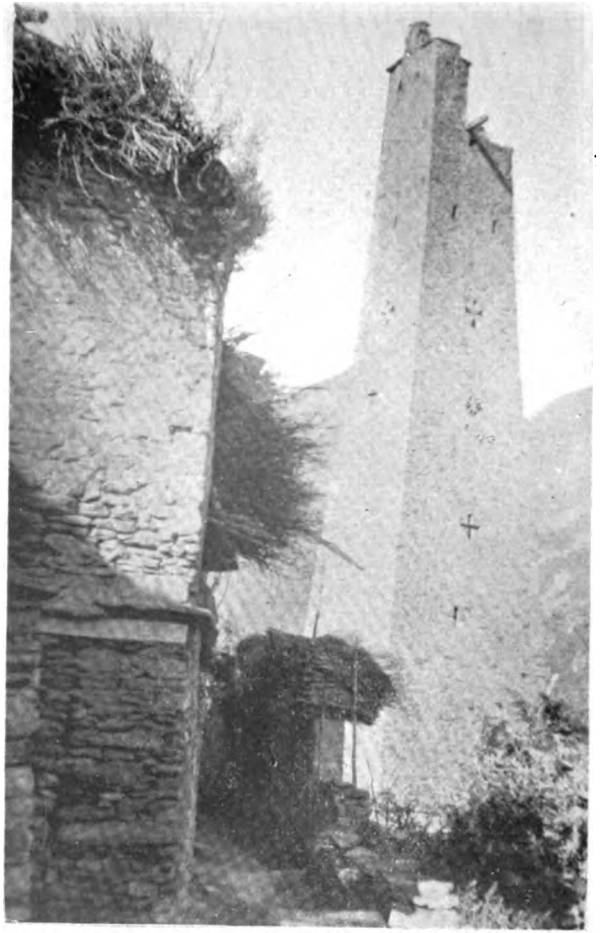
All these old non-Chinese races had their religion with a more or less elaborate ritual. We append a free translation of what the "Miao Fang Pi Lan" says of the customs of the T'u Min. We do not know yet where to classify them but what is here given is intensely interesting.

"Although the T'u-min (土民) are given to quarrelling and regard life lightly, they are yet simple minded and just. The names of the gods they worship are Meishan (梅山) and Yuinhsiao (雲霄), but they cannot say why they are called thus. Each year in the third month they sacrifice a white sheep to the accompaniment of pipe music and the beating of drums. At the 18th of the fourth moon and the 15th of the 7th moon they, during night time, sacrifice to their ancestors. At the 9th of the 9th moon they have a public harvest thanksgiving sacrifice to Chongyang. At the 28th day of the 12th moon at night time they sacrifice to their ancestors and call it a spirit offering. During the time of offering they think it unpropitious to hear either a dog barking or a cat mewing.

The people confine themselves to their farming and rarely travel abroad. Seldom do they enter a city. Their taxes are light and are paid through a headman. The males do the farming and the women the weaving and housework. All are careful and in this are like the ancients.

At every village there is a house for meeting and worship called the *Pai-sheo T'ang* (擺手堂). Here they gather in the first moon from the 3rd to the 5th or 6th day. Men and women both attend. Here too gongs and drums are beaten. The purpose is to remove all evil influences for the year."

The thing to remember is that this is a Chinese account and while most illuminative is far from being exact We know this because similar statements have been made to us regarding other peoples which we found to be coloured and distorted by Chinese misconception. Had some one more sympathetic and with a keener insight gone to enquire into the nature of their ritual he would probably have found that the T'u Min gave to this writer a



A Ch'iang tower at Oir near Weikin. The towers were built for defence and for purposes of storage. Several often stood in one village.

Ch'iang villages and terraced fields at Haemurchai in the Monghsien District.

description adapted to his Chinese notions of what a religion should be and not according to the aboriginal practice.

The Yao are supposed to be extinct now in Kueichow. But we wonder. May not a few yet be found somewhere though bearing another name? They are not extinct in Yunnan. But whether extinct or not, the "Miao Fang Pi Lan" in speaking of them uses a tell-tale phrase which lets us know that they too had their sacrifices and religious concepts similar to those of other tribes. The four characters used are Tao Ken Ho Chong (刀耕火種). "They plough with a knife and sow with fire." No one unacquainted with tribal life could possibly interpret such a cryptic assertion. It is used about the Lolos, Chiang and others. It refers to the knife style of the plough they use and that when the fields are sown the priest offers a sacrifice praying for a good crop, when he heads a procession which circumnambulates the fields with torches lit at the sacrificial fire. The Yao then too were a religious folk and probably originally monotheists.

The Ih Chia are of Lolo stock. Judging by the strictness they maintain in their ancient religious observances they must be of a fine conservative type. Miss M. Welzell, of Peichieh, is our authority that "they have a sacred curtained enclosure at their times of public sacrifice which serves as a Holy of Holies". It is not therefore surprising that their social standing is in advance of the Miao who have largely lost their ancestral rites. The Ih Chia form the landlord class in their districts under whom the Miao serve as tenants or serfs.

The Lolos (猓玀 or 玀玀) or Nosu as they call themselves are found in Kueichow, Yunnan and Szechwan. The pure breds are styled the Black Bones and the mixed breds or working class, the White Bones. The Black Bones in Szechwan are taller and fairer than their Kueichow and Yunnan relations. With the Chinese they bear an unenviable reputation for bloodthirsty fierceness. The White Bones being mostly descendants of captives taken in raids or wars show less of their superiors' martial nature.

Their Szechwan *habitat* covers a long stretch of country in the Kienchang region from near Tsingchihsien to Lingyuen and Hueilichow.

The Chinese occasionally try to punish them for their raiding but they have had so many experiences first and last of Lolo bravery that they fear trying to conquer them. The Lolos, therefore, continue to live in their own free independent way, perfectly content to hunt and roam through their wild fastnesses. "Cut off", runs the proverb, "a Lolo's head in battle and he will turn round and fight you with his tail."

The origin of the Nosu is unknown. Mr. W. N. Fergusson, in a lecture on them given in Chengtu, claimed to know it from a book he had or knew about, but the name of the book he did not make known. If Chinese local histories are to be trusted, they have been

where they are now for a very long time, perhaps 2000 years at least. Their territory may have contracted here and expanded there as time went past, but the South West has always claimed them.

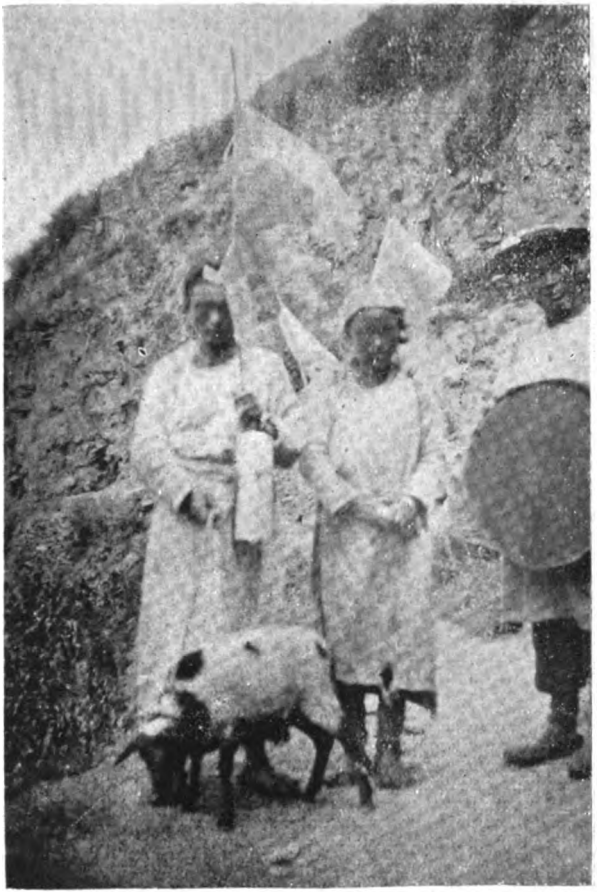
The Yueh Hsi history gives the best description of their manners and customs that we have seen. It is too long to give in these notes but here is a free translation of an excerpt from it. "There are ten clans of Lolos. They live in plaited bamboo or board houses. Commonly they are not showily dressed. In making agreements they resort to cutting marks on pieces of wood. Their skirts come nearly to the ankle. Two will ride on one horse with their feet entwined. If a headman dies without leaving a son as heir his wife or daughter can succeed him in his position. The dead are cremated and trumpets are blown and gongs beaten at the funeral pyre. When some one falls sick a sorceress is called in and not a doctor. No medicines are used. She uses chicken bones to divine with. In all matters of importance resort is had to divination. The people are expert in the making of swords, bows and arrows. Their arrows when poisoned are exceedingly deadly."

Another excerpt, a quoted one, says, "The Lolos have a very wicked disposition. In making an agreement carved marks on wood are used. The men pull out their whiskers. They wear leather belts or girdles. A strip of cloth is wound round the head. Their swords day and night are kept by their sides. Lolo houses are built high up on the hillsides. The farmers plough with a knife and sow seed with fire. (刀耕火種) All are fond of hunting. The roasting of sheep's bones is used to discover what is propitious or not. No one travels without his weapons. Men and women do up their hair in a top knot. No shoes or stockings are worn. Over all they wear a round spreading felt cape. Buckwheat cakes form their bread. At marriage presents of sheep and cattle are exchanged. At feasts the ground is spread with pine tree foliage on which young and old sit. Mutton, beef or pork is eaten half raw mixed with garlic and other vegetables. The bowls and spoons are often of wood, the chopsticks of bamboo. The dead are not put into coffins but the rich wind them with cloth. This winding, in Chinese called Ko-pu (裹布) came to be written Ko-pu (猓部) and later Ko-lo (猓玀), from which the name Lo-lo (玀玀) is derived." The old name was thus Ko-lo and now Lo-lo.

"Each year on the 24th day of the 6th moon they celebrate their small New Year. An ox is killed when its brains are beaten out and mixed with wine. This they love to drink and at night the hillside is bestarred with their torches carried in procession. This is called the "Ho Pa Huei" (火把會). On the 1st day of the 10th moon they hold their big New Year. Sheep and cattle are then killed for a general feast. To it all are expected to subscribe even if it be only bean-curd from the very poor."

These excerpts if informative nevertheless reveal the mere

An ancient Ch'iang bronze depicting a worshipper bringing a lamb as a sacrificial offering.



Two Ch'iang men on their way to the sacred grove and altar in the High Place, accompanied by the priest. They are leading the lamb to be sacrificed, and display the customary white banners and sacred roll.

bystander attitude. They are Chinese. No inkling is given of any religious meaning in these festivals. Their writers seem unaware of any. But it is well known that while the Nosu religion to-day is grossly mixed with sorcery and superstition it still retains an old substratum of monotheism. A trinity of white stones is used when they sacrifice to the Spirit of Heaven. These later accretions of heathenish witchcraft no more represent the old native faith of the Nosu than the service of Baal did the pure faith of Elijah.

The Nosu priests have a written language of their own. Specimens of their script have been acquired by various foreigners including the writer. We once saw a conjecture somewhere that their characters were borrowed or adapted from the Tangutan script but never having seen it we are unable to offer an opinion on the point.

Dr. D. C. Graham has done valuable service in collecting and having translated some of these priestly documents. Doubtless he will extend his work along this line.

A few missionaries have succeeded in forming friendly relations with the Nosu. The Rev. S. Pollard once paid an extended visit to a hospitable chief and was royally entertained despite the fact that Chinese officials endeavoured to persuade this chief to murder him. Mr. Pollard's book well repays a reading.

Ling-yuen, like Songpan to-day, used to be a busy tribal centre. Many races met and bartered here. One work names nine, viz., the Fan Ren, Ko Lo, Peh-Ih, Hsi Fan Mo-Sie, Ko Liao, Tah Tan, Hui Tsze, and Ü Ren. (**焚人，猓玀，白夷，西番，麼些，猺獞，韃靼，回子，漁人**). The first were from Suifu. The Ko Lo were the Lo Lo, Hsi-Fan the same as of to-day. The Mo Sie were the Mo So or Nashi. The Ko-Liao were the Keh Liao or Liao. The Hui-Tsze were Mohammedans. The Peh Ih or White barbarians, the Tah-Tan and the Ü Ren we do not know.[1]

Other works mention the Ch'iang as living in the Kienchang region in considerable numbers. Why are they not expressly named in this list? No doubt one reason is that they were known under other names. The Nashi for instance belong to the Ch'iang family of tribes. They still live in Northern Yunnan and in different places along the Chino-Tibetan border. The present Li Kiang was once the capital of a powerful and wide extending Nashi Kingdom. Dr. Joseph F. Rock for some years made his base camp at a Nashi village near Likiang and used Nashi men as helpers in his research journeys. For a well written and splendidly illustrated article of his on the Nashi see the 1924 November number of the National Geographic Magazine.

Dr. Rock takes them to be of Tibeto-Burman origin. No doubt the Nashi blood is more or less mixed with that of their near neighbours yet their parental stock cannot be mistaken. In language and religious customs their Ch'iang affinities are very plain to those who know this people. The Lushi, their cousins

and neighbours, make this even plainer. What we should much like to know is, are there other tribes in that region belonging to the Ch'iang stock ? Where are the descendents of the old Kuenming (昆明) people who lived at Kuenming the present Yen-Yuen-hsien? They surely cannot all be extinct[2].

The Nashi have a writing of their own. Dr. Rock has given us specimens of it in his article. What he has to say of their priests goes to prove that their olden-time religion has now become sorely debased by the influx of Chinese and Tibetan sorcery. Yet enough remains to identify its original character. Herein comes its interest to the true investigator. And for this reason it is time some one was bringing a knowledge of their letters within the reach of scholars as they may yet lead us to the elucidation of other problems in our West China borderland.

Dr. Rock has further put us in his debt by the description he gives in the 1925 April number of the National Geographic Magazine of his visit to the Kingdom of Muli. He by it fills in an otherwise empty area for many which lies to the West of Kienchang and South of Hsiang-Cheng. The people there he classifies as Hsifan. From what he says of them he is doubtless right. But the Hsifan term is a very broad one. It means simply Western barbarians and can be used to denote others who are not of Tibetan lineage.

The road up the Kienchang valley was once a great National highway. The Nanchao or King of Yunnan came North this way when he used to make an excursion with hordes of allies against West Szechwan and lay seige to Chengtu. It boasted of two Capitals, one Ch'iong Tu (邛都) and another Tsoh Tu (筰都). The latter was near the present Ts'ing-Chi-hsien. The word *tsoh* ([illegible]) meant a strand of plaited bamboo and was given to the aborigines who used such to construct cable bridges. Tsoh Tu was a Ch'iang capital. From Tsoh Tu to the Nan river at Kiungchow was all once Ch'iang territory. This now is hard to realize. But history affirms it. The fact we believe may still be given corroboration by certain pockets of non-Chinese peoples to be found at different places. Recently we heard of one not so far from Yachow. Certain it is that the whole Kienchang region, that between Ts'ing-Chi and Tatsienlu, the outer Yachow borders, the T'ien-Chuen-Chou country and the hilly country west of Ta-ih-hsien all call for a careful ethnographical exploration.

---

2. The Nashi or Moso are said to be descendants of the Mimo which is another name for the Kuenming people, and the ancient people of Likiang in N. Yunnan used to call themselves Tsoh. All came under the name of outside Ch'iang. Thus the Nashi, the Kuenming and the Tsoh all belonged to the one and selfsame race. And this race was distinct from Hsifan and other neighbouring tribes.

A Ch'iang farmer. This Jewish-like type of features is frequently seen among Ch'iang who are of pure stock.

A Ch'iang huntsman. His face is typical of many of his race.

In the North West of Szechwan the first aborigines we meet after leaving Chengtu are at Wenchuan. Here reside the Wasze (瓦寺) and the Ch'iang or Cheeang Min (羌民).

Once there were only the Cheeang. But during the Ming dynasty the Chinese brought in Chiarong mercenaries from the West to subdue them. These they sandwiched among the Cheeang "chai-tsze" or fort villages as a check against future uprisings.

The name Wasze arose from a Lama priest building a tile temple in the district on T'ongling Shan, (塗禹山) which was called Wasze. So they became known, according to the Lifan history, as the tile temple people.

Their Chief or T'u Sze lives in a chai-tsze on T'ong-ling Shan 15 li from Wenchuan. He wields extra-territorial rights all through his district. The Wasze practically are like serfs, in that they rent the soil from him and are liable on call to military service.

They are mostly lamaists though of a very free and easy order. Their big temple, with its shocking idols on Tong-ling Shan, is now in the last stages of decay and dilapidation. The people are bilingual.

The route up the valley between Kuanhsien and Songpan was once known as the Ti Cheeang road. We know that the Cheeang Min live all the way from Wenchuan to within two days journey of Songpan, but where are the Ti? The races are distinct. A large part of the Lifan district is occupied by Cheeang, as also Weichou, Monghsien and T'iehch'i. They are also found West of Monghsien and lie in close to the Heh-shui Country on the South and East.

The Cheeang Min are distinctly of a Western and not of a Mongolian type. They came before the Chinese to Szechwan, but they are all the same the descendents of a race of foreigners. A strain of Chinese blood now flows in most of their veins which militates against their strict classification by skull measurement yet any one familiar with their features and characteristics cannot mistake their outside origin.

---

1. An ethnographical map of the period of the Three Kingdoms gives the district of the Pe'h-Ih or White barbarians (白夷 and that of the Ü-Ren (獉人) as close to the Northern border of Yunnan.

The "Man-Sze-Ho.Chi" (蠻司合誌) states that the people at Pulantsuen (who were Cheeang) near Weichou were called White men, Peh-Ren (白人). This may explain the name of this Southern tribe. The Cheeang were given the name of White barbarians because they used Whiteness as synonymous with morality (白人者 其俗以白爲善,以黑爲惡也).

This same history also gives the district where the Liao lived as Mangpu (苲部) near to Yuin-Ling-hsien, not far from the Kueichow-Szechwan border.

In Han times the confederation of their clans was known as the Ranpang Kingdom. Its capital was at the present Monghsien. The histories state it was the largest state North of Tsoh Tu.

Another Cheeang Kingdom existed in S. E. Kansu and S. W. Shensi with its capital at Wutu. The Cheeang apparently entered China through Kansu and pushed their way South into the old Shuh border land.

A sketch of their history, customs and religion we wrote a number of years ago. This can still be had from us in booklet form. There is no need, therefore, to repeat here anything said in it. While we could now add much to the length and interest of the booklet there is nothing in it that requires to be retracted, since what was written sprang from careful and original investigation.

Both the flat-roofed stone houses and the high towers of the Cheeang Min attract the eye of the traveller. He thinks of the long trail of such houses from Asia Minor across North India and Central Asia down through Kansu to West China. The towers recall those of Biblical times. Local history states they were used to hang the armour and military accoutrements of the warriors as well as the valuables of the people. In times of attack, doubtless the people sheltered there for greater safety. Several are often seen in a village.

More than once it has been inferred that we said the Cheeang were of Semitic origin. This was because we found their religion to be so similar to that of the Old Testament. But we have never committed ourselves that far. Slap-dash investigation and rushing into print is always to be deprecated. Caution is required. One's Scottish nature here stands a man in good stead. We have never said they were Jews. Neither have we said they were not. We are sorry to disappoint the man around the corner with the British-Israelite trend in him and we submit our apologies to a companion of his who has been waiting around the other corner to dispute the point against us, whenever we made it.

We have simply said they were an attractive lovable people of non-Chinese origin who for two milleniums have clung with gallant tenacity to their mountain sides and mountain tops. The odds against them never were less than terrific. And the intensity of the long strife between them and their Eastern neighbours is still written in stone all up the Min river and its lateral valleys. Any one with eyes half-open can see this plainly. During the Ming dynasty when the struggle rose to its greatest intensity, forts, walled villages and towers were erected in profusion against them. They may be seen at the mouth of every valley and on the Monghsien-Songpan road often every 10 "li" with perhaps the remains of a military road between.

Some other day we intend writing more fully than we have hitherto done on the various unique features of their monotheistic religion. We have not the space now to do so. Neither can we

A half-bred Ch'iang on his roof-top beside the sacred white stone. The White-Stone is emblematic of Abba-Chee, the Father-Spirit and righteous Saviour of men. The White Religion is very ancient, and represents a patriarchial form much older, perhaps, than that of the Israelites.

The first Christian church built in the Ch'iang country. The missionary, the Rev. T. Torrance, is seen at the door of his room, which is on the roof of

enter here into any discussion on their White Stone. But we may say that never at any time have we sanctioned the affirmation that it was an object of worship. No one ever *discovered* this from us, nor will any one.

The Cheeang Min are also bilingual. They refer to their language as Siang t'an (相談) mutual speech. In meeting them it is well to know this.

If one crosses the Min at Maochou and follows the road by the river side he, after a march of 60 "li", will come to the junction of the Heh-Shui river and the Min. Here a surprise awaits him. He will find that the Heh-Shui is the larger stream. The Chinese, because the Min was in their territory, made it in name the main river. For the same reason in early days they gave the Min as the origin of the Yangstze.

The Heh-Shui river gives its name to a Country, through which it flows, several days West of Maochou. So few foreigners have entered the Heh Shui Country proper that we know little about it or its inhabitants. It is said to have 22 valleys. The people speak a language of their own and are of a race different to all their neighbours. They are smallish in stature, uncouth in their habits but industrious and frugal. Those who travel do not as a rule show much desire for cleanliness of person, but their women, like all other tribeswomen, delight to deck themselves with ornaments.

Who they are and where they came from is not known. Are they allied to the Ti? The Chinese have learnt, at least, that when their hearths and homes are threatened they are first class strategists with a fine morale and great bravery in action. Of late years they have come into possession of foreign arms imported through Kansu and taken from the Chinese in war. Their independence, therefore, is not likely to be challenged again for some time.

A foreigner who came the back way from Kansu for purpose of trade visited the Heh Shui about 15 years ago. The person who acted as interpreter for him informed us personally. One or two had been in the country before his day. It was the intention of General Pereira to see this unknown land before he retired from his travels but fate overruled his purpose. There is no reason why a tactful missionary should not take the people the gospel, only he need expect no assistance from the Chinese officials but rather hindrances at every turn.

Conflicting reports have been given us about the nature of the Heh Shui religion. Different cults seem to prevail in different districts. Until we know exactly, there is no good speculating. We remember the hotch-patch information proffered us about the Cheeang religion until we made our own investigations. Lamas in some parts seem to be pushing their influence. A Chinese preacher at Songpan who has had good facilities for enquiry writes that

"the religious customs of the large Heh Shui resemble those of the Cheeang. On their house tops they have a white stone and the horns of an ox. Three times a year they have sacrifices and attendant dancing. The people give much heed to the priests and fear them." It will be noted here that he does not say to whom the sacrifices are offered or who are the priests and on these two points very much hinges,

To the North of the Heh-Shui lies what is known as the small Heh-Shui. This is inhabited by a tribe called the Bolotsze.

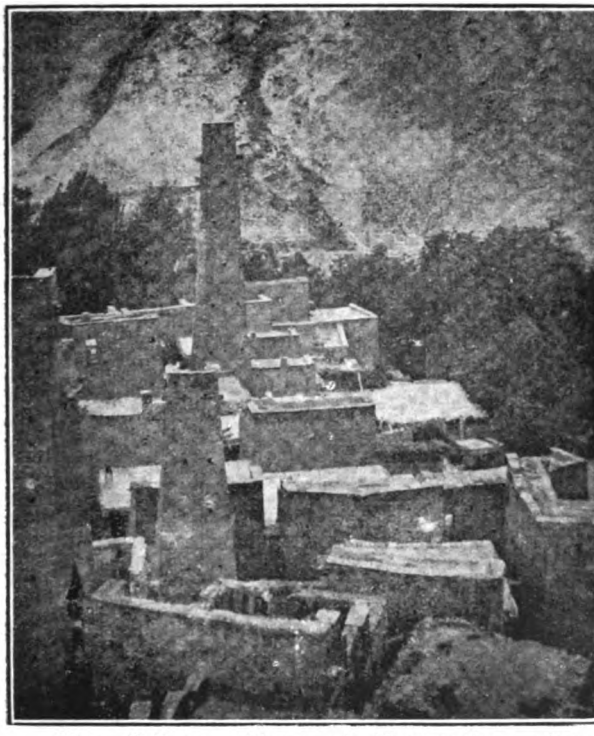
The story is that at the end of the Ming dynasty a Chinese general brought a force of Lolo warriors to Songpan to assist him in fighting the tribesmen. These imported Lolos settled in the small Heh-Shui and married local women. Their descendents are the present Bolotsze.

They have, at any rate, the raiding reputation of their Kien-Chang forbears. In lean years bands of men go out cattle driving and plundering. The Chinese fear them. They are the Ishmaelites of the far North West. Yet we are persuaded that there are many decent families among them if there are many bad. They respond readily to kindness which they rarely get from any one. Bands of Bolo farm servants we have met at Songpan appealed strongly to one's sense of sympathy. They lived so near nature, were so willing to work and withal so inherently frolicsome that they readily drew our keenest interest. Never shall we forget a gospel meeting we had with a number of them, and how the whole company with one impulse eagerly declared their readiness to follow Christ. Their intense earnestness could not be mistaken. One Bolo Christian has already been baptized.

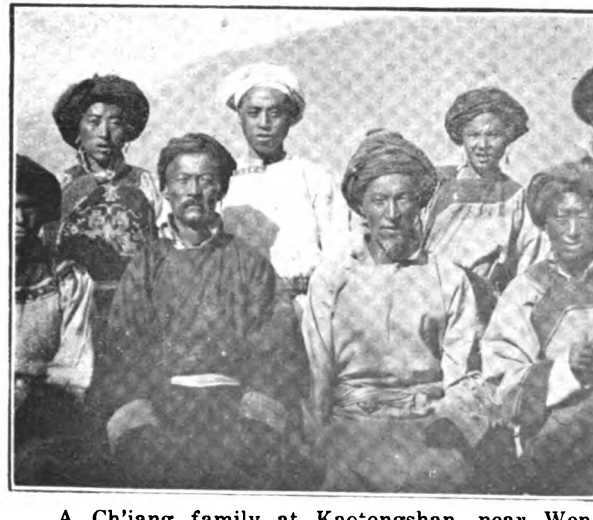
Of all aboriginal centres in Western Szechwan, Songpan is the one best worth visiting. No other has its hum and charm and delicious variety of colour and life. The city lies in a basin, 8000 feet above sea level, among open mountains, pleasing for situation and the centre of tribal districts North, South, East and West. In Summer the climate is excellent, food plentiful and the intercourse of people fascinating.

The Hsifan, a people of superior Tibetan stock, speaking a dialect of that language, and conservatively retaining their own customs and manners, live all round the city for a distance of one to several days' journey. After that they thin out to meet with the grass land nomads on the North, the Cheeang and Bolo on the South, the Chinese and others on the East and the Ngapa Tibetans on the West.

A few only speak Chinese fluently, a few more merely enough to bargain prices in buying and selling, the most none at all. The Chinese and Mohammedans who practically halve the city between them, and are the traders in the region, have to learn Hsifan or go out of business. The Hsifan if nominally under the Chinese thus make it known that they and not their suzerains are "the lords of creation".



The Ch'iang village of Taotszeping, photographed from above to show the flat house tops.



A Ch'iang family at Kaotongshan, near Wenchuan.

The people are farmers, cattle raisers and shepherds. Many of their houses have little of the solidity and durability of Cheeang houses but they register a big advance from the tent stage of their progenitors. The people are often, tall sturdy and well developed. Some of their chiefs are immensely wealthy. A visit to their homes is a surprise to the traveller who expects to see an ordinary Tibetan dwelling. And the surprise is all the greater because of the genial reception given him.

All, of course, are Lamaists. They seem, however, to be much less strict than their co-religionists further West.

A vast trade is done in the import of tea and the export of skins and wool. Yak caravans, in the season, are continually coming and going. P'ien cattle or the cross bred yak-oxen are much in evidence and there is also a hornless breed occasionally seen.

The Hsifan live as far East as the Longan district where they meet another class of tribesmen. Who these are precisely has yet to be determined. The late Rev. R. A. Whiteside, of the C.M.S., who was stationed at Longan, knew of them and would, had he lived, made an attempt to do work among them. He once wrote us that, "there are three districts occupied by these people. 1. Ho-Ch'i-Kou, which is governed by Ts'ien Wang T'u Kuan (前王土官). There is a valley 20 li from this city which runs right away into the mountains for 300 to 400 "li" with an outlet in Kansu near Wenhsien. 2. Huang-Yang-Kuan (黃羊關), which is governed by Hou Wang (後王土官). The valley opens from Shui Tsing-P'u 120 "li" from this City. The road from it goes on over snow mountains and after 400 or 500 "li" leads to Kansu near Kaichow. The people in these two districts speak practically the same dialect and may be regarded as of one race though under different Governors. 3. Ko-Tsze-Pa (菓子壩) is governed by Hsueh T'u Kuan (薛土官). The district begins 140 "li" from this city and extends to Songpan, lying generally to the south of the Songpan road. A generous estimate would put the total population at from 12000 to 15000 and they are fast dying out or becoming absorbed by Chinese settlers marrying aboriginal women."

The Rev. W. B. Williston, who succeeded Mr. Whiteside, went at our suggestion and visited these aborigines two or three, days distant from Longan. Which route he took Kansu-wards we cannot remember. But he established that they had a sacrificial religion and worshipped the God of Heaven.

The Ch'iang were once in the neighbourhood, but the Long-An history would seem to infer that these aborigines are of the Ti stock. If, so how tremendously interesting the establishment of their identity would be! We mention this to stir up the spirit of enquiry. No time is to be lost, as Mr. Whiteside wrote that they are fast dying out. We sincerely hope that this people will be neglected no longer. May the wish of this martyred missionary

soon be fulfilled. Should it then prove that these people are indeed "Ti," we shall have gone a long way in the solving of a great question.

Beyond the Cheeang and Hehshui countries to the West lie the vast regions of the Chiarong. We touch them first at Kanpo and Tsakulao after we leave Lifan. These two "T'eng" or tribal colonies with the other two of Upper and Lower Mong Teng are peopled by the Chiarong. They are found, too, in the Kinchuan districts to which the easiest access is by way of Mongkong.

The independent States of Somo, Rongkang, Damba, and Joksgee are all Chiarong principalities. So are the tribal districts of Ore and Muhping. How far the Chiarong live to the West, Messrs. Edgar and Cunningham alone can tell us.

The Chinese refer to this race as the Western Rong. Their language is declared to be different to either Tibetan or Cheeang. A year or two ago it was discovered, and discovered in Chengtu, that all the Chiarong spoke their own language. Actually! And that they all could understand each other. Marvellous! The Tatsienlu missionaries who had known the race for many years made confirmation of this long before. Which, of course, made the discovery all the more exciting.

Messrs. Fergusson, Brooks and Myers, about 20 years ago, visited the Chiarong States. Mr. Fergusson later put his description of their travels into book form.

We do not pretend to be able in the least to explain the intricacies and perversions of the present day Lamaistic beliefs of this hardy race wedged in between Tibet and China but want simply to lament that many centuries ago they allowed Tibetan Buddhism to swamp their early native faith. Among them now we see the sorry spectacle of ritualistic relics of which no one has even a clue to their meaning, but yet which they superstitiously are afraid to discard. White stones they have, too, but allow them to grow black with dirt and smoke. The Lamas on behalf of the people offer sacrifices but have transferred these to Buddha while they recite or grind out with the offerings their own inane gibberish of prayers.

These notes on our West China peoples are obviously very scrappy, provocatively incomplete and probably sometimes not perfectly accurate. But this is exactly why they have been given. The need of research is imperative and the hope is that they will lead to greater and more intense investigation.

Take, for instance, the religious problem only. How pressing is its solution and how much there is involved in finding that. From the earliest times the majority of these tribes have had a monotheistic sacrificial faith. How came it? And whence arose the remarkable similarity in all their religious practices? No rule of thumb or evolutionary theory or haphazard guess is of use here. Only the patient earnest accumulation of data will avail. We believe we have in these parts an opportunity to throw startling

A group of Bo-lo tribesmen. The Bo-lo are a mixed race. The name is supposed by some to be made up of "Bo" meaning Tibetan and "Lo" meaning Lolo.

A group of Hsifan chiefs with their retainers, taken on the Chinese drill ground at Songpan. Their rifles have each a supporting fork, which is placed on the charger's neck to increase the accuracy of the rider's aim.

light on the early religious mind of the human race which exists in no other part of the inhabited earth. Granted that there has been a sorrowful decline in these religious ideals and that Buddhism wherever it has gone has cankered, perverted and often blasted the finer spiritual conceptions of our primitive folks, yet it is still possible to trace and disentangle much of tremendous worth by knowing how to proceed about it. Some have retained what others have lost. One may find plants living here that have died out there. The religious scientist knows how to collect and classify when he is given a chance. Here is his chance.

The present writer has already contributed a share to the work in his travels and labours among the Cheeang. Fortune favoured him in finding intelligent Christian Cheeang friends and through them old men of repute who taught us much of the inner meaning of the White Religion. One cannot find much in the company of Chinese or with Chinese at your heels. If you do, it will be a travesty of the truth, and probably specially concocted for your own consumption, and to build on Chinese assertion marks one out as a fool. We have sat in an evening among the Cheeang and heard them joking and laughing over the versions given to gullible Chinese who came enquiring about their worship. We ourselves have tested out this trait of theirs with Cheeang in districts who had not previously met a missionary and found it to be a common or recognised habit of theirs. They trust no strangers, even as none are allowed to their sacrifices, where their ritual is kept pure.

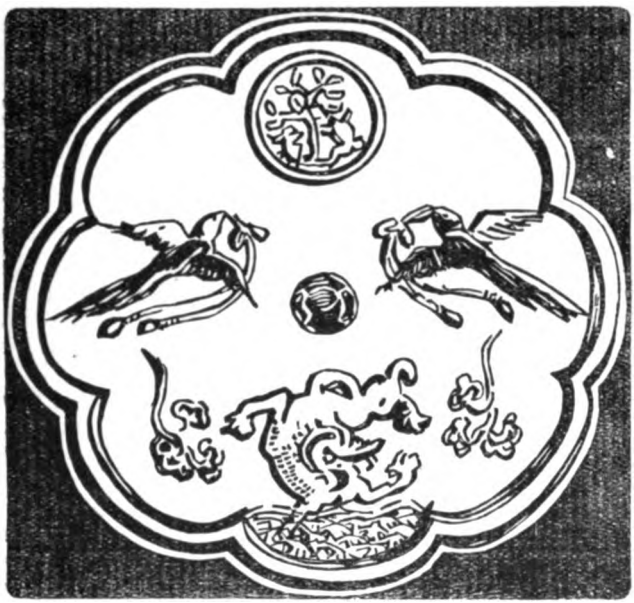
These aged informants of ours have now passed on. Had we not shown diligence then we could not now have learnt what they taught us. Is not this enough to stir others up to set about learning all they can from other tribes before the opportunities diminish? We have in our possession a Cheeang liturgy the sounds of which are written in Chinese, but no one can now be found who understands it. We have sat and listened to a priest chanting his prayers who while he could repeat everything could only interpret a few lines of the whole.

The Cheeang once had their own writings. Now the art of the scribe is lost. We heard once of a scroll or book found in an ancient tomb but all trace of it had gone. Though the Cheeang burn their dead some do not and very old tombs are found in their country in clay banks, as stone slab burials underground or as cut in the solid rock, mostly near the river side. At Hoping, 5 "li" above Wenchuan, there are numbers of stone slab burials. The tradition is that they belonged to a small sized race of men whom they, the Cheeang, displaced. An iron cash of the South Song dynasty was once presented to us as taken from one. Mr. C. H. Coates photographed a mummified looking body from a rock-cut tomb on the hillside above Panchiaochi. The climate is so dry that others may be found and if ever another old book comes to light and it should prove a Cheeang volume the interest then would be

great if by a knowledge of the Nashi script one were able to read it. Who knows if the Nosu in Kueichow or some other tribe have not preserved the meaning of some phase of ritual which elsewhere has been lost. And vice versa. If so, one district could thus piece out what is lacking in another. Even in the Cheeang country this can be done. One can learn here what cannot be learnt there. The ritual is fuller in some places than in others.

For those seeking health or change a summer wisely spent in the Cheeang highlands could not be improved on. The climate is ideal on their mountain sides, the scenery unsurpassed anywhere. There is a magnificent virgin country on the divide between the lower T'o and Heh-Shui rivers. From the T'o the entrance is at Tongmenwai. It begins above the village of O-ir. From the lower Hehshui the road leads via Shapa to Sanchichai. From Sanchichai over the divide 13000 feet above sea level to O-ir the path is 120 li through "no man's land". On the southern side, on the high slope above the forest line the carpet of flowers is enchanting. With a tent here an excellent outing could be spent. The wilds are rich in fauna and flora. The place is a naturalist's paradise.

A second valley leading up to the divide is by way of Sanchakou. There is another beautiful country between Tsakulao and Ts'aop'o in the Wasze territory which is greatly praised, but we never had time to take that route. But we have ascended a glen opposite Wenchuan and leading in from Ts'eh-T'ou which takes one into magnificent scenery. To enjoy oneself, to learn anything, to do something, the rule is: get off the main road. Take no servants given to browbeating or cheating the natives. Employ a local guide. Show kindness to all and give help wherever you can. Then you'll reap a harvest of kindness and leave endless good-will behind you.

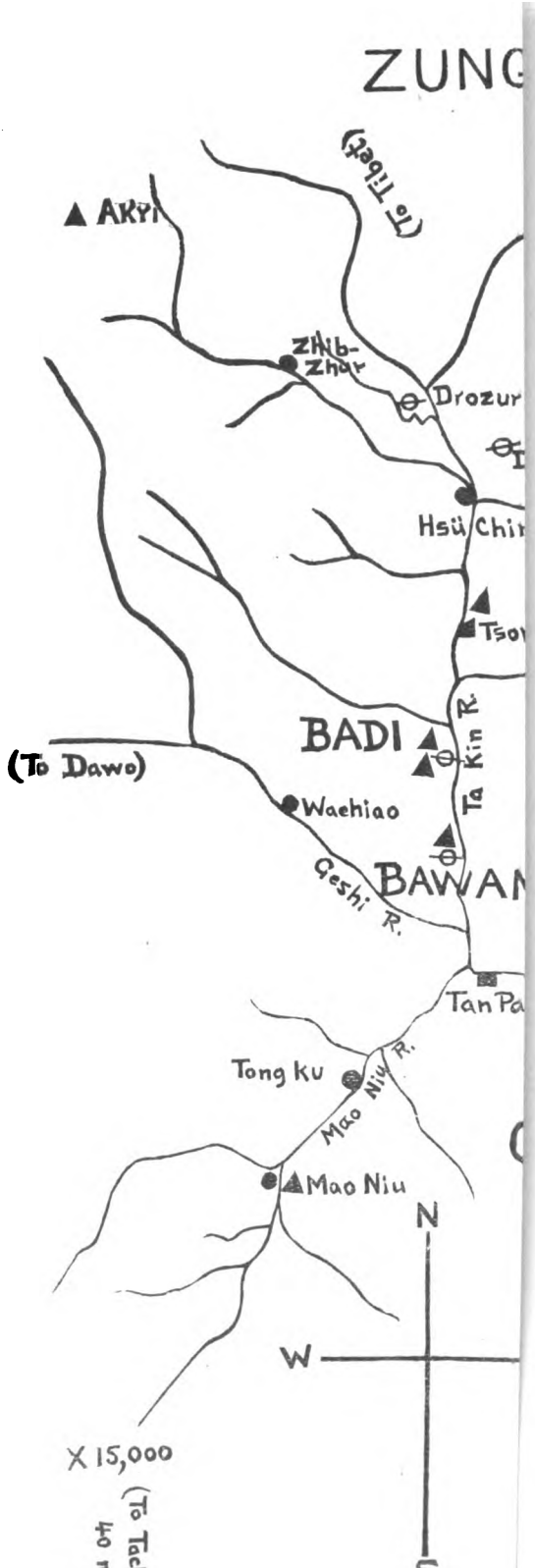


This drawing by Mrs. Kitchen of an ancient mirror shows a sacred tree with a figure underneath on each side. Below a dragon is seen. In the centre are two birds flying. Is not the whole representation suggestive of the Genesis story?

THE ROMANS OF THE SZECHWAN MARCHES

J. H. Edgar

The Moslems in many parts of West China insist that their ancestors came from "Rum." The local languages give us no information and we are forced to conclude that *rum* here, as in *Rum*ania and Erz*erum* means "Rome." Moreover, it also demands that we consider the ancestors of the Moslems in China as immigrants from Asiatic colonies of the Caesars when the Byzantine rulers were masters The fact that in Tibet "Rum" is still the name for the Turkish dominions, shows how conquering nations sought to absorb names as well as empires, and the agents of the Prophet evidently saw no reason, when in distant exile, to deny their connection with China's former imperial counterpart in the West. The arrivals of these emissaries of Mohamet was between 700 and 800 A.D. They came as "Romans," and their descendants 1200 years later in the back-washes of Asia still affirm with no uncertain sound, "We are Romans!"


ZUNG
(To Tibet)
AKYI
Zhib-Zhar
Drozur
Hsü Chi
Tsoy
BADI
Ta Kin R.
(To Dawo)
Waehiao
Geshi R.
BAWA
Tan Pa
Tong Ku
Mao Niu R.
Mao Niu
N
W
X 15,000

THE RACIAL FACTOR IN THE KIN CH'WAN GROUPING

J. H. EDGAR

The eastern frontier of Kin Ch'wan is about 110 miles west of Kwanhsien, and the territory is completely surrounded by twelve native states with autonomous military or civil chiefs or princes. The region, consisting of more than one ethnic group, formerly federated, was after a series of wars, conquered towards the end of the eighteenth century. Thereupon China began her constructive policy by almost immediately founding her five colonies under the control of a colonial administration

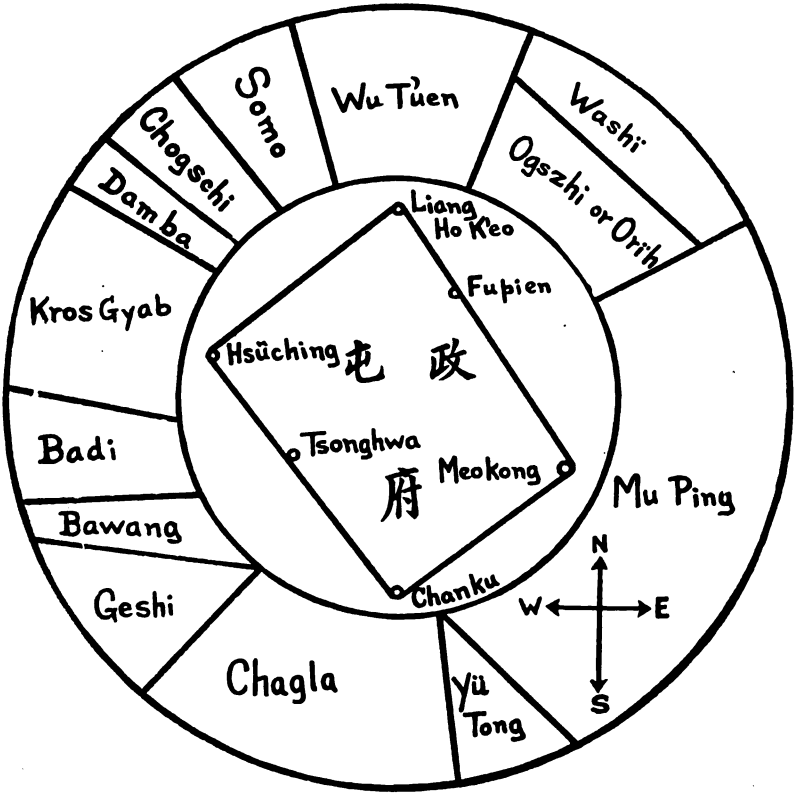
The name Kin Ch'wan, originally, had nothing to do with gold, but was compounded from *Ts'u Ch'in* and *Ts'uan La*, the names of two popular divisions of the preponderating Kia Rung. The region is now divided into the "Greater" and the "Lesser" after the main river and its principal tributary.

The topography of the Kin Ch'wan demands some introductory remarks. The eastern limits of the grass lands, from T'ienwan to Drozur, form a regular, but at times broken rim from 5000 to 10,000 feet above the softly rounded peneplains of Khams. But on the China side we find a savagely broken country of gorges and mountain ranges descending eastwards with interrupted uniformity, to relatively low country in the vicinity of the Min River. About the centre of this much eroded and corroded tract the T'ong, emerging from K'ros Gyab as the Gyalmo Ngul Ch'u, forges south through deep valleys, gorges, and box canyons to Tzïtati, where, turning east, it pierces the Mount Wa plateaus, and joined by the Ya and Min at Kiating, finally, loses itself in the Yangtse at Suifu. With the lower reaches we are not now concerned, but at Yepa, twenty miles above Wa Sze Kou, the river, for 150 miles has been pounding through a canyon course carved out of an elevated block that would otherwise have made the lower parts of the Kin Ch'wan an imposing mountain lake. A bird's eye view of the region from Yepa to the extremities of the Kin Ch'wan would give the impression today of a crinkled fan with a long slender handle. The leaf would represent the depression already mentioned, and the handle would be the series of canyons through the ranges. The gradual deepening of this awesome feature has had an important effect on the cirque-like plateaus of the Kin Ch'wan, for impelled by a southward slope, the main river, and tributaries too numerous to map or mention, would, with ceaseless activity, carve their

patterns from the primitive block. We may still see the remains of old valleys. They exist almost unmodified in higher altitudes, and as ancient lake bottoms lower down. An interestng configuration of land above Hsü Ching is probably an example of the latter: and views of the former, in entirely different positions, may be had from a terrace on the way down from Mow Kong three miles above the junction of the Ta and Hsiao Kin rivers. Another, much higher, is seen on the left bank of the T'ong in Yü T'ong opposite the village of Yepa. The new topography is not only the result of the ceaseless pounding of water but also of the insidious action of nature's dissolving or other eroding agents. We have further to reckon with the expansion of heat and the contraction of cold, the law of gravitation, earthquakes, and direct and indirect human agency.

The above interpretation of the Kin Ch'wan topography demands extensive tracts as old as the glaciers, and others not only of a much more recent date, but those actually still in the process of formation. The latter consist of river flats, slopes in the deeper valleys, backwash areas, deposits from side ravines, material left by flood, terraces, and landslip masses. But high above the new formations we find the remains of old valleys, lake beds, hollows, slopes, terraces, rounded ridges and other features of past ages before the advent of man. In both cases Mother Earth has offered these zones to her protege, *homo sapiens*. How long he has been in the Kin Ch'wan is a hard question, but we would tentatively associate him with the loess like deposits around Fupien, and with the higher sections of the deeply eroded valleys. We are in the same dilemma regarding proto-historic man. We suspect, however, that he came to this Arcadia from the table lands and valleys of the north. If so, history for a thousand years has been silent about his doings, but we infer that he was free from China and only culturally influenced by Tibet. This argues well for the fertility of the land, the bastions of nature, and the spirit of freedom within man.

But the ramparts of God, the patronage of Lhasa, and the "towers of Babel" failed them at last, for China, at a ruinous cost in money and men, smashed the proud confederacy of the Kia Rung and began her normal policy of reconstruction, which is never extermination, but absorption into the greatest human amalgamation ever known. Hence on her advent to the Kin Ch'wan she immediately inaugurated a new form of grouping in marked contrast to the old in many ways. Briefly, the new colony was to be made safe for the Chinese; the commercial opportunities were to be studied and developed; as the result of improved polities returns for national losses were to be assured; and the conquest was to receive finality by the absorption of the native masses into the body of the conquerors. So a cordon of friendly rulers was to surround the colonies; garrisons were to be sustained in strategic



Diagrammatic representation of the region of the Colonial Government or T'nen Cheng Fu

positions; doubtful individuals and groups were to be sent to regions nearer China; roads from each colony were to converge at a carefully considered capital; and it in turn was to be linked up in a practical way with Chengtu. Investigation showed that many areas were vacant owing to death and transportation, and many more capable of development were untilled. These were all at the disposal of soldiers; and others were by various means induced to make a new start. As the government were very much in earnest, cities were immediately founded, partly as a means to develop trade, and, also, to support the garrisons appointed to protect those who could in any way make the venture a success. In a short time, therefore, Mow Kung became the capital; Hsü Ching a department; and Ts'ong Hwa, Fupien and Chang Ku, districts in the same administration. Six headmen and four princes were responsible directly, or indirectly, to the military commissioner at Mow Kung, and the abbots of liberally subsidized lamaseries were directly under Peking and not Lhasa.

A detailed account of the above colonial centres will indicate how Chinese grouping differs from that of the Kia Rung and other ethnic divisions:

(a) Mow Kung is built near the site of a Kia Rung fortress and was the most formidable of all the non-Chinese strategic positions. The military camp is on a terrace deep in the Mei No gulch. Above this feature and on the left bank of it, and the Hsiao Kin, are three terraces. On the first are the buildings of the civil official and the Catholic mission; 400 yards further down is a larger terrace high above the Hsiao Kin box canyon, which is occupied by the town of "Newmarket;" and on still another terrace, hundreds of feet higher up, is a lamasery which, although in ruins now, is an excellent imitation of a fort. As the settlement and garrison are below the arm of a cross formed by the canyons of the Hsiao Kin and the deep V-shaped valleys of the Mei No and K'ong K'ou gulches, and canyons, rivers, terraces, and human groupings are themselves ensconsed between mountains thousands of feet high, we can imagine a permanent sense of security as a heritage of China's enterprising empire builders. As a capital there were other considerations of a favorable kind. Mow Kung was, for instance, 160 miles from both Kwanhsien and Tachienlu; and 70, 50, 45, and 30 miles respectively from each of its colonial satellites. The roads were good, and as enemies were far away beyond the cordon of friendly princes, the colonial capital was usually as safe as any city in the empire. Hence Chinese and natives went to it as a final court of appeal in all matters, and imports and exports alike passed through its warehouses. As a centre for such a region the situation could not be improved on, and it is hard to imagine causes in the future that will challenge its supremacy.

(b) Hsü Ching, in sight of K'ros Gyab and Damba, is the most remote of all the colonial outposts. It had a "Department"

status; a strong garrison; and two native headmen. Up river there were rich agricultural regions to be exploited and its mild climate produced excellent fruit, including a famous pear. The town, also, on the right bank, was 30 years ago, large and prosperous. Indeed, the colony was well chosen as a base for military operations as well as for peaceful penetration. The withdrawal of the military garrisons has, however, adversely affected the town and not improved the attitude of the truculent and powerful prince of K'ros Gyab, but the country people are, to a large extent, unaffected. In the town, and in Chingli, six or seven miles up the river, Chinese influence dominates, but in other places the absorption policy has reached a stage where a plebiscite might send the hybrids as readily from, as to, China.

(c) Chang Ku or Rongmi Drangu, and now Tanpahsien, was and is the only rival of Mow Kong. Situated in the old principality of Chagla it still is the centre for Badi, Bawang, Ge Shi and Tibetans in the T'ong valley as far as K'ong Yü. In the midst of very turbulent natives its position in the territory of the most powerful, and at the same time most loyal of China's princes, made it safe as well as commercially strategic. It is built on landslip debris below mountain settlements and under the shadow of snarling precipices. It has a population of about 200 Chinese families, and small lamaseries and important headmen's castles are not far away. It is now under Tachienlu politically, but Chengtu controls its commerce. A very rough but important road connects it with the great tea highway near Dawo.

(d) T'song Hwa is now an isolated agricultural colony, between mountains, and owing to bad roads through gorges and canyons it is indifferently connected with either Hsü Ching or Badi, both 25 miles away. The only true outlet is to Mow Kong, and the high and unpleasant K'ong K'ou Ri makes such a journey a fair imitation of an adventure. It probably owes its existence to the requirements of the "colony" policy which demanded the occupation of certain strategic positions in the new dominion. To insure some semblance of success the lamasery "Source of Light" was liberally subsidized and became the official centre, where non-Chinese princes were expected to pay homage to the Manchu emperors. But that was long ago: the "Kwang Fah" Sze is now the best imitation of a ruin one could meet with, and is an excellent comment on the once thriving, but now moribund, Chinese Lamaism.

(e) Fupien, 30 miles to the north of Mow Kong, has less to recommend it even than Ts'ong Hwa. It was chosen partly because of rich loess-like deposits, and partly because roads to Hsü Ching, the four states, Lifan, and Kwanhsien, meet or depart here. The princes and Lamaseries of Mup'o and Pachio, also, are near at hand and the agricultural value of the whole region is of considerable importance. Thirty miles upstream Liang Ho K'ou, is not only

an important trading outpost, but there is a flourishing colony of non-Chinese in the valley below. It is quite true hard times and a devastating rebellion have made Fupien an unpleasant ruin, but if ever Mow Kong loses the power to converge trade to the south, and as soon as Fupien's right to export and import along lines of least resistance is officially admitted, the present struggling colony may become an important centre in the Kin Ch'wan.

But the city concentration was a means to many ends and agricultural development was one of the most important. Hence soldiers and victims of over-congestion and injustice were induced to settle on fertile river banks, near main roads, in the vicinity of settlements, and fertile patches in sequestered ravines. Sometimes, also, from ten to thirty families would group around lamaseries and near the castles of princes or headmen. Chinese women were never officially prohibited but many men found the native girls just as pretty, more useful, and equally prolific. The hybrid families, also, were in some important ways an improvement on the pure stock. Such colonists rarely became wealthy or important citizens; many may have degenerated; but most have found enough to eat, wear, and pay taxes, as well as a scanty provision for old age and a coffin of some expensive wood.

Agricultural and commercial success and a reasonably efficient military and civil supervision made for steady progress, but an unexpected discovery was responsible for an almost feverish acceleration. A man named K'ou, by natural ability, instinct or magic, found gold in large quantities. The emperor was deeply interested, and ordered him to continue finding it. This he did until the whole of the Kin Ch'wan was ransacked, and tons of the precious metal went into the imperial treasury. No doubt this discovery gave a happy fillip to the colonial venture.

As we intend to mention the native architecture in the Kin Ch'wan, that of the Chinese must be referred to, if only to provide a contrast. In the colonial towns the temples, yamens, guild halls, shops and dwellings are Chinese, and compare favorably with their counterparts in the provinces. But in the country, Chinese inns and farmhouses, built of local material and to a large extent controlled by native norms, do little credit to either Chinese or Tibetan culture. Probably the bulk of the Chinese in the Kin Ch'wan cannot rid themselves of the idea that they are strangers experimenting in an alien land, and this often produces an inertia which is apt to express itself in a drift from bad to worse. In the case of yamens their depressing condition is easily explained, inasmuch as the officials are patently sojourners and naturally do not consider it their aim in life to minister to the comfort of unknown successors.

The native grouping is the result of local interests, gubernatorial, religious, and agricultural. The Tibetan culture, in its present stage of development, has no towns, but the princes and headmen's

centres, as well as the lamaseries, supply the deficiency to some extent. Each, therefore, will come under review.

(a) The native rulers generally force a concentration in some strategic and fertile locality. The palaces are similar to the dwellings of ordinary men but with the dimensions, interior upholsterings, and associated traits generally exaggerated to some extent. The palace of the Bawang queen, for instance, inclines up a craggy eminence, and the imposing irregularity of walls, roofs, turrets, triangular corners, windows and latrines, is grandly dominated by a defiant tower, artistically splashed with white wash. The palace of the Badi prince, now a ruin, on a crag overlooking the turbulent Takin, must have been one of the finest structures in Mantzedom. There are also imposing masses, with hints of barbaric splendour, in Bawang the Less; Kwan Chiai in Ogszhi; Drozur in K'ros Gyab; and Piehsman near Fupien. The old fort, also, at Mei No must have been a veritable ogre's castle. In many cases the princes duplicate their palaces in out of the way mountain ravines, on sequestered terraces or strategic wastes. These retreats give them an opportunity to retire from the public gaze, some respite from official duties, as well as safety from enemies, or the urgent demands of Chinese agents. All the princely centres are responsible for some kind of concentration which is exploited by traders, native and Chinese.

(b) The lamasery is a democratic grouping representing the princes and people. It is generally in a central position. In pre-Chinese days, even more than the prince's palace, it was the town in embryo. As it was a religious institution the position was not necessarily strong in a military sense, nor were the buildings usually suggestive of a stockade. Again it had none of the accessories so essential to the farmer or the nomad. The prevailing flat roof here, also, has a rival in the gabled one, because the latter is better suited for the display of the rich gold gilding so much affected by opulent institutions. The lamasery was from the people and for the people. It truly exhibited their culture, wealth, and spiritual fervour; and its festivals, pageants, sports, and religious exercises supplied a variety of demands common to the moderately civilized back-wash people. And, finally, safeguarded by a living god in Lhasa, the holy city, who was the head of a powerful hierarchy, the lamasery spoke of a divinely sanctioned democratic principle that could, if necessary, bring prince and emperor into line. A striking comment on lamaism came to our notice in 1931. We were uneasily traversing a lonely region of unfriendly nomads 14,000 feet above the sea. In due time we came to a mass of melancholy buildings at the foot of a pass. No permanent habitations existed anywhere within 20 miles; but this was Akri, the religious centre of 500 nomads, who were vociferously proclaiming their independence of China. We, however, were welcomed as "brethren" because a wicked servant, unknown to us, had introduced the party as friends of the Dalai Lama.

Lamaseries in the Kin Ch'wan are small in comparison with those in Khams and Tsang, but their power over the political groups is similar. The following are of great importance:

(a) In Bawang we have a good sample of a small but powerful lamasery. The local village has some ten small, dirty, Chinese homes, a few inferior Tibetan structures, and the Queen's administrative buildings. But the ordinary is forgotten by the dominating presence of a white cliff-like wall, broken by window spaces of a dark and sombre kind. It is too fort-like to be pleasant but the severity is toned down by the homes of the lamas prettily grouped on higher ground behind. The courtyard, too, is clean and the flanking buildings, all in excellent repair, suggest that the management is efficient and has ample funds to draw on. There are at present one hundred lamas on the roll book.

(b) At Linka, in Badi, we have a similar institution with more lamas. Situated on a ridge it is the usual temple with buildings facing a quadrangle. But outside again amid gardens of pomegranates are the homes of the priestly colony. Highly colored panels; brilliant flowering plants prettily arranged on balconies; and fruit trees in radiant bloom or burdened with fruit; all call for admiration and a more kindly attitude towards the personnel of the settlement.

(c) But religious ill-will is by no means lacking in Badi. A mile down stream in a depression is the temple of the Bons or Black Magicians, who worship the Cross Cranponee or the emblem of the Sun. The colony is picturesquely situated. A rugged escarpment flanks it on the south, and high ranges overshadow it on the west. In front is the bellowing T'ong which lately having emerged from a series of gorges is now entering another. The homes of the individual heretics hug the mountain's side and form a dainty background which again stimulates us to think better of them than many rumours would warrant. But our interest now is in architectural displays rather than the *pros* and *cons* of Oriental nonconformity, The temple is a combination of Kia Rung, Chinese and Tibetan architecture so arranged as to produce a very unusual effect. The ordinary buildings which flank the quadrangle are unpleasant and ill kept. But the temple is unique, unless it bears some resemblance to a fortified gate tower in an old Chinese city. In detail we have (1) an enormous podium 16 to 20 feet high; (2) from this, leaving a broad rim, rise four walls, slightly tapering upwards for 20 to 25 feet, which ending with triangular corners give the mass a sturdy tower appearance; (3) Then, apparently from about the centre of the basement, floor a double-roofed structure of piliars, beams, and tile work, such as may be seen on temples and gate towers, rears up thro' the lower structures. The smaller roof, in pleasing harmony with the larger under one, is crowned with a large globe which is, finally, surmounted by a delicate gilded spire. Two kindly roes or

"k'yung" support the topmost structures on the north and south. The walls are age-worn; the whitewash is unpleasantly soiled; and even the obtrusive black band that so defiantly proclaimed the heresy of the cult, is now indeterminate grey. The vestibule and the worship hall suggest a wickedly haunted forest, and when the tumultuous music begins to sound, and grotesquesly garbed figures glide to and fro in an incense laden gloaming, the unaccustomed visitor may wonder if the devil has not been freed from his chains.

(d) Two days up river will bring us to the famous Fah Kwan Sze which failed to become a rival of Lhasa because Lamaists will only really admit one supreme incarnation, and he is in Lhasa. Hence the "Source of Light" only flickers feebly on a small plain some distance from a back-wash colony.

(e) Halfway between Tanpa and Mow Kong is a fort-like mass of buildings containing from 60 to 100 lamas, which is the religious centre of an important hill population under the military headman of T'se Long.

(f) Ninety li from Mow Kong on the Kwanhsien road, at Ta Wei, we have the lamasery of Ogszhi, which is thought by some to be the most important in Kin Ch'wan.

(g) On the Fupien road again, 70 li from Mow Kong, is the ruins of the famous Pa Chio lamasery, which. although ruthlessly robbed and gutted for the sin of rebellion, is again being built with enthusiasm.

(h) And finally, Mu P'o is a priestly colony in conjunction with a Chinese settlement and the centre of the Piehs Man chief. The inmates may not number 100, but they represent the cultural cream of the State and powerfully influence the opinions and conduct of the region.

The ordinary grouping, unlike the castle of the prince, which is strategic, and the lamasery which is central, must accord with what the topography offers. Hence the castle of the farmer is everywhere. We find them as in Geshi, Badi, Bawang, Chagla and the five colonies on river flats and ravine deltas; in rough depressions of landslip origin; on terraces of the ancient topography; on ridges and slopes above precipices; and below the jungles and forests of the higher ranges. The ingenious daring of these farmers is amazing. In K'ros Gyab we suspect that no declivity of less than 50% is ignored and the castle may be from two to three thousand feet above the prince's centre. How they are reached without captive balloons, or how the infants survive, are problems we willingly leave to others. The farmer in the Kin Ch'wan has a more varied choice, and his beautiful white-washed castle dominated by a tower from 75 to 150 feet high may peep out from groves and gardens; rear upwards from river banks; bestraddle razor back ridges; or defy the world from crags or frowning precipices. They may be romantically alone; in clusters with spaces between each structure; joined together in one huge mass; or string up the slope

or ridge tier upon tier until some obstacle calls a halt. On rare occasions, also, groups of castles, like ascending terraces end in a graceful, sky scraping tower. These structures are often prominent features on the landscape, and as in the case of Drong Lo, remind one of the high chimneys in a flourishing manufacturing district. If we accept the opinion of Chien Long's generals they were built for defensive purposes and did much to retard the operations of the Manchu armies. At times they incline in a marked degree from the perpendicular, but even those built of clay, have never been known to collapse. The castles of the farmers usually have a fort-like aspect, owing to the triangular corners that are invaribly present. These picturesque abodes are solidly built of stones and always have more than one storey. The basement is for animals; the next floor is for the owners; and the higher ones may be temple, granary, or sleeping quarters for menials, visitors, or lamas. These structures accord perfectly with the local needs. In the vicinity of farms, water supplies, and fuel, they are usually comfortable and commodious. They are stables, cowpens and corrals as well as barns, temples and shrines. Moreover, they are the families' castles and strong towers. Both as regards design and position they threaten the well-being of an assailing enemy, and it is almost impossible to destroy them by fire or local engines of destruction. Indeed, like the rocks of the valleys, and the cliffs of the mountains, they are permanent features on the landscape; and even the ruins are never pulled down but crumble away as other irregularities of nature. In the Kin Ch'wan white is an obsession. As white-wash it is applied to the walls and splashed in occult designs high up on the towers, as well as along the foundations of houses. Then quartz fragments as white as snow, cap the ramparts, walls, corners of houses, incense stoves, and any place or eminence likely to gain the attention of men. This is probably a survival of a primitive culture that was neither Chinese nor Tibetan, but which powerfully influenced both.

The grouping of the Kin Ch'wan castles, especially in Bawang and Badi, is artistic in a high degree. Rarely does one find architectural designs so charmingly displayed. Nature it seems spoke to these men of the back-wash, and her voices were correctly interpreted, and her desires expressed in a wonderful way. And today, whether on the beetling crag, the awesome precipice, the commanding terrace; or amid the gardens and turquoise haze of the verdant hollows, the harmony with nature is so deft and impressive that it cannot fail to haunt the traveller for the rest of his life.

Where there is human grouping there must be roads. These, of course, existed before the advent of the Chinese not only between the states and settlements everywhere, but also ran to the important centres in China and Tibet. Later on, the conquerors in their own interests improved the existing roads and made many new ones. The policy was to converge traffic from the peripheries of the Mow

Kong centre, and then link the latter with Kwanhsien, one of the gateways to Tibetan regions. The next main road went south to Tatsienlu, and more than one joined the caravan road to Lifan. Tracks for porters also led out to Muping, and three or four made communications with the north-west tea road possible. Of these, two were of great importance: one passing through Geshi and over the high Tang Li Pass reaches the northwest Tibetan route above Dawo. The other enters K'ros Gyab above Hsü Ching and passes through many wild and romantic regions to Tibet and Ching Hai. The Kwanhsien—Mow Kong road is constantly used by coolies, horses and chairmen. It is lonely, rough, and rain soaked, with draughty inns and coarse and haphazard food supplies. Two passes, the Niu T'ou, and Pa Lan, present difficulties: the former, because of steep approaches, and the latter (15,000 feet), because of altitude and unpleasant weather. The road to Tatsienlu, following down the Mow Kong river through arid, tiresome country, crosses the Ta Kin near Tanpa, and proceeds through deep gorges, woodlands, and finally open country to the Ta P'ao, 15,000 feet; and then descending rapidly, enters an open valley which leads to Tatsienlu. The distance from Kwanhsien to Mow Kong, and from the latter to Tatsienlu, is the same, 100 miles. The roads inside the basin, apart from those mentioned, are arid, rough and arduous, often dangerous and abounding in bridges of a provokingly insecure construction. This is especially so in Geshi, and from Badi to Hsü Ching via Ts'ong Hwa. Here the cliffs and mountains make animal traffic an unpleasant adventure. The K'ong K'ou Rï, between Ts'ong Hwa and Mow Kong, and the Hong Ch'iao between Fupien and Tsakulao, must be treated with respect in the summer, and the latter left severely alone between November and April. K'ros Gyab may be entered by the "Camel Gorge" just above Linka in Badi. Roads to Kong Yü, 80 miles down the T'ong, exist but wise men, not interested in forlorn hopes, give them a wide berth. The natives reach their own, or Chinese, centres by roads and tracks which cross rivers, traverse valleys, scale mountains, and edge along cliffs where the margin of safety is reduced to a minimum. As often as not they are for experienced pedestrians only. Both the Kin and its tributary are crossed, and at times descended in favourable reaches, by coracles. The bridges, which span all the rivers except the Ta Kin, have been criticized above. Authorities differ regarding their right to be called cantilever. In any case, a layer of logs is laid down and held in position by quantities of rock fragments. Another layer projecting over the first is treated in the same manner; and in a short time a series of such projections on both banks reduce the central chasm to reasonable dimensions. Then, finally, a sturdy plank from two to three feet wide completes the structure, which may be a good or indifferent bridge, firm and reassuring, or erratically resilient. The mountain tracks demand much time from, and

great exertion on the part of, the natives. To go up to, and down from, the terraces is in some cases a hard day's work. In one place where the rainfall is often inadequate only two trips a day to the permanent springs are possible.

A conquered people may be exterminated by severity or kindness; they may be absorbed; they may willingly or unwillingly migrate *en masse;* or they may segregate themselves, and by a policy of non-co-operation, kill, or to a large extent nullify, the influence of the usurpers. This latter, in a measure, has been the policy of the Kia Rung. These people were conquered 140 years ago by the Manchu armies. Although there was no programme of extermination, yet owing to the exigencies of war, the bravest and the best were killed or transported; and the opportunity to unite embarrassingly was safely avoided in the interest of an imperial policy. For the same reason many were dispossessed of lands and castles, and all were in varying measures face to face with an alien and insinuating culture. Their language and customs were threatened; so was their liberty; and by military foresight and civil enterprise there was not only an unusual and often unnatural demand made on the land, but the fruits were misdirected to alien channels. Gold, especially, which was almost a fetish, left the Kin Ch'wan in tons, and in a marked degree enriched the enemy. So it is not difficult to understand, that to men untrained to cope with the new problems, any policy however sound or beneficial, would breed discontent, and in a general way make their road hard. Hence, in the case of the Kin Ch'wan peoples, we can imagine, even if not articulate, how the tragedy of conquest, and later changes of customs and altered status perforce, would favour that paralysing despondency which has been the death of so many peoples. The Manchus, however, were aware of the danger and with remarkable insight set about healing the mental wounds that are the forerunner of race suicide. The student notices at once; *(a)* that the Chinese object was not extermination but absorption into their ancient human amalgam; *(b)* that with this end in view Lamaism was subsidized as a religion; *(c)* that in most cases the survivors were placed under native rulers; and *(d)* that no criticism was directed against those who wished to retire to the back-washes and build their homes in the most inaccessible locations. So, grasping the fact that Arcadian peace and simplicity could not be allied with progress, the Kia Rung, with no conscious spurt towards further development, took refuge in the back-wash and stubbornly refused to embark on a main stream which they could not navigate. Hence, in essentials, they are today what they were more than one hundred years ago.

But the question comes back like a repeating decimal; is the impregnability of any Arcadia fixed and final? And so with the natives in the Kin Ch'wan, can any defences, kindly policies, or accidents of nature, save them from what may be the world's

Frankenstein, modern civilization, and a probable Nemesis that might yet bring human existence to an end? This potent and annihilating force has submerged the Tasmanians and the Chatham Islanders as it did the Troglodytes of France and the Palaeolithic men of Tibet *kalpas* ago. And there seems no escape for the Kia Rung; they too, must face the monster, Social Progress. Men speak of opium and new vices not in the decalogue, but it is doubtful if China can harm them much in this respect. The real danger lies in the necessity of assimilating new ideas incompatible with a cast-iron environment, and a whole hearted committal to an education that can only be of value beyond the back-wash. In other words, they will be fitted to exploit opportunities, and educated to enjoy luxuries not found on the slopes and terraces above the cliffs. They will learn from newspapers, radios, cinemas, schools, libraries, and countless other sources, about a larger, easier and more luxurious world; and a deep seated conviction that they have not only the right, but the necessary equipment to enjoy it, will breed discontent, and force them in the end to seek satisfaction in the "far country." As prodigals they may return from trains and trams, ocean liners and flying machines, but it will be to foment discontent in the breasts of elder brothers who have been content, so far, in the morning gloaming of Yao and Shuen. One result is certain. The farms on the mountains will be abandoned or worked by the serfs of men in the cities, and the castles will become the abodes of the die-hards, misanthropes, or an occasional neurotic. But even this is not the end. Modern machinery will make the mountain patch an anachronism, and the "knights of labour" will proclaim the cliff track and the heavy burden crimes against humanity. We offer no word of blame: it is Destiny. But the thought of the mountain farms and defiant castles existing only as economic curiosities saddens us. However, it not entirely ruin. The present owners, even if doomed to lose their personality, will still live as new vitamins in a racial body that has drawn liberally from all sources during centuries that have more than quintupled the years of Methuselah and Jared. But after all, the loss of personality is a serious thing. Is it, then, the only alternative to extermination? Reserves under government control would have saved the Moa and Dodo. But the only application of the principle anthropologically, we can think of, is China's policy with the Black Bone Nosu. It can hardly be considered a success; but it gives us an idea. For it is possible that civilization by a due regard to Christ's principles may yet become safe for humanity. If so, it will probably be recognized that races which are either unable or unwilling to conform to the example of leading nations will be given the sympathy and protection that will enable them to develop as their natural instincts suggest and circumstances permit. But that would mean states and even kingdoms on the principle of our national reserves for animals in danger of extinction. Still we are not discouraged, for the idea seems latent in the mandated territory.

OM MA DRE MU YE SA LE N'DUG: AND BÖN WORSHIP

J. H. EDGAR

Tibetan travellers often marvel at the ubiquity of the *Om mani pad me hum* but rarely refer to the fact that myriads would die sooner than honour it in any way. These heretics are the Bons or black magicians, who are fanatically attached to *Om ma dre mu ye sa le n'dug*, a phrase to them more powerful, but to us equally meaningless.

But who are these Bons? The name is derived from "Punya," men who worshipped the *g'yung drung*, cross cramponee, or swastika. The founder of the system, G'Shen-rabs, is said to have on his head the "Mitra" jewel; and his compassion "shines forth as the rays of the sun."

In spite of an attempt to identify G'Shen-rabs with Laotze, 老子, the Taoist sage, Tibetan historians say that he was born in Western Ngari or Khorsum; and the Bons themselves not only claim Persia[1] as the home of their system, but speak of a "long vale of Ormus[2]" to which the faithful will return.

If "Ormus" is a rendering of "Ormuzd," the light god of Persia, we are on interesting ground, for it may be that we have here a link in a chain which will connect Bonism with an ancient cult of sun worshippers. As confirmation we present the following: (1) As regards the Mitra jewel, Webster's Dictionary informs us that "Mitra" was a Vedic deity, probably the Persian Mithras. (2) Does this throw any light on "*ma dre*" in the Bon formula? Is it possible that we have here a forgotten invocation to an ancient sun god? (3) We have mentioned above that the Bons were, and are now, worshippers of the swastika, and it seems almost certain that this figure is a conventionalized form of the sun. As seen today in China and on ornaments in Europe and America its true significance is not at once apparent. but in lands influenced by Bon art we are not long in doubt. In the figures A and B[3] given below we have no hesitation in affirming that both the sun and the swastika are intended.

To sum up, in our investigation of Bonism we must note: —

1. Its far Western and perhaps Persian origin.

2. Its idolatrous reverence for the swastika.

3. A possible association with Mithras[4] and Ormuzd, Persian light gods.

4. The probability that the swastika is the sun represented as a wheel of light.

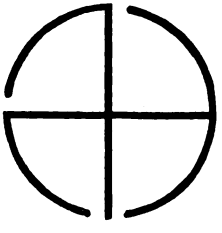
Bonism was well established in Western Tibet before the second century B. C. Its founder was born in the "Temple of Pure Light."

NOTES:

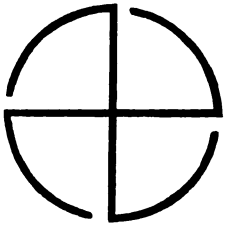
1. Tazig is Persia or Ta Jik: This term included Arabs and other Asiatics.

2. Ormus was so written by a Bon scholar from the Golo region. No European influence of any kind.

3. Original forms of the swastika which show the sun as a wheel. From Kia Rung House Charms.



A.



B.

4. However, we are told "they found the Cross Cramponee on the Madros Lake." (Manasrowara).

OM MA DRE MU YE SA LE DUG
(A Ballad of the Kin Ch'wan)

J. H. Edgar

Th' Egyptians worshipped dogs . . . . . others adored a rat, and some for that church suffered martyrdom. (*Hudibras*)

In far away Manchu Pe Ching
The Lama God Dorje Ts'e Ring
Was keen to cleanse the Lama's land
From those who prayed with drum and hand
"Om ma dre mu ye sa le dug."

"Let all," he said, "adore one God
Or rot beneath the Badi[1] sod;
For soon 'Om mani pad me hum'
Will through the land like thunder boom –
Not 'ma dre mu ye sa le dug.' "

The Bonpas[2] knew a storm was near
Yet none displayed a sign of fear,
For king and pontiff all would dare
And still repeat their founder's prayer,
"Om ma dre mu ye sa le dug."

Soon, o'er the castled hill and vale
Rebellion travelled like a gale
And men despised the Lhasa way,
For wizards taught them all to pray,
"Om ma dre mu ye sa le dug."

Then over Badi-Bawang hills
The flapping flags and praying mills
Were everywhere in strong demand,
For no unholy thing could stand
"Om ma dre mu ye sa le dug."

But once again the mandates came
From Lhasa and Pe Ching the same:—
"The Bons at once must change their ways
And all forego the sinful phrase,
'Om ma dre mu ye sa le dug.' "

The Bonpa lords were very wroth,
And swore 'tis said an awful oath,
That they would curse "Ge-lug-pa" foes[3]
In words whose meaning no one knows—
"Om ma dre mu ye sa le dug."

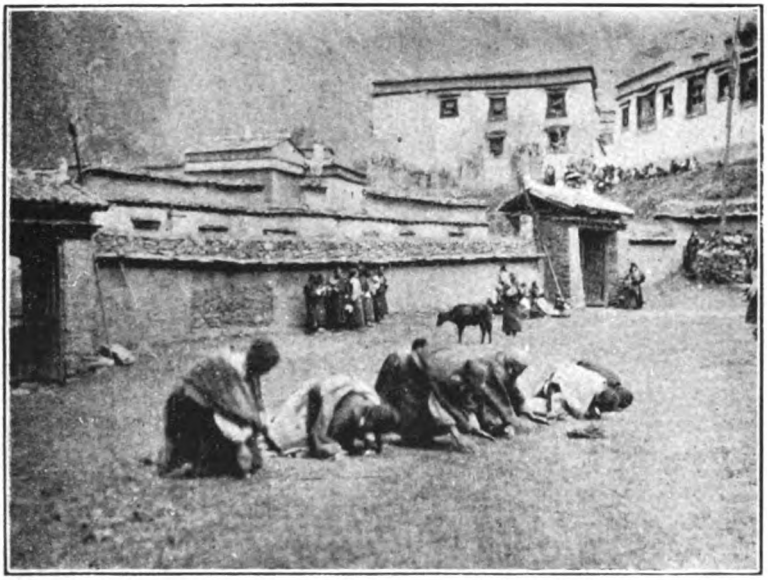
Then on the Bonpo lands there fell
The stinging fusilades of hell,
And homes and temples all were burned
While only men were spared who spurned
"Om ma dre mu ye sa le dug."

They hunted them through mountain brakes.
And ended lives with hellish aches,
But foes could not the vict'ry gain
O'er men who chanted in their pain
"Om ma dre mu ye sa le dug."

And when the overactive gods
Grew weary blessing priestly rods
There sprung from that old martyr seed
The men who still intone and read
"Om ma dre mu ye sa le dug."

---

1. A small principality where the Bons are numerous.
2. The Bons, or black magicians, are a heretical seet in Tibet.
3. The Gelugpas are the yellow or orthodox lamas, whose charm is "Om mani pad me hum."



Photograph by D. C. Graham.

Some of the worshippers at the Festival of the Gods in Tibet. They are bowing towards the Living Buddha on the balcony of the temple.

Photograph by D. C. Graham.

A scene in the Tibetan Festival of the Gods.

NOTES ON THE TIBETAN FESTIVAL OF THE GODS.

D. C. Graham

The Devil Dance, or, better, the Festival of the Gods, which is here described, occurred at the Gu Lih Si Lamasery, west of Tachienlu, July, 1930. The religious ceremonies lasted three days, and were followed by at least one day of horse racing and other amusements which the writer was unable to attend.

In the Journal of the West China Border Research Society for 1924-1925 there is an outline of one of these festivals with an interpretation of its meaning. These notes may be considered as supplementary. They contain primarily the impressions of the onlooker as he witnessed the ceremonies.

On the first day the writer arrived early, and before the ceremonies began called on the abbot, who is also a Living Buddha. His Tibetan companions, on entering the room, bowed their heads to the ground in worship. The writer explained that he wished to witness the great festival, and to take pictures in order that others might see some of the interesting scenes. The abbot was very cordial, and even agreed to allow his picture to be taken at a later time.

Following the interview, the writer, with a Tibetan interpreter, went into the court where the festival was to be held. Already the crowds were gathering, and the ceremonies soon began. Because of the friendliness of the abbot, the writer was permitted to go and to take pictures practically anywhere that he pleased. Sometimes he stood or sat among a group of lamas, and sometimes he mingled with the spectators.

Now a gong is beaten softly. The tapper is wrapped in cloth to give it a soft sound. Then a horn peals forth, sweet and alluring, calling the people to worship.

Soon the Living Buddha marches in, followed by several lamas. The writer is invited to march along and see the great lama take his seat.

There is the soft sound of timbrels and drums, then there are very deep, alluring notes of giant base horns fully fifteen feet long.

More sounds of timbrels. Many men and women among the spectators are bowing and kowtowing reverently in worship.

A lama, clad in a richly embroidered ceremonial robe, marches out with solemn dignity, half marching, and half performing a religious dance. The notes of the music vary with the emphases of

the dance. All is solemn, alluring, impressive. The dancing lama has in one hand a dorje or ceremonial thunderbolt, and in the other a bowl made of the top of a human skull.

The festival is held in the open, uncovered court in front of the largest temple.

All the priests are dressed in red, and they are of all ages. They sit in groups on platforms and in other prominent places near the entrance of the temple. At the rear of the court and on both sides are crowds of men, women, and children. All are dressed in their best clothes, and their dark brown skins, their gay attires, the charms, the earrings, and the other jewellry, are remarkably attractive. The bright red color is dominant both among the lamas and among the spectators. The men and boys look attractive, and the young women and girls beautiful.

A shower stops the first act.

Devotees stand around turning hand prayer wheels or fingering over their rosaries as they repeat "Om mani padme hum."

This festival is dominantly religious, but it is also the great social event of the year, when people dress up, meet their friends and acquaintances, gossip, drink tea and liquor, and watch or participate in the races and other contests.

The rain has ceased, and the first act now continues.

There are soft notes of timbrels and the beating of large drums. The dance is really a graceful religious folk-dance, with dignified attitudes, poses, and steps, all to the accompaniment of soft music. The lamas wear long, flowing robes, beautifully and elaborately embroidered. It is solemn and appealing, and arouses the emotions of reverence and awe.

Now short steps, now leaps, now turns with flourishes of the arms. The right arms of the lamas are exposed, the left arms covered.

The deep trumpets sound solemnly and appealingly. Other priests appear and join in the dance, led by the first priest. Soon the yard is full of dancing lamas, in one hand the tops of human skulls, in the other hand thunderbolts. All follow the one leader, moving and dancing in harmony with him. The abbot sits in dignity in his seat on the second balcony. At almost any time one can see people, overcome with awe, bowing their heads to the ground in worship. The performance is stirring, moving, impelling, even the deep notes of the great horns.

There is a pause in the music and the dancing. Then there is low, sweet, solemn music. Another lama appears on the front porch of the temple, with his back to the audience, in one hand a trident, in the other the top of a human skull. He dances solemnly, as all watch him. He is repeating incantations, such as "om mani padme hum," or portions of the sacred books. We can not hear him, but we can see his lips moving. There are graceful movements and dignified attitudes to the accompaniment of music. He descends

the steps to the court. The deep notes of the trumpets peal forth. Men and women fold their hands above their heads, then on their breasts, and then bow their heads to the ground.

Again the music and the dancing cease. Then there is quick music. Another lama appears, dancing. In his right hand is an image of a human skull. In his left hand there is what seems like a short rosary with very thick beads. The real rosary is wrapped about the left wrist. As he dances, he moves his arms, his lips moving as he repeats incantations, *om mani padme hum*, or portions of the sacred books.

All the lamas now dance in unison.

More priests appear and join in the dance. Some of the priests have wooden daggers in their right hands instead of thunderbolts. All the lamas dance to the music in unison.

Now the deep, bass voices of all the lamas join in chanting or singing incantations or portions of the sacred books. The voices are remarkably low, sub-bass, matching the tones of the trumpets, timbrels and drums. Sometimes one lama sings alone, and sometimes all the lamas join in. It is low, slow, solemn, awe-inspiring, with occasional crescendos. All movements are artistic and graceful, and all sounds harmonious.

Now the whole group of fifty or more lamas walk about in a circle, holding out daggers and skullcaps. Then there is more dancing, and the priests begin to disappear into the temple. The lamas now dance by twos, and the dance becomes more rapid. Occasionally new couples join, and the couples that are exhausted disappear into the temple. This continues until all the young, vigorous lamas have entered the temple. Then the dance is continued by the older lamas, and becomes slower and more dignified. Led by the first leader, they gradually disappear. Art and grace have been evident in this performance.

The first part is ended.

Now occurs the second part, on the afternoon of the first day. Young lamas come out in succession, two by two, performing graceful, vigorous dances to the accompaniment of music. At the same time they repeat portions of the sacred books, or incantations, or *om mani padme hum*. There are a thousand graceful motions, twists, and turns.

After a time two young priests come into the court, dancing and scattering wheat. Then two younger lamas perform, and are laughed at by all. Their clothes are ragged, and they are evidently clowns.

A lama places a rug in the middle of the court. A boy dances forth, dagger and skullcap in hand, beautifully dressed, and dances on and around the rug. He lays down the dagger and the skull cap, and continues to dance. He kneels on the rug, waving his arms and bending and turning his body. The interpreter says that he is symbolizing the deer. Then he gets up, and after a

vigorous dance disappears. Other active dances follow, some by boys, others by young men. These disappear into the temple, and the first day of the festival is ended. There have been graceful, harmonious dances, and appropriate music, but no symbolism.

The Second Day.

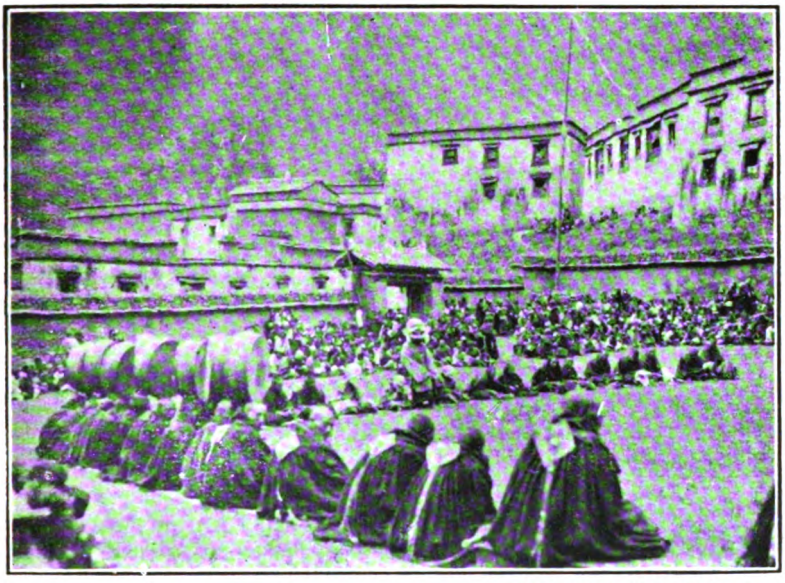
Just as we are arriving, the deep, sonorous notes of drums, timbrels, and base trumpets are calling the faithful to worship. There is a large circle of lamas with musical instruments in the main courtyard, in front of the main door of the temple. There are sixteen drums, two long trumpets, several small trumpets, and several pairs of timbrels. In the center of the circle sits a saint with a very large head, dressed in a yellow gown.

Now enter two men dressed in elaborate costumes, with large heads and wide open mouths. They are vigorous dancers, and are probably demons or devils. Now follow similar men whose faces are a deep blue. Now follow two creatures, one having the head of a deer, and the other the head of a yak, both having horns, and both dancing very vigorously. Then follow two odd-looking old men, dancing and scattering wheat or barley.

Now appear eight masked lamas with smiling faces and small statures, whose faces vary in color from blue, brown, green, and yellow to white. After a long and elaborate dance, they disappear one by one into the temple. Each is given a reward of two white strips of gauze.

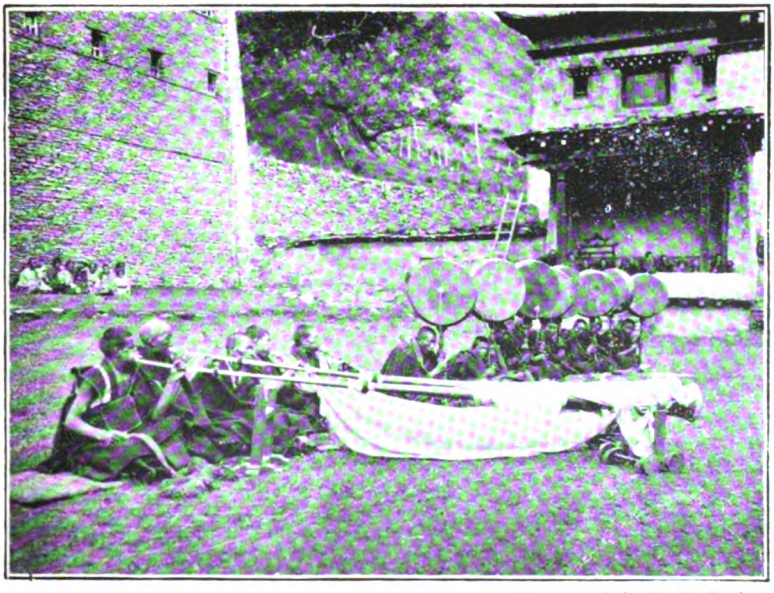
Now four men dressed and painted to represent skeletons come onto the court and dance a wild dance resembling those of the American Indians. Now it is slow, solemn, deliberate, and dignified. Now it is fast and exciting, stepping and leaping swiftly and wildly. Their eyes are hollow, their teeth and bones gleaming white, and their fingers and toes long and slender. There are small bells on the dancers which tingle as they dance. The musical accompaniment is first by drums and timbrels, but the long bass horns finally join in. The music, the performers, and the dancing all are fitting to impart a feeling of the solemnness of life, its vanity, and its sad end. And all the time worshippers bow reverently to the ground, worshipping the Living Buddha in the balcony above, and the gods in the temple.

Something covered with a blanket is placed in the center of the ring. The blanket is removed, and there is the image of a human being, a naked, newborn baby boy. The skeletons dance around it, and lift it by ropes tied to its hands and legs. Then it is carried away, and the skeletons dance their way into the temple, to the accompaniment of the music of flutes. This ceremony reminds the spectators that life is precarious, and that mortals will be overcome by death. It is solemn and impressive, and is followed by a recess.



Photograph by D. C. Graham.

A part of the orchestra at Tibetan Festival of the Gods. The large headed figure represents Padma Sambhana, the founder of Lamaism in Tibet.



Photograph by D. C. Graham.

Another part of the orchestra at Tibetan Festival of the Gods, the so-called Devil Dance. The trumpets are about fifteen feet long.

There are solemn notes by timbrels and drums. A lama wearing an immense hat, on the top of which is a large circle of peacock feathers, and holding in his right hand a dagger and in his left hand a skullcap to which tassels are tied, appears and dances an elaborate religious folkdance. His garments are embroidered in all colors of the rainbow, and he wears a long gown that reaches to the ground. On the front of his apron is embroidered a large face with tusks, and around this a row of skulls. Other lamas come out, similarly attired, and join in the dance. There is a procession which is led by a lama with a baton, two men with silver trumpets, and two men carrying golden incense burners. The music becomes more rapid and louder, and there is a circle of twenty-two tall priests solemnly dancing. They move about, now slowly, solemnly, now rapidly, almost excitedly. They wear large hats, long gowns with embroidered sleeves and aprons, red-topped boots, and clothing all colors of the rainbow, and carry daggers and skullcaps. There are slow movements, with music low, solemn, followed by rapid movements accompanied by rapid and exciting music.

A table is placed in the center of the court, and near it a leopard skin and a yak skin. The music becomes low, solemn, and slow. A lama in rich embroideries, a trident in one hand and a skullcap in the other, appears. His face is a deep blue, he has large, protruding eyes, he has four large tusks showing in his wide-open mouth. He performs a dance inside the circle of priests.

There is a pause—quiet and still. Then the two bronze ramshorns resound. Then a large figure appears, in his right hand a wooden image of a human skull, in his left a large rosary. His face is blue, and resembles a large pig with tusks. First, for a long time, his back is toward the people, and only his arms move to the rhythm of the music. Then he turns around slowly and faces the people. This is repeated several times. Finally he comes down onto the court and dances in unison with the figure having the trident. More similar figures appear, and dance in the center of the circle. Many have skullcaps and daggers, and two have swords and large rosaries. Now all the figures inside the outer circle of musicians perform a vigorous, solemn dance, to the accompaniment of appropriate music. The great festival, with its many performers, its beautiful embroidered costumes, its thrilling, harmonious music, and its rhythmic dances conveys to the simple Tibetan a sense of the greatness of his religion and its organization.

A few silver vessels like winecups are passed around. A lama in the center takes up a cup and a vessel containing wine. Another lama holding a skullcap and a winecup performs a dance on the leopard skin. There is solemn chanting of sacred scriptures. Wine is poured into the cup of the priest dancing on a leopard skin. There is more chanting, and more wine is poured, and more dancing. Again and again more wine is poured, and there is more

chanting and dancing. Finally the cups are taken away, followed by more chanting and dancing. In this ceremony the occidental observer is reminded of the Christian communion service.

Now the low, sub-bass voices of the lamas join in another chant, accompanied by motions as though stabbing with daggers or swords. Then there is more dancing. Again the ramshorns sound forth, and amid more chanting the priest pours wine on the skins. Then there is chanting without music, then music and chanting. A bell is given to the priest in the center, and after a time he rings it. Then he is given a wand which he waves about. All this time about fifty gaily-dressed lamas are dancing in unison with him. He is given a rope which he finally places on the yakskin, and later an axe and a dagger which he finally puts in the same place. There is more chanting of scriptures and incantations. Holy water is sprinkled on the yakskin and its contents. After more incantations the priest in the center takes the dagger in his left hand, and goes through the motion of driving the dagger, by means of the axe, through the articles on the yakskin. He now takes up a knife and cuts up what is on the skin. After this all the lamas march around in a circle and slowly disappear into the temple. The knife has been used to cut a demon to pieces, and the last ceremony is one of exorcising demons.

A boy lama, dressed as a deer, and with deer's horns on his head, comes out and dances around a rug on which there is a stool. On the stool are two pieces of tsamba. He takes a knife and cuts the two pieces of tsamba to pieces. He also is exorcising demons.

Again the ramshorns resound. Two lamas come out of the temple, each wearing a large hat on top of which is a tuft of peacock feathers, and with skulls embroidered on their gowns. They dance for awhile, then reenter the temple. After this the musicians march out, and the performance is over.

The Third Day.

The low, sonorous notes of the giant trumpets peal forth, persuasively calling the people to worship. The lamas, clad in red robes, and carrying their paraphernalia—bugles, masks, costumes, etc.—file into the main entrance of the temple. The great Living Buddha himself is among them, and politely bows to the group of foreign guests. Other horns join in the call to worship, low, and persuasive. Horns of higher pitch join in. Men, women, and children are coming into the courtyard, they are clad in beautiful garments, and have ornaments on their heads, necks, breasts, wrists, and fingers. Nearly all of them wear boots made of skin and felt, almost knee-high.

Now the high notes of small trumpets are heard, timbrels resound, and then the long bass trumpets. Now enter some priests

wearing hats resembling Roman helmets, and yellow in color. Gongs are beaten with tappers covered with cloth, for there are no harsh or unharmonious sounds in the Festival of the Gods.

There are four marshals clad in ragged clothes and comical masks, and holding in their hands long twigs covered with dead leaves. Their masks are large and comical. These marshals control the crowds of spectators.

Still the appealing notes of horns, bugles, and timbrels continue as the crowds continue to arrive. Most of the people sit down in groups, here a group of men, and there a group of women.

Some musicians with trumpets take their place. Their yellow hats resemble Roman helmets.

The bronze ramshorns peal forth, and Padmasambahva and a satellite appear. The former has an immense head, and long ear-lobes. He has a smiling face, and his companion has a white beard and a white face.

The low notes of drums and timbrels are heard. On top of a small table or stand a small tsamba figure representing a demon is carried into the circle. Many of the spectators arise and begin to worship. There is a great procession of musicians and dancing lamas onto the court. Clad in their elaborate costumes, the monks are dancing two by two to the accompaniment of ramshorns, timbrels, bugles, base trumpets, and drums. Today there are sixteen drums. The great procession of lamas moving along with graceful, dignified steps, accompanied by beautiful music, and clad in elaborate costumes, makes a spectacle that would thrill the hearts of either primitive or civilized men. This time the musicians are in a large outer circle, and the dancing priests are in two inner circles.

There are low chants and incantations, accompanied by dancing and music. The music, dancing, and chanting are in unison and in perfect harmony, as though they were by one super-person or organism. The chants and incantations are in low, sub-bass tones.

There are motions with daggers and swords, as though to stab something. Yet there is no fierceness or barbarity in these, but perfect rhythm and harmony of movement. Now the music and the dancing and the movements are slow and calm, and now there is a lively crescendo, with quickened music and dancing.

Now the music quickens, and there is very lively dancing. The deer and the yak are extremely lively. Two long rows of priests are formed, and carrying the demon, and with lively dancing and lively music the procession moves out of the gate into the open field. A fire is built of tree-twigs. Chanting incantations, and accompanied by music, the lamas dance around the fire. Then, as the climax of this ceremony and of the whole festival, the head priest takes the demon and throws it into the fire. The procession returns to the great court, where all the lamas are given pieces of

white gauze as rewards for their excellent work. After some more dancing the lamas disappear into the temple, and the religious ceremonies of the Festival of the Gods is over for another year. The demons have been exorcised, and the people have been entertained and thrilled by a marvellous religious ceremany. Tomorrow there will be horse racing and other amusements, and then the people will return to their homes.

NOTES ON TIBETAN RELIGIOUS CEREMONIES AND FESTIVALS.

D. C. GRAHAM

There are numerous Tibetan religious ceremonies and festivals, all of which are conducted by the lamas. There is an accompaniment of music, prayer prostrations, and sometimes dancing, and an essential part is generally the reading or chanting of sacred books. Their purpose may be the exorcising of demons, the causing of herds to prosper, or some other desired end. Sometimes they are conducted in houses or in tents, and at other times in lamaseries.

The outstanding event of the year is what is called by foreigners the "Devil Dance." It seems to the writer that this is a misnomer, and conveys to foreign readers a wrong conception of the nature of this religious festival. The natives call it, in Chinese, *shen huei*, or "the festival of the gods," and *t'iao shen*, or "the dance of the gods." To them it is a sacred religious ceremony in which reverence and worship are appropriate lines of conduct. While a primary purpose of this festival is the exorcism of demons, there is also the dramatization of religious history, religious instruction through the play, and the arousing of feelings of awe and reverence in the minds of the simple Tibetans. The writer witnessed a "Festival of the gods" at the Gu Lih Si monastery, near Yin Kuan Tsai, west of Tatsienlu, in the summer of 1930. The technique for giving religious instruction and arousing religious emotions among untutored people, as displayed in this festival, is marvellously efficient, and must be the result of centuries of thought and experience. The music is soft and alluring, the costumes beautiful, and the dances graceful. The following quotations, the first by Rin-Chen Lha-mo, a Tibetan woman who married Mr. King, formerly the British consul at Tatsienlu, and the second by Dr. Sven Hedin, the greatest Tibetan explorer, both of whom the writer has had the pleasure of meeting, will convey to the reader something of the spirit of these festivals.

> "The chief festival of our church is the Devil Dance, an annual celebration held all over the country, each Gompa holding it for its own parish. The time of year it takes place varies in different districts; in our region it is held in the summer; and is termed the Ya-chiu or summer Prayer.

This is the festival your writers term the 'Devil Dance.' I do not know why they should call it so, for it has nothing to do with devils, but is a service of worship of Heaven on behalf of the whole people. It is our equivalent of your Christmas and Easter festivals."[1]

Thus writes the great explorer, Sven Hedin; –

"Suddenly from the uppermost platforms on the roofs ring out deep, long-drawn-out blasts of horns over the country; a couple of monks show themselves against the sky; they blow on singular seashells, producing a penetrating sound, which is echoed back in shrill and yet heavy tones from the fissured rocks behind the convent; they summon the Gelugpa, the brotherhood of yellow monks, to the festival. The veneral lamas whose duty it is to attend on me, explain everything to me, but I do not find it easy to follow them, especially as their words are translated to me by a Mohammedan. They say that this first blast gives notice that the monks are drinking tea together. Then a shout of joy bursts forth from the lips of all the assembled multitude, for now the ceremonies begin.

On the right hand, on the other side of the court, a gallery is placed obliquely resting on five pillars, and from it a stone staircase of eleven steps leads down to the court. The gallery is now concealed by heavy black curtains, characteristic of all lama monasteries. Invisible choristers, among whom we seem to distinguish voices of men and youths, now intone a mystic chant. It is subdued, deep, and slow; it quavers in religious enthusiasm beneath the dark vaults of the gallery, and seems to proclaim with full conviction:

In every land the whole world round
This song of praise shall soon resound.

The murmuring voices are silent and the chant swells and the falls again, and seems to die out in some distant underworld, as though

1. Rin-Chen Lha-mo. 1926. p. 155.

> the singers had reached the portals of Nirvana. Enthralling, mystical, full of yearning and hope is this wonderful Losar hymn in Tashi-lunpo. Nothing of the kind I have heard — neither the chanting in the Isaac cathedral in St. Petersburg nor that in the Uspenski Sobor, the cathedral of Moscow — has made a deeper impression on me; for this chant is grand and powerful, and yet at the same time soothing as a cradle song, intoxicating as wine, and sedative as morphia. I listen to it with a solemn feeling, and miss it when the murmur of voices begins again, drowning the final notes."[1]

There is a social element in these festivals which should not be overlooked. These are occasions when one is released from the everyday humdrum duties of lilfe, and derives thrill, pleasure, and amusement from the processions and ceremonies. The more important Tibetan festivals include one or two days of horse-racing and other contests. Yet the religious significance of the festivals can hardly be exaggerated. They arouse in the hearts of the simple people a sense of awe and admiration towards their religion and their gods. They impart religious ideals and teach religious history through the drama, and tie the affections of the people firmly to the religion and to its temples, its priests, and its gods.

---

1. Hedin, Sven, 1909, pp. 307-308.

FEEDING VULTURES WITH HUMAN FLESH

J. H. EDGAR

This gruesome custom is common in many parts of the Tibetan country. In a land of wide open spaces such a practice is an anomaly. Still it saves the streams from pollution, in a measure has a beneficial effect on the flocks, and accords favourably with nomadic habits. Burial is naturally for settled people, but the vultures not only live in the pure azure but carry the remains wherever camps are made. As few Europeans have witnessed the ceremony in question, an unpleasant attention to details will be necessary.

The feeding grounds under discussion are on a terrace half a mile above the town of Taofu Hsien, about 110 miles northwest of Tachienlu. One morning we were aware that about 200 "lamas" young and old had come together on a large natural platform above our camp. When we arrived the performers were sitting in rows semicircling a depression. They were very busy chanting a burial ritual in weird monotonous tone. But now and again loud shoutings and vigorous handclappings would interrupt the continuity. At regular intervals two priests in canonicals would march out solemnly and blow dismal but loud music from large conch shells. This seemed to call the vultures to their duty for they continued to come in ever increasing numbers. Some sat on the hillside with their great wings arranged to resemble rock masses on the mountain sides, while others edged down towards the performers. Many of the vultures seemed exceptionally tame, but irritable and cross with each other. Below the performing lamas was a depression, and in it was a roughly paved hollow where two corpses were laid out and tied by scarves to a short stake. They were entirely naked but covered with rough and rather dirty material. The ceremony, a tedious affair, prolonged by doling out tea and *tsamba* to the 200 mourners, was at last finished and the lamas then left in a body.

Almost immediately a roguish looking layman with a sharp knife glided down into the arena and removed the covering from a naked male body, much decomposed and face downwards. The vultures, between 40 and 50, now pressing down, were only restrained from anticipating their pleasures by the determined action of the bystanders. The surgeon for obvious reasons did not linger. He began by making a straight deep cut from the nape to the coccyx; then down through the buttocks and on to the heel. Then quickly followed similar parallel cuts on the back, buttocks, thighs, and calves. The arms were treated in a similar fashion.

and knees, ankles, fingers, and wrists were almost severed. The toes and fingers were sliced down into strips and the abdomen and all earthward portions of the body were gashed according to rule. The longitudinal treatment of the cadaver accomplished, the ritual demanded transverse cuts which left the flesh in scores of squares, and finally the head was completely scalped in a manner creditable to an experienced Red Indian. The next body, a female one, was deftly treated in the same manner. This over, the impatient vultures tumbled into the pit and soon became a seething mass with hardly a head visible. Comparisons in this case are certainly odious but they were the best imitation of a colony of gigantic maggot-like creatures that a nauseated mind could imagine. Sometimes three or four would be on the top of the wriggling mass and unable to get their heads through; and ever and anon a brute, half asphyxiated, would emerge with sections of flesh or an entrail in its mouth, spasmodically gobble it down, get breath, and bore down into the living mass again. In a very short time the gory and offal smeared harpies had torn the squares of flesh from the bones, and these from their joints. Then their services to living humanity were at an end, and hissing and fighting the unpleasant flock wobbled out of the arena to suitable positions on the mountain slopes.

The belief that the bodies are cut to pieces and the divided sections fed to birds is incorrect; the incisions form squares of flesh which are easily detached during the disgusting scrimmage. The partial severance of the main joints and the mutilation of the hands and feet are also in the interests of the scavengers. The skulls are seen in numbers in the vicinity of the arena, but the other bones are said to be pounded in mortars and the powder, when mixed with *tsamba*, also enters the maws of the vultures.

It surprised us to see a female body mutilated in public. In Kanze this duty is performed by the inmates of a large nunnery.

AN IDOL FESTIVAL IN TANPA HSIEN

J. H. EDGAR

Tanpahsien, formerly the Chinese colony of Changku and the Tibetan Rongmi Drangu, is about 100 miles north of Tatsienlu on the right bank of the T'ong, Takin, or Gyalmongul Ch'u.

The traveller leaving Tatsienlu proceeds up an open valley, and passing hot springs threads through avenues of mountain jungle until, 40 miles away, he comes to a bifurcation of the road and choosing perforce the less attractive one, begins to ascend the slopes of a frowning mountain. This pass, the Ta P'ao, dangerous in autumn, winter and spring, may also give anxiety in summer owing to topographical, climatic and political reasons. The view from the rock bound summit may be unusually awe-inspiring. Near and far are gigantic peaks in the vicinity of 20,000 feet which furnish an exhibition of massive grandeur and pitiless beauty perhaps unequalled on earth. But as a rule the traveller is weirdly alone in cold saturating fog, and his only thought is how long will it take to reach the light green forests of feathery larch where a choice may be made of a night in a rest house (for fleas) with a demonstrative Hittite visaged female in charge, or a bivouac on a grass clad terrace where he may upset the plans of a robber band! The next day the road descends through larch, spruce, and birch to the farms and settlements at K'wei Yong; and, later, after ten miles of forest and jungle clad gorges, Mao Niu is reached, where 40 families perch their castles on a bluff overlooking the junction of two rivers. Then 35 miles down deep, and at times eerie, gorges with farms and settlements on the river flats, hill sides, and mountain terraces, after manipulating unpleasant roads and rickety bridges with or without accident, he, on the sixth day, arrives at the extreme east of Chwanpien, where the little town of Rongmi Drangu exists as the Tanpahsien of Chinese officialdom.

Tanpahsien is one of the most interesting concentrations on the western frontier of China. The Geshi and Mao Niu rivers above, and the Hsiao Kin below, join the main artery in the vicinity of the town, and the united volume of the former rushing past snarling cliffs, later, with the Hsiao Kin, races on bellowing to a region of box canyons of unparalleled savagery. The unrelenting controls of the region demand an accord with river orientations, hence the strange and diverse types inhabiting this Arcadia make Tanpa a rallying point of great value to China, and of more than ordinary interest to the student of *Homo Sapiens*. At least three or four types centre in this city of the Rong people. Moreover

the abnormal incidence of goitre adds to the interest. The calipers and tape-line would reveal significant differences not explained by environmental or pathological controls. Yet to any but trained observers such results defy analysis or an intelligent expression. So we shall deal entirely with dress and behaviour, believing that they will be a more correct indication of racial psychology than a cephalic or bigonial index.

We had been for days among the graceful towers and defiant castles of the goitre-cursed denizens of Bawang and Badi, and were hurrying home to study them in gala dress on the streets of Tanpa. It was a rare opportunity. The city god was to have an airing, and strange peoples were to welcome him on clean streets with flapping flags, loud hosannas and holiday attire. It was called a religious function, but the urges that made it a success were mostly those that would explain a race meeting or a cattle show in the home lands. As regards ourselves we were there as missionaries, and also to study strange costumes, racial expressions, and psychological reactions. Preparations had been going on for some days, but the ingathering began on the fifteenth. Early in the morning the main approaches from hill and valley were seen to be thronged with devotees from the sequestered settlements on slopes and terraces. Singly or in groups; riding or walking; empty handed or burdened with loads; they descended the thorn-fringed mountain paths, crossed injutting spurs, strung over bridges, loitred in groups, and finally congregated in squares or open places near or in the town. We were now at close quarters, and our conclusion was that this gathering of men and women, prince and peasant, good and bad, strong and weak, young and pretty, old and ugly, would be worthy of attention anywhere, but in this ethnographical hub it was positively unique. A satisfactory description is hardly to be expected, but in an effort to bring order out of a fascinating chaos, we shall within self-imposed limits, do our best. In other words, we shall confine ourselves to dress and behaviour.

In dealing with the former we shall begin with the Chinese. In the city waiting for the mountain visitors are the colonists, temporary traders and officials. Their dress hardly calls for comment. The town is their work, it is a part of China and the garments are true to type. They may be out of date, of mean material, and poorly made, but they are Chinese, and sticklers for Chengtu fashions may find what they want, with lowland silks, in the yamens. There at least, they will see some of the secretaries with their hair *en brosse*, wrist watches, coloured glasses, leather boots, foreign headgear and cigarettes burning in amber or jade holders. But this is too exotic to be of interest, so we willingly begin an attempt to deal with the much more complex, as well as difficult costumes of the heterogeneous human material of the Ta and Hsiao Kin Ch'wan. The dress of the men, while borrowing details from many cultures, is as often as not untrue

to them all. Indeed, imagination and convenience seem to be the controlling factors. The bulk of the visitors, also, are mountain farmers who are not only free from a general mass suggestion, but are unable to dress expensively and change fashions frequently; or like the nomads gradually add much colour and considerable amounts of jewellry to their persons. But ignoring those who go barefooted, or indulge in sandals with puttees, a fair display of brightly coloured mocassins are common enough to set one wondering if some former dwellers in a frigid zone had not exerted their influence on migrations that in time reached both Tibet and Greenland. From the waist to some distance above the knees a pair of blue, black, or white cotton "shorts," as a rule very wide, seem to have no serious rivals. The upper garments, however, vary considerably in style, materials, and colour. Jackets, perhaps a Manchu survival, with or without sleeves and collars, and at times bound with a sash, are common. They are usually ornamented with many buttons which are made of any material likely to rivet the attention. Coins are much in favour and include rupees from the days when Queen Victoria was in her 'teens, or when someone was Emperor of Goa before the last King of Portugal was born. Buttons from the uniforms of Nepalese soldiers, also, must at one time have reached Eastern Tibet by the yak load. Garments of native cloth, Chinese material, and Tibetan skins suggestive of Grassland controls, are frequently seen on the streets. Such styles, probably from the days of T'ang. Han or Shang. may be shortened by an ample sash or allowed to drop from the shoulders and lie bunched up around the waist. The male coiffure shows the influence of many cultures or none. The hair may be shaved off, or kept short like the lamas, or worn as a queue, rudimentary or otherwise. If long, naturally or artificially, it will be wound round the head and may keep turbans or other headgear in place as well as furnish the background for the display of gold, silver, ivory, turquoise, coral, or any other suitable article of value. This particular coiffure is affected by native officials and nomads of Badpa affinities. Naturally, one would not expect to find such a fashion in vogue in the stifling altitudes contiguous to the large rivers. Charms of great size and exquisite workmanship are often worn, as are ponderous ear rings with tiers of coral or agate alternating down a wire of silver. Huge ivory cylinders also make the thumb hideous. Then we have buckles and clasps of curious designs; rings of silver vulgarly large and decked with coral or turquoise; beads of the same with lapis lazuli and agate added; and, finally, even where bejewelled swords are not necessary to a man's equipment, a fire striker, often curiously beautiful, is rarely absent from the side of the mountain farmer.

If the men carry on their bodies the fashions of the Ch'ing, Yuan, T'ang and Han, the women have influences of all these superimposed on something that may have been derived from the

Troglodytes. More even than individual men, they generally pay more attention to ornamentation. The head, ears, neck, body, arms, and fingers all offer opportunities for the display of gold, silver, and anything that may be intrinsically of value, or has been made so by custom. An enumeration will include coins, cowries, turquoise, fragments of conch shells, agates, and ivory, all of which are associated with rings, pendants, buttons, clasps, charms, brooches, necklaces, and a variety of coloured fabrics. The hair is often coiled over a square napkin, black, white or blue, which is probably the most convenient way of displaying masses of silver inlaid with coral or turquoise. The ear rings differ slightly in workmanship from those of the men, but the materials are the same. They are so heavy that the lobe of the ear may be hideously elongated and at times permanently injured. The finger rings as a rule, set with coral, turquoise, and other "precious" stones suggest tawdriness and vulgarity. The mocassins in colour and style are Tibetan, but only recently have short cotton drawers been considered necessary. These latter may be the result of Chinese influence if not of official orders. The necklaces, charms, buttons, clasps, buckles, and other trifles find suitable positions on the necks, arms, breasts and other parts of the body. But much that is included in the above description is borrowed from other cultures; the primitive garb survives only among the unmarried girls or sterile women. It is (a) a sample of sartorial imbrication where a cape from the shoulders overlaps one attached round the waist; (b) the latter provides no frontal covering, but the deficiency is made good by a fringe of woollen cords attached to a girdle that buckles round the waist. The corded section may be twelve inches wide and the strands not more than ten. They, in Badi, may terminate in glaring red tassels. This dress—capes and girdles—may be of Polynesian origin. The scales of "homespun" may have designs stamped or embroidered on the edges; and skirts which in the matrons replace the frontal fringes are often artistically pleated. This primitive dress, whether worn by maid or matron, in conjunction with a bejewelled coiffure, and the independent bearing of the wearer, produces a striking effect. Long ago, however, both pontiffs and emperors interdicted it, but the rumblings of rebellion confirmed the suspicion that Ephraim was joined to her idols, so she was left alone. But what edicts and "anathema maranathas" failed to do the quiet influence of social contact is accomplishing by undermining the walls of public opinion, with the result that modifications and additions unthought of thirty years ago are now almost necessary.

Behaviour will next demand our attention. Naturally in dealing with costumes seen in Tanpa we had, perforce, to anticipate aspects of Behaviour, but just now we shall elaborate along lines more particularly concerned with the reactions of backwash peoples to the unusual atmosphere of an important festival. The women,

because less influenced by the exotic culture, will gain our attention first. They are all painfully self conscious, and at times absurdly solicitous about appearing not so. You find them sometimes as individuals, but mostly in groups, sitting, standing, or reclining in a variety of postures, or moving about in every step or stride the spirit of motion could suggest or condone. They stare blankly, jostle playfully, smile fatuously, giggle hysterically, flirt coquettishly, and chatter volubly or in whispering asides, in many tongues. Or it may be, sauntering further afield, some bolder spirits, to offset the sense of ineriority, will barter at the counters, dine in the "men's" shops, give the "glad eye" to friends, gape rudely at strangers, peep round corners, resent rudeness with quaint curses, and scatter like partridges if the European is seen to be unduly interested in their features or attire. The above description applies to the young and middle-aged native women; the very old do not as a rule come into the picture. The Chinese matrons and maidens, on the other hand, are busy at the counters or cooking stalls exploiting the opportunities as they present themselves.

The men do not herd to the same extent; seem to have more definite aims; and on the whole, behave more normally. . But the majority are from sequestered farms, and here are not specially in their element, rather self-conscious, and not desirous of obtruding themselves on anybody. But some of the young bloods assume a jaunty air, and with or without provocation, may become quarrelsome and insulting. Such by-products often create complications by amusing onlookers with questions in quaint Chinese idiom and raucous intonation. Now and then, you may meet a man really wild, barbarously bejewelled and dressed in heavy rancid skins. He strides along like a Roman Consul and you wonder how he would behave if he and his band met you unarmed in the wilds of K'ros Gyab or Gololand. In other lands, he might supply novelists with any character from a Neanderthal hunter to a pirate in Wrangel Island. The lama, also, is there with cropped hair and red toga. As he slouches or glides along with an occasional saturnine smile, you are not inclined to credit him with an undue proportion of spiritual qualities; but later on you may find that he is a good fellow and not as wicked as tradition would require. The Chinese men also demand a reference. The local colonists are shop keepers and traders who do not miss many opportunities. Some are well-to-do in spite of simple ways, rude diction and bucolic manners. They are probably at a standstill culturally, but the next generation with their parents' wealth to aid them will readjust the balance. Of course, we have the coolie waiting for "business," and hucksters at stalls and temporary shops, but they add little to the picture we are presenting. The various associates of the yamen were much like a feature in a puzzle picture. The official, indeed, objected to the

"show" and was, therefore, conspicuously on country duty. His staff, also, were not in evidence much beyond the yamen gate. The officials are generally young men with good intentions and high ideals. Unfortunately, not many have acquired the native languages nor become proficient in comparative psychology. Moreover, among their secretaries may be found inexperienced youngsters with irritating tongues, cynical smiles, and opinions of themselves not quite in keeping with facts. But in Tanpa, as in other regions in the Marches, we soon realize that China has a clearly defined programme, and is consistently endeavoring to express her political theories in tangible results. The representatives of the military were also in evidence, apparently organizing and directing the processions. The emergency cavalry unit was sadly inefficient, but its lack of discipline and occasional false starts supplied the excitement which may make uncertainly enjoyable to some extent. But in due time the disorderly throng got away and the idol and his spouse, flanked, followed and preceded by the local cavalry, infantry, and a clamorous nondescript rabble was honoured in every street and alley; after which the majority of visitors moved to and fro, up and down, or thronged into "mien" shops, or drank, wrangled and shouted in public places, warehouses, and street corners.

The design of the idol and its gilding of gold suggested imagination, clever execution, and sacrifice. It spoke to me, also, of man's quest for God. But after human genius had done its best, how far removed was such a conception from the Logos who was in the beginning! But strangely enough in China "Tien" the God of Gods was never given a material form or confined in buildings; nor was it ever forgotten that the images of all kinds were in comparison with Him less in power and dignity than were the lictors of the petty yamen in relation to the mighty emperor, "His Son." And it was with the object of leading men up the spiritual ladder to a true concept of the Logos that we were content to become one with the moving crowd during the long stifling August day. Towards evening a partial dispersal was in progress. The greater number would never be met again; but we knew that large quantities of Christian literature were being carried to settlements on crags and mountain slopes forever proscribed to Europeans. The next day we saw where a man had torn up two books and four tracts. But this was all the waste we could discern out of 10,000 portions disposed of in the Chinese, Tibetan and Kiarung languages.

CONVENTS AND NUNS IN TIBET.

J. H. Edgar.

In Western Tibet, near the Indian border, there is an important institution controlled by an abbess known to the Buddhist world as the "Diamond Sow." A gem of such beauty in a female pig is an unusual occurrence, but the Tibetans have an explanation at hand. We are informed that more than two hundred and fifty years ago, maurading Nepaluse were devastating Tibet, and one day were approaching this famous sanctuary. The Abbess was in grave danger, but a herd of swine appeared, and by some magical process she was enabled to enter them, and thus escaped the impending tribulation.

We of course remain unconvinced, but must admit that Tibetans recognise the right of gods to dwell in a female body, and the possibility of women controlling religious Institutions.

But all the same, convents in Tibet are as rare as monasteries are common, and for Europeans to visit one is certainly an unusual experience. Friends of a critical turn of mind might even blame me. When did a Tibetan convent become part of a missionary's programme. Was it not making yourself objectionable in foreign lands? "But" my reply would be: "I had Government permission and official escort to safeguard my character; and, moreover, held myself responsible for the good behaviour of my party."

For years I had heard rumours of settlements of Holy Women, and had seen their alleged inmates in the valleys and on the mountains of Tibet. But the institutions were always in semi-mythical regions where only someone else had been; hence most reports of this kind seemed to be little more than fairy tales and unconvincing legends given in order to supply a want in European minds. But one day, a serious looking Tibetan pointed out to me "the largest convent in Tibet." My time, however, was then limited, and the opportunity suggested had to be ignored. But later, misfortune detained me in the vicinity, and an examination of the nunnery promised some relief from the brooding *ennui*. So one morning we set out. The distance was only about one mile, but even half a mile at 12,000 feet is not always a pleasure trip.

On the way, too, it leaked out that the nuns had left the year previously. But as the shadow, in the form of ruins, might help us to reconstruct the reality, the journey was continued. Suddenly, without warning from Guide or Nature, we stumbled on the abandoned site. Every thing suggested a community in hiding, a den of thieves; a light under a bushel, catacombs; or

anything that liked darkness rather than light, or deep seclusion rather than the public gaze. Then over all that write Ichabod, and you may begin to imagine our disappointment. The paltry ruins even here at very close quarters might have passed for irregularities of the surface.

But they were the remains of human abodes, not of thieves or outcastes,-but the spiritual guides of Tibetan women. The ruins were examined carefully, and the information gained was of great value when a year later I visited the new nunnery. An opportunity then to investigate the dwellings was, of course, out of the question. I found the regulation cells of Tibetan nuns to be about 5 ft. by 4 ft. and 3 ft. high. They were inartistically built by the women themselves according to a plan which aimed at adding to the inmates, misery. They could never be made comfortable, and when allowance was made for books, cooking utensils, and a simple receptacle for odds and ends, even a very small person must have had a sardine-in-the-tin existence. She had to move about in a stooping position, no colleague could come in for a chat, and when sleeping the choice must be made between curling up like a dog, or sitting cross-legged like a Buddha or god. In any case it was impossible to stretch out at full length. The dens were all congested into an area about 200 yards square. But it is said this restricted place at one time contained 300 women who specialized in holy living. I am no authority on the nature of the Tibetan nun's temptations, but some ingenious misanthrope saw to it that the means for pandering to them were ruled out entirely.

But how differently the males fared! Down below was the imposing mass of lamasery buildings, roofed with golden tiles, where many unholy men were free to hunger and thirst after unrighteousness,—a difference truly oriental, but a libel on Buddha's doctrine all the same.

But why had the nuns left? Had asceticism killed their ardour? Or was the situation out of harmony with Buddha's instructions? No, the sisterhood was still in existence, and the situation was without fault from the orthodox standpoint. Moreover; it was hinted that female adepts armed with slings and supported by savage dogs put an embargo on inquisitive males who approached within a three mile radius. No: neither hardship, unfortunate choice, nor last conduct; but professional jealousy was the disturber of the peace of the holy atmosphere in the mountain glen.

This is the story: A saint of unusual sanctity, and in charge of a constituency drawn from many lamaseries, was in charge of the female colony. He was accused of misdirecting the emotions and rupees of the laity; and false witnesses and unfavourable revelations warranted a campaign of petty persecutions and irritating law suits. In the end, the saint who had "triumphed over

demons," was almost distracted by men of his own race. Flight or madness was the only alternative. He chose the former, and left with the nuns for another principality, where a new institution was founded under the sublime peaks of an ice bound range. The situation was about 13,000 ft. and the dreary cirque might have been the home of demons and hungry spirits. But he—and incidentally ourselves—cared for none of these things. So one morning early, we set out on our unusual pilgrimage. On the way we visited the aged saint who kindly divined in our favour. A ride up an open valley in the golden sunshine to the rim of the depression was pleasant, and the view on top worthy of a greater effort. The great mountain range reared high and cold, and the broken hills were of the kind that might lure the bold and unwary to destruction. But our concern was with something near at hand. Just before us was one of the saint's retreats, and in the valley were rows of huts with listless and uncomely inmates, who were busily commenting on our approach. "The Nunnery" said someone. "No," was the guide's reply, "these are the homes of holy recluses, who have left the world". To me they seemed like beggars, and very dirty. But where was the Nunnery? The crater-like enclosure was before our eyes, but there was no sign of another settlement. However, we went on, and after crossing the three mile limit were soon obsessed with a feeling that we might at any time meet opposing amazons armed with murderous slings, or in charge or packs of blood hounds which had been trained to bite intruding males'. But only an oppressive silence brooded over us and great vultures circled in the azure, as we marched along in the golden sunshine. Then, suddenly, behind a hill, we saw a settlement with high walls and a barred gate. It might have been a ruin in a desert. Silence reigned; not a vulture hissed, not a blood hound bayed; nor were armed females posted in commanding positions. We were ignored, and in this way was our indiscretion rebuked. "Right about turn; quick march"! was uppermost in my mind, but the escort thought otherwise, and were already pounding on the heavy gate. "What do you want?" said a strong face at a square hole in the gate." Then after some parleying the bars were withdrawn, and we marched in. But the prospect was not one to engender enthusiasm. A mass of hovels, the counterpart of those in ruins previously visited, met our gaze. But we knew all about them: were we to find nothing to interest us?. Oh, yes, the stern-faced woman with shaven head and priestly garments turned to me and said curtly "Unauthorised males have no right here; but you have authority apparently and our gates are open. Do what seems good to you; still, if you are gentlemen, on no account enter our dwelling." I made haste to reassure her; and let it be known that my only business was to supply them with Christian literature. The Abbess informed me that she had one hundred and six nuns in the institution. She

thought it kind of me to course on such a mission. So to prove her sincerity she ordered them to come out of their burrow and pass me in single file. Then the solemn procession wended its way round I gave out Christian literature to all. This ordeal over, one might have imagined a dignified retirement the next move. But no, about sixty of them sat in crescentic form on the housetops, and waited demurely until I had amplified the message in the books. The Abbess thanked me for my delicacy and courtesy, and assured me of a welcome in the future. I returned the compliment by saying I was charmed and would allow it to leak out that Kanze had one well conducted institution at least. "Heaven bless them" said a Tibetan, "this is true religion. I once had doubts about the wisdom of allowing such institutions, but I have none now!"

However, there was even in this case one fly to spoil the precious ointment. Outside the wall was a saucer like depression paved with stones. These were stained with blood, and fragments of human flesh were in evidence. Great vultures hopped and hissed, or stood like soldiers in battle array close at hand; and a sickly stench almost past endurance greeted our nostrils. To my request for an explanation, the guide informed me that the nuns in this arena cut up the dead and fed them to the great vultures. And it was so. But few if any Europeans have even seen this the most disgusting custom of the Tibetans; and no doubt the necessity of someone attending to such ghastly duties is the chief justification for nunneries in Tibet.

THE TIBETAN TONAL SYSTEM

J. H. Edgar

Jaschks suggestes that "the high and low tones which have made their way" into the Tibetan speech are the result of Chinese influence. He also claims that "the tone is determined by the initial consonant of the word." Amundsen, also, who takes some pains to prove the reality of Tibetan tones, gives detailed information which tends to confirm theories that have, in our case, been seeking expression for years. The following section is condensed from Amundsen's "Primer," pages 15 and 16:

Amundsen's rules are:

i. A high pitched, short tone, as if butted against something. Words with high toned initials ending in *da*, *ga*, *ba*, and shielded words ending with the same letters, are in this tone.

ii. Has the same pitch as the former, but very long. shielded words and those with high toned initials not ending in *da*, *ga*, *ba* and *sa*, except when the latter letter exists as a suffix, are in this tone.

iii. Is a short tone of medium pitch. It is represented by unshielded words not having toned initials or endings in *da*, *ga*, *ba*.

iv. Medium and long. There are three kinds of words in this tone: (a) unshielded words with high initials and *sa* as a second consonant; (b) shielded words with *sa* as a second consonant; and (c) unshielded words with low toned initials, having *da*, *ga*, and *ba* as second consonants, and *sa* as an affix.

v. This is a curved tone, and is found in unshielded words not having *da*, *ga*, *ba* as a second consonant.

vi. Is a descending tone and characterizes low toned, unshielded initials with *sa* as a consonant. (It may be noted here: *a*, that the thirty Tibetan letters have tones; *b*, that "words are shielded when prefixed, headed, or both;" *c*, that the initial letter is the first emphasized when pronouncing the word; *d*, that in the word *g'nams*. pronounced *nam*, *g'* is the prefix, *n* is that initial, *ma* the second consonant, and *sa* the affix.

An analysis of the above section will reveal the fact that *da*, *ga*, *ba*, and *sa* affect both the quantity and quality of the tone. The former is clearly seen in ii. The effect of the letters *da*, *ga* and *ba*, as finals, appears again in iii. In iv (a), *sa* is a high toned letter, as second consonant, modifies the high initials, shielded words, and unshielded low initials with *da*, *ga*, and *ba* as second consonants, where they are affixed *sa*. Then the unshielded, low initials not having *da*, *ga* and *ba* as a second consonant, become a new low tone, v; and tone vi. results from unshielded initials with *sa* as a second consonant.

This alleged tonal system of the Tibetan language may owe something to intercourse with the Chinese, but much of it is more

likely the persistence of unconscious controls resulting from a gradual effacement of prefixes, superadditions, subscriptions and suffixes during a period from 640 A.D. to the present. Fortunately the Tibetans have an excellent alphabet which enables us not only to examine the problem but to proceed towards its solution with some certainty. Students of Tibetan are at first much puzzled by the wide difference between the spoken and written languages, and some in their haste, and controlled by prejudice, might have been tempted to explain the anomaly by the pedantry and affectation of the hierocracy. For instance *dbus* is now pronounced *ü* because for some reason *d* and *b* cancel each other, and *s* modifies the vowel before it, again, *brgyad* eventually rejoices in a sound not unlike the English *j* and *bsgrang* is *drang*. Why? We leave the question unanswered at present, but are confident that the highly trained scholars who saw a meaning in the jumble of consonants representing so many Tibetan words were not dealing with the result of an explosion in a type foundry, but with a need then plainly demanded by the Tibetan speech. Just as surely, however, that need does not exist today in standard Tibetan, and any condonation of the ancient norm in speaking is vigorously assailed. But why is this so? That the change was gradual and quite natural may be inferred from the history of the word *dbus* mentioned above. In the T'ang Dynasty we shy at it and pass on to the Yuen and Ming where it certainly was pronounced *us*, to be, for reasons already stated, modified to the pleasing if difficult *ü* of today. This process of sound simplification is to be explained by more than one cause, but we wonder if laryngeal modifications brought about by migrations and climatic anomalies may not be one of them.

An age long sound simplification would naturally multiply homophones, and tones would differentiate them as the orthography would the classic text. Hence we would expect, as seems to be the case, that as the consonantal additions vanish from the dialects tones will appear, and if the rules quoted above are at all reliable, the tone, both as regards quality and quantity, is related to the old orthography. In other words, although the old crudities have been cleared away, the forces that once produced them are still unconsciously affecting the present day enunciation in accordance with the former consonantal association. Two sample words will illustrate our meaning. *Stags* and *r'ta* as pronounced today would both be romanized *ta*. But to the Tibetan the tones are different. Why? Probably owing to the unconscious demands of the long unused prefixes, superadditions, and suffixes.

For the Chinese tones, in part, we would suggest a similar origin. That is, a progressive simplification of primitive orthographical accessories which by multiplying homophones would make tones necessary. But these would vary in accordance with an unconscious influence exerted by discarded consonantal prefixes and suffixes. But owing to the lack of an alphabet the reconstruction

SUMERIAN AND TIBETAN EQUIVALENTS

J. H. EDGAR.

The following lists of words, the Sumerian from Dr. Ball, if they do not prove racial affinity, suggest at least social contact of some kind:—

Sumerian	*Tibetan, etc.*	*English*
Bar-bar	Bar (to light)	Sumerian, Light of fire
Dab	T'ob (Tibetan; to get, etc.)	Grasp, seize
Gab	'Gyab	To shut a door
Gam, Gur	Gur	Bow down, submit
Ge, Ga	Ge, Ga	To hinder
Gi	G. Ching	One
Gu from Gur	Gur (Tibetan, tent)	Sumerian, House
Gu, Gud	Gurgu (Bawang?)	Ox
Ka	K'a	Mouth
Me	Ma, Mad (me)	Not (negative)
Mun	Ming	Name
Mur	Mori (Mongol) Moro (Kia Rung)	Horse
Sa	Sa	Earth, dirt, etc.
Shir, Sher	Shar (Tibetan, to shine)	Sumerian, Light
Su	So (General everywhere)	Tooth

I am only sure that "gurgu" is a word for ox among some non-Tibetan states. It may be of interest to point out that Chinese and Sumerian equivalents are amazingly more frequent than Tibetan-Sumerian ones. Naturally migrations from a nidus in Central Asia would not powerfully affect the language of the prehistoric savages of Tibet. On the other hand we require some such influence to explain the architecture of Szechwan and Tibetan ethnic groups, as well as peculiarities in their religion. Perhaps, at present the suspected Sumerian influences may be most conveniently assumed as being indirect ones.

THE HORPA OF THE UPPER NYA OR YALUNG.

J. H. Edgar.

The Horpa are an ethnic group professing Lamaism who reside in the upper Nya Ch'u[1] basins. Their region, beginning about 90 miles northwest of Tatsienlu, continues in the same direction for 150 miles. The Hor have strong bodies, aquiline noses, large hazel eyes, and hair that at times is wavy or curly. Their every movement suggests freedom and independence, and Rockhill was near the mark when he spoke of them as the most handsome of the many peoples who have colonized the Tibetan lands. Moreover, the Hor are clever traders, build beautiful lamaseries, and combine hard drinking with religious fervour. A rough estimate would suggest a population of forty or fifty thousand individuals. Horpa colonies also exist in Tibet north of the Nam Ts'o. The eastern Hor live in the Nya and Hsi Ch'u valleys. The latter river rises at widely different points in the unsurveyed regions of Tibetan Kansu. The two main streams joining at Drangu (Lu Ho Hsien) flow south to Dawo, and there breaking through the mountains, later on join the Yalung or Nya Ch'u. Above Drangu and Chu Wo, respectively, both branches of the Hsi are unknown to geographers, but from the latter place to a point near the Catholic Mission at Sha Ra T'ang the population in valleys, on slopes, and terraces, is both numerous and prosperous. From this point down stream for 20 miles hundreds of families take advantage of the genial climate and rich soil of the wide cirque-like plain to accumulate wealth for themselves and the rich lamasery ten miles away. Below this feature on the pass, terraces, valley slopes, and river flats to the lamasery[2] and official town of Taofu (Dawo) the Horpa is found tilling his fields around castles and settlements. However, it may be that the prosperous farmers who crowd the open valley of a southward flowing tributary of the Hsi Ch'u are the descendants of an alien stock. Fully half the Horpa are settled in the rich Hsi Ch'u basin; the remainder reach from the Yalung gorges below Kanze along beautiful plains, to Rongpa Ts'a, the Garden of Tibet "as thou goest" to the grazing grounds in the direction of Kansu. As we understand it, the above regions are the homelands of the five Horpa clans of Berim, Kangsar, Mazur, Chuwo and Drangu. Kanze is their traditional capital, but Drangu has the largest population. Dawo with its large lamasery was also a town in the Horpa States. Among these

people, as in other places, colonies of one clan may have settlements in a neighbor's territory but outside his jurisdiction.

The Hai K'a pass, or Sung Lin K'eo, has always been the southern boundary of the Hor, but the western is harder to define. Seven, or even nine, clans have been suggested as alternatives to the previously mentioned five; but the author of a famous dictionary[3] speaks of the former Lhasa agent in Chantui as "the *G'nya d'rong gi spyi k'yabs*" who administers the petty lordships of the "eighteen tribes of Horwa" that live on the banks of the Nya Ch'u "just west of Tatsienlu." Geographically this information is incorrect, and ethnically confusing, even if it refers to a period between 1865 and 1894 when the Lhasa agent had a nominal authority in the Horpa States. But recognizing a widespread error which associated the Nya Ch'u or Yalung with the Drangu-Dawo or Hsi Ch'u, we know of only five, or at most nine, petty lords of Horpa affinities. So the above statement, if at all reliable as it stands, would imply an important Horpa population in Chantui Nya Rong under other names.

That the Hor are not new arrivals in Eastern Tibet may be inferred from the fact that Srong B'tsan S'gampo[4], about 650 A.D., "established commercial relations with Miniak; India, Nepaul and Hwei Ho or Hor".[5] We are also informed that Tibet obtained her laws and specimens of workmanship from "Hor and Yu Gur."[6] Their conversion to Lamaism must also have been about the same time as the more western peoples.

But who are the Hor? and when, and why, and how, did they become possessors of the upper Yalung (Nya Ch'u) and its tributaries? These are questions which may never be answered satisfactorily, but the following notes will indicate trends in that direction. Chinese histories and frontier lore, for instance, mention many peoples of other ages which may furnish clues of some value. These references will be given in order of time. In the "Hsi Tsang T'u K'ao"[7], a Ch'iang[8] named Wu Ko or Wu-i[9] is said to be the ancestor of many ethnic groups residing in the Tibetan land. This is approximately between 250 and 209 B.C. About a hundred years later a people known to the Ch'iang shepherds of Tibet as "Yüeh Ti"[10] (or according to Sze Ma Ch'ien, Yüeh Ch'ï) having been defeated by the Huns, migrated west and conquering Bactria renamed it Ta Hsia,[11] which is probably a Chinese rendering of Ho or Hor. Between 600 and 400 A.D. the pilgrims Fah Hsien and Hsüen Chuang[12] travelled west through Turkestan and then south, to the west of Tibet, and to India. In their writings we find mention made of the Ghut or Ghori kingdom. Then about the end of the seventh century, or early in the eighth, the Records of T'ang tell how the Hwei Ho were allied with the T'ufan[13] against China (A.D. 696). Moreover, during this same period cognate peoples, known to the Tibetans as Yu Gur and Hor, were aiding Tibet in a cultural sense and preparing

the channels for the permanent westward flow of non-Chinese sympathies.

But what bearing have these names on the men of the Horpa States? That depends on the student's temperament and training. Some certainly will suspect that the Uigurs[14] and the Hor are the same people modified by time, neighbors and topography. The Wu Ko or Wu-i of the T'u K'ao, even if of little value to the ethnologist, is probably related to the Tibetan Yu Gur, of Uigur, and the Chinese Hwei Ho, Hwei, Heh, and Hwei Huh. Again the Yüeh Ti of Sze Ma Ch'ien, to be read Yüeh Ch'ï, are considered by some to be related to the "Yu Gurs." But in Bactria these fugitives became "Hsia" or "Ho," probably an approximation to the Chinese "Ch'ï or a less corrupted "Ghur." We can now trace a connection with the pilgrims' Ghur or Ghori as well as the modern D'Ghur (Rockhill, quoting Hodgson in "Life of the Buddha") who are Hor or Hur. And as eastern Turkestan was for centuries the home of the Uigurs we are not surprised that "Hor" is applied to men from that region and northern Tibet. At the same time we would suggest that the To Charoi, Ghurs, and perhaps present ethnic groups in western Tibet, may be survivals of the "Yüeh Ch'ï" who came to Bactria long ago, and who to some extent later entered Tibet via the Indian passes, (Indo-Scythian). The armies of Hwei Ho (Du Halde) or Uigurs, who were allied with the T'ufan against China accepted Manicheism and spread to eastern Turkestan. But in spite of an implied cognation and topographical propinquity the Horpa of the Nya Ch'u basin never lost their identity. So we suggest that they might be descendants of enterprising groups of the Lesser Yüeh Ti, a lagging remnant of the main hordes, which in Sze Ma Ch'ien's time were ensconced in the eastern slopes of the Nan Shan. With the historical fact in mind that they were interrupted "migrants" there seems to be no valid reason why parties of these fair skinned fugitives should not have made their way to the head waters of the Yalung, and in time become the rulers of some of the most fertile lands in Tibet.

But if the "Yugurs" and "Hor" are the same people, who are their supposed ancestors, the Yüeh Chï or Yueh Chi, an ancient group with alleged Tibetan affinities? They were neither yellow, black nor brown, but may have been white[15] with noses, eyes and hair not very different from the Nya Ch'u Hor. In any case, we are glad that Dr. Schuyler in his "Turkistan," when speaking of the Wu Sun and Yueh Chi, says of the latter; "they also have been identified with Getae and Goths.[16]

NOTES.

1. Ch'u is Tibetan for River. Nya Ch'u = Nya River.
2. Nying Ts'o Gomba = Old Lake Lamasery at Dawo.
3. An English-Tibetan Dictionary by Sarat chandra Das.
4. A famous Tibetan king about the middle of the seventh century A.D.
5. According to W. W. Rockhill, the famous Tibetan traveller and scholar.
6. Jäschke's Tibetan-English Dictionary.
7. The Hsi Tsang T'u K'ao 西藏圖考
8. 羌 See note 15 for locality.
9. 無戈 or 乞
10. 月氐
11. 大夏
12. 法顯 and 玄裝 Buddhist pilgrims.
13. 吐谷 T'u Fan or Po.
14. 回和 or 回紇 or 紇國 Chinese names for Uigurs.
15. Their skins were 赤白 (pink) ("Biographies of Khokand"). Webster's Dictionary suspects that the Yüeh Chi were the Tochari of Strabo and probably akin to the Tibetans. According to Wells, the Ephthalites or "White Huns" were a branch of the same people. The Yueh Chi conquered Bactria about 126 B.C. and invaded India later. Giles gives Yüeh Chïh as a name for Bactria, but the characters 月氐 may be a mistake for 月氏. Beal's Dhammapada, section xxxvi, deals with a king of the "Yüehchi." The author also suggests a relationship with the Getae. Von le Coq identifies the Yueh Chi with the Tochari and traces them to Southern Russia. G. Parker informs me that the Goths (呼得) came as far east as Kanchow in Kansu, and later moving west left traces of their presence in the syllable "Kan (d)." Although the meaning of "Kanze," the present eastern Hor centre has a religious significance now, it possibly suggests a northern origin for the hordes discussed in the above article. Parker denies that the "Ti" (氐) "Ch'i" according to Sze Ma Ch'ien, has any connection with the Yüeh Chï (月氏 combination, but asserts that it forms the first syllable in "Tibet," the "T'u Pod" (吐谷) of the Chinese histories. Compare the Luh Yi (六夷), Ch'ih Ch'iang (七羌), and Chiu Ti (九氐), of the Min Valley, between Weichow and Sungpan.
16. The Chinese rendering of Goth is 得呼.

THE FIRST PRINCE OF WASHI [1]

J. H. Edgar.

About thirty-five English miles from Kwanhsien in a westerly direction is the San Chiang junction where members of the Washi ruling family had a settlement and temporary home. The territory of this quasi-independent ruler begins some miles west of Ta Yih Hsien and continues to a point within five or six miles of Weichow or Sinpaokwan, in all, a distance of 70 miles. The western boundary ends at the summit of the Pa Lan Pass, which will give the state a rough diameter of 80 miles. The region is wild and mountainous and the population, entirely agricultural, is scattered, and whether Chinese or Kiarung, never very numerous. The government centre is at T'ong Ling Shan, about four miles above Wen Ch'uan on the right bank of the Min River. The most important grouping, however, is at Ts'ao-p'o, where there are many fine non-Chinese castles and some small lamaseries. In the P'i-t'iao valley, about the centre of the state, there are also settlements of native lamaists. For nearly 500 years Washï has been a loyal buffer state between China and restless, warlike peoples in the Kin Chwan regions.

An explanation of the name Washï will no doubt throw some light on the ancestry of the princes and the causes which made the first ruler an alien on the confines of China. The Lifan and Wen Ch'uan histories give 1442 A.D. as the date of this functionary's arrival in the Min valley. His original home was in "Wu Sï Tsang Chia K'oh," [2] and on the beams of an old temple, renovated about about 1472, the legend speaks of him as the "Chia K'oh Prince of Wa Shï." The meanings of the names "Wu Sï" and "Chia K'oh" as it seems only possible to interpret them, are unexpectedly interesting. "Wu Sï" is undeniably the old Chinese rendering of "D'Bus," then pronounced "Us" by the Tibetans, but now contracted to "Yu" the name for Central Tibet. It seems very likely then that "Wa Shï," a name also applied to the gorge from the T'ung River on Tatsienlu, is the Ming name for Tibet in a slightly corrupted form. The "Chia K'oh" is even more interesting. The tradition of the present rulers is that the original marquis [3] came from the Indian side of the Himalayas. The name "Chia K'oh" certainly bears this out, for the characters are simply the Chinese rendering of the Tibetan "R'Gya-Gar" the name for India. Why the family in the first instance left India is not stated, but Tamerlane's activities [4] may have had something to do with

it. Again, the right of the Mings to dictate to a chief in such a remote region may be explained by their being the legal heirs of the Mongols. In any case, it was more convenient to have such a free lance nearer the provinces, so he was invited to come East on military duty and was given lands and titles where his nomadic habits were changed perforce and his loyalty insured.

NOTES.

1. 瓦寺 probably a corruption of 烏斯 ("Us") the Ming name for Tibet, now pronounced "Yu" literally "D'Bus."

2. 加湾 is the Chinese for "R'Gya-Gar" the Tibetan name for India. The people dressed in white, hence the name.

3. That is a Governor of the Marches, or frontier regions.

4. Between 1333 (?) and 1405. The Mings began to reign in 1368, but the Indian family had been in Tibet some time before 1442.

COMMENTS ON THE "THE MOUNTAINS ABOUT TATSIENLU,"

Article in the Royal Geographical Society Journal.
Vol. LXXV. No. 4, April, 1930.

J. H. EDGAR.

The above article establishes some important facts: (1) High peaks in the Tatsienlu region have been known to explorers for half a century; and, (2) for unknown reasons, were not included in the maps of a decade or so ago; (3) moreover, in the case of the Gang Kar both the name and the altitude were, even then, approximately correct.

The article deals with the majority of travellers who have been in a position to discuss the mountains in question, but we notice that the names of Potanin, Prince Henry of Orleans, Doctors Tafel and Assmy, Capt. Stotzner, General Pereira, L. M. King, and Dr. Heim are omitted. The writer of the article, also, seems unaware that in a biography of the late Dr. Z. Loftus of Batang, published about 1910, a vivid description of the Tatsienlu mountains is on record. Our own interest in the main feature may be found in an article written in Tatsienlu before the appearance of the R.G.S. article.

The Chengtu Expedition referred to was in Tatsienlu during our furlough in Australia, and we missed the Roosevelts by a few months. Kingdon Ward's remarks are approximately correct; but should that be claimed for Gill's "Jara" *north* of the Kazhi? Was this traveller not looking *back* "in the direction from which he had come"? And certainly he had come from the east. Ward, however, is again near the mark, when he suggests 20,000 feet for the Tatsienlu Range.

In Gordon's account we note in passing that the Ta Hsiang does not mean the "Great Elephant," but the "Premier" Pass; and the Tzu Mei is known to us more particularly as a col and a non-Chinese hamlet four miles south of the Gang Kar lamasery. The name may be loosely applied to some adjacent mountains, but not seriously to any system continuous with the Gang Kar complex. Moreover, we know of no feature in the locality indicated by the sketch map that could claim the name Tzu Mei.

In Gill's account, we assure readers that the Gang Kar is not seen from the valley roads on the T'ung side of the Chila or Cheto, and what he saw when looking back *first* time was the short Tatsienlu range. The "Ka Ji" (Kazhi), fifty to sixty miles westward of Tatsienlu, gives just such a view as Gill describes. But my belief is that he was speaking of the Zhara and looking at the Gang Kar.

Szecheni's expedition is more satisfactory. In the narrative (page 265-266) we have again a description of a journey towards the Cheto col. But on, near the summit, the narrative becomes confused. In the first place, on the Pass there is no view of specially arresting mountains, and even a view from higher saddles or lower plateaux, would only reveal an ordinary snow field and a rather poor view of the Zhara. From the Kazhi, however, we may not only admire the great rime referred to above, but also an intrusion of serrated peaks which run between the T'ung and the Che Ch'u from the Hai Tzu Shan to Tatsienlu. This may explain the suggested confusion, but in any case the most northern peak of the Great Rim is the Zhara, and the southern one the Gang Kar. About 90 miles north of the Chila, just west of Taofu or Dawo, we have crossed the Yalung-T'ung divide above glaciers and near snow peaks. To the northwest—again perhaps 100 miles - on the left bank of the Yalung is another snow peak, the KAWALORI of Coales, which is detached from the snow clad Kanze system on the right bank of the same river.

Returning again to Loczy's "Bo Kunka" we find that this name, so pronounced, is the one given today in every case where the southern peak is concerned. This traveller's description, also, in almost every way is admirable, and the altitude, 7600 m. is as nearly correct as can be expected. Evidently Kreitner's "Kunka Range" (literally "Snow Mountains") E.-N.E. of the main peak is also correct or nearly so.

The Ajala crossed by Stevens is roughly half way between the Gang Kar and Ying Kwan Chai. The country representing the more northern part of the division consists of rolling downs with excellent pastures. This is true in the very region chosen for the position of the "Bo Kunka" in the sketch-map. The Chengtu Expedition made its observations not far from the same spot.

Rockhill's description applies to the Zhara and his second suggestion reminds us that the principality through which he passed was at that time officially known as Chag La. "The mountain of Chag La, therefore, is an excellent guess. But we have never heard the word pronounced other the Zhara.

Although Johnson quotes the altitudes at that time associated with the Kar and the Znara it is quite possible that he saw neither the one nor the other. His route was over the Cha Zam (Jaze) and his opportunities were limited, even if the weather was favorable.

Wilson, on the Ta Pao, refers more particularly to the Zhara, but also must have seen the Gang Kar and, indeed, all the other ranges. Coales alone of all the travellers renders the northern mountain correctly. Pratt, Le Gendre, and Davis may have had bad weather; or confined themselves to the valleys; or like Wilson, at times were content with general descriptions. Finally; Stevens' *Yind Kwan Chiai* and Kreitner's *Dzong Go* are the same place and are the Chinese and Tibetan rendering respectively of the same word.

The Tibetan names as spoken are as a rule widely different from their written equivalents. The Zhara is an exception, but this name has puzzled every traveller except Coales, unless in most cases they use the French, not the English, *j*. While the name of the state and its ruler "Chia" might vindicate Rockhill, a literal translation of Zhara as "the fence of helmets" accords well with the Gan topography. For, viewed from the plateaus of Minyag, the Zhara surely suggests a fence or barrier, and one peak is not unlike the ceremonial hat of some Lama cults. It was this peculiarity that suggested to Rockhill the "Horn of China" as a possible explanation.

As regards the name Gang t'Kar we are on surer grounds. The word as written in the Tibetan script must mean the "White Ice Mountain", a common name for snow clad peaks in Eastern Tibet. In this very region there are three or four "Gangs t'Kars" modified by regional names. Since Dr. Rock's visit the qualifying Minyag has been added to THE Gangs t'Kar. The explanation is simple. Dr. Rock came from the south, and his men catching their first glimpse of this superb feature, exclaimed—"The Gangs t'Kar of Minyag". But "Bang Gangs t'Kar" (pronounced Bo Gang Kar) is now as it was in Kreitner's day the local designation. When at the Gang Kar Monastery in 1931 the shcolarly abbot gave us in the Tibetan script, the words "Bang Gangs t'Kar" asserting that they represented the official name. The same applies to the head monastery about 35 miles in a southerly direction on the Yalung side of the mountains.

ANCIENT WHITE MEN'S GRAVES IN SZECHWAN PROVINCE.

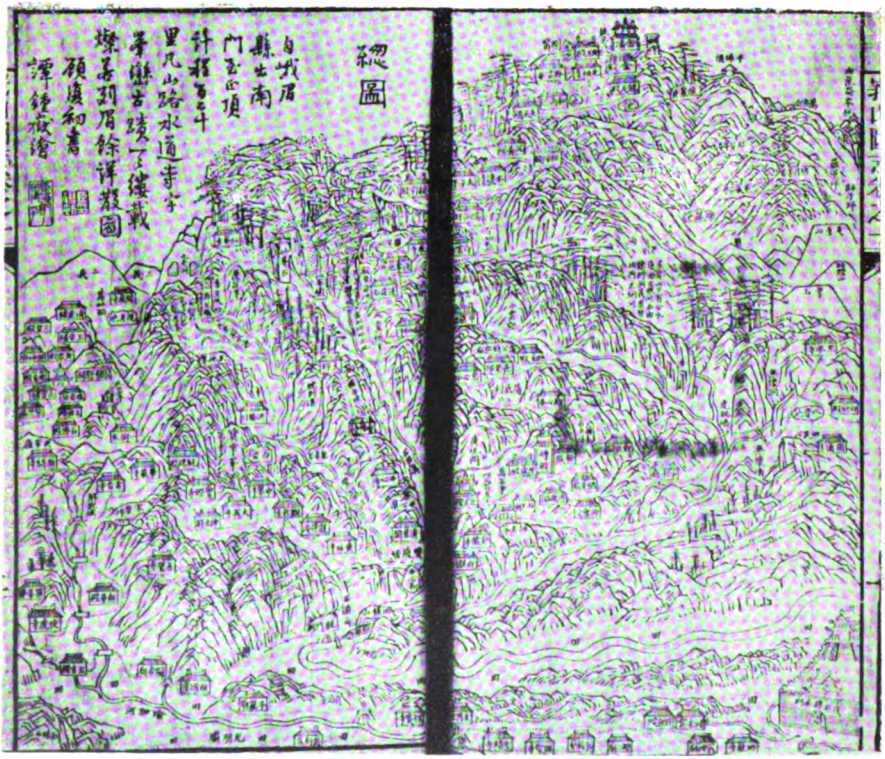
D. C. Graham.

South of Suifu, on the Szechwan-Yunnan border, there are said to be graves of white men, called by the Chinese "*ben ren fen.*" The writer has talked with both Chinese and aborigines who affirm that they have seen them.

There are said to be wooden coffins on the sides of perpendicular cliffs, held in place by iron bars. Some of the coffins have rotted away and fallen to the ground, and in them have been found human bones, silver bracelets, and other articles. It is believed that it is unsafe to have in one's possession the bones, bracelets, or other objects from these coffins.

The Chinese tradition is that these are the graves of a group of white people who lived in this region at the time of Chu Ko Liang, about 225 A.D., that the great Chu Ko Liang told them that if they would bury their dead in this way their descendants would prosper, but that instead the white race has disappeared.

Whose graves are these *ben ren fen*? One conjecture is that they are the coffins of Chinese who lived in this region centuries ago, who sought in this way to protect their dead so that the coffins could not be opened and looted by the aborigines. Another possibility is that they are the tombs of a group of the Shan or Tai race which formerly inhabited this region, and whose descendants are still called Pai-yi by the Chinese. It is an established fact that among this race are occasional groups that are quite white. A third theory, for which we have as yet found no historical evidence, is that a small group of the white or Caucasian race once lived in this section and buried at least some of their dead in this way.



A Complete Map of the Omei Temples and Routes by the famous Szechwan artist Mr. T'an, from Volume One of The Mount Omei Picture and Guidebook.

(The dark square at the right is the stain of the owner's seal on the titlepage. The shadow in the centre is caused by the fold between the two pages of the book.)

OMEIHSIEN TO THE TEMPLE OF THE HOLY TREASURE

With a translation of the Preface and the Notes on these temples from the *Omei Picture and Guidebook* (峨山圖說 *O Shan T'u Shou*), by Huang Shou-fu 黃綬芙, Chengtu, Ping Wen T'ang 炳文堂. Hsioh Tao Kai Hsi Yuan Men 學道街西轅門, 1887. Two vols. Title characters by Ku Fu-ch'u 顧復初, Preface by Huang Hsi-tao 黃錫燾; woodblock illustrations by the artist T'an Chung-yoh 譚鐘嶽.

By

DRYDEN LINSLEY PHELPS

On a beautiful day in January, so the old tablet reads, in the year of Wan Li of the Great Ming Dynasty, A.D. 1606, the Temple of the Great Buddha (大佛寺 Ta Fu Sze) was dedicated. There are a number of edifices shaded by splendid trees in the walled precincts a *li* or more outside the East Gate of the city of Omeihsien. Other tablets of soft red sandstone, carved and set up probably in the Ming Dynasty, of which the complete date characters have been eroded, bear the words: "Chosen by Li Ch'ang-ch'uen (李長春)"; "Set up in November of the year issu (乚巳)". This is probably A.D. 1605, though the same combination of cyclic characters occur also for the years 1425, 1485, and 1545. We are told that the King received an order from his mother to erect this place of worship. Buddhism, like Christianity, owes much to womanhood. In the Hall of the Illuminated Treasure (光明寶藏 Kuang Ming Pao Tsang) are two old tablets partly defaced, one of the thirty-sixth year of the Ch'ing Dynasty Emperor K'ang Hsi (A.D. 1697), and one of the Ming Dynasty Emperor Wan Li, in the Spring of A.D. 1603, announcing subscriptions for the building of the monastery. The small sweet-toned bell here bears the characters: Huang T'u Kung Ku 皇圖鞏固 often seen inscribed in a temple imperially benefited and which may be translated: Established in the Royal Domain.

In The Pavilion of the Universal Treasure (圓通寶閣 Yuan T'ung Pao Ko) or Yuan T'ung Tien (元通殿), the great hall of the temple facing north, stands a titan Goddess of Mercy of gilded

bronze some thirty feet high. Forty-two outstretched arms, each about six feet long, bestow benefits upon humanity. The image is surmounted by a gorgeously carved headdress. In the rear of the statue the gilt is gone, revealing the massive metal sections. I suppose ponderous size and weight have been this goddess' protection against rapacious military men who would otherwise have sent her along with countless of her smaller brother and sister bronze divinities to the mint to be reincarnated in brass copper coins. At the right of the great altar hangs a bell of bronze on a two-headed griffin. It is six feet high and thirteen feet in circumference at the base. The Lotus Sutra is inscribed upon it in raised letters; and the characters: 咒語 Chou Yu: a Spell, a Prayer.

Now let us turn to Mr. Huang's Preface to the *Omei Picture and Guidebook*. He was Tao-t'ai of the Chien Ch'ang (建昌); prefectures; born in Shan Hua (善化; and wrote the following in October of A.D. 1888, the fourteenth year of the Ch'ing Dynasty Emperer Kuang Hsu.

"Records lay stress on pictures and their explanations. Especially is this true with regard to mountains. The annals of cities merely describe distances, lengths and breadths, mountains and rivers, positions of roads and bridges, in order that the local official may at a glance take in the situation. Thus, he may make defense in case of attack by robbers. Such is the purpose of the Prefectural Record. But it is not so with the descriptions of mountains. For the latter have many summits, cliffs, defiles, ravines and dangerous rivers. Sometimes in travelling hundreds of *li* one fails to discern even a footprint. No single glance can include the variety and abundance of the scenery. Therefore if one does not personally go to investigate he is likely to arouse the ridicule of intelligent persons by his errors.

"Omei is Szechwan's most famous mountain. But it has no official annual sacrificial ceremony, I regret to say. In the year A. D. 1885 Mr. Ting, the Governor of Szechwan, requested His Majesty the Emperor Kuang Hsu to permit an official sacrificial ceremony in the Spring and Autumn of every year. This was granted. The following year the Lieutenant-Governor, Mr. Yu Chih-k'ai, sent Mr. Huang Shou-fu, the Tao t'ai elect, to make an investigation of Omei. Upon his arrival he discovered that all the temples contained images of Buddha. But there was lacking a shrine for the Divinity of the Mountain (*i.e.*, the mountain tiger). He rummaged through the ancient annals and found many errors. Mr. Yu then contributed money for the erection of shrines in honour of the local divinity and for the instruments of worship. Mr. Huang gladly undertook the task of compiling the history of the mountain. Mr. T'an, a distinguished artist, was instructed to make the drawings. A certain Mr. Liao Sheng-t'ang assisted in the compilation of the records. But unfortunately Mr. Huang died the following year so the work was left uncompleted. In view of this fact Mr. Yu asked Mr. T'an to finish the pictures. The latter

travelled for several months through every sort of hardship. Finally he completed eighty-four sketches. To the former annals were added almost as much material again. Mr. Liao helped with the explanations. After a number of months the task was done. Fearing some omissions Mr. Yu invited me to look over the manuscript. He said that as I was resident in Chien Nan (建南) I was not far from Omei. What care he exercised and how difficult this project!

"I carefully inspected and revised the manuscript. This was no matter of pride with me, but merely to comply with Mr. Yu's request. After the work was published Mr. Yu asked me to write a preface. I understood that it was Mr. Ting who brought about the annual ceremonial of sacrifice, Mr. Yu who built the shrines, Mr. Huang who started the compilation of the mountain records, Mr. Yu who finished them, Mr. T'an who executed the pictures, Mr. Liao who penned the explanations. Credit for the work is due entirely to them. I have no part in it. But I am nevertheless very glad that, the work having been published, travellers may use it as a guidebook: and readers may in imagination journey there. Those who have already been to Omei will find familiar spots in the book. Is this not a piece of work worth doing? It therefore gives me pleasure to write this preface.

Huang Hsi-tao of Shan Hua.

October, 1888.
Written in the Chien Ch'ang Tao-t'ai's Yamen."

A Comprehensive Picture of Mount Omei

"Thirteenth Year of the Emperor Kuang Hsü, February, 1887. Title characters by Ku Fu-ch'u.

The panoramic picture (See Plate). It is 120 *li* from the South Gate of the city of Omeihsien to the summit of Mount Omei. This sketch distinctly shows all the defiles, water-courses, monasteries, summits, cliffs and ancient relics which must be passed. The following views give a clear understanding. Written by Ku Fu-ch'u. Drawn by T'an Chung-yoh.

"Here we have a complete picture of Omei. It is related that in this mountain Huang Ti (the Yellow Emperor) enquired concerning the True Way.[1] It is further recorded in the sutras that the monasteries of P'u Hsien (普賢, All-pervading Goodness) built here total more than seventy. Each contains an image of P'u Hsien[2] For this reason the mountain has no official

1 Huang Ti's legendary date of accession to the throne, B.C. 2698.

2 The bodhisativa of mercy, the patron divinity of Omei, who is reputed to have arrived there in the Han Dynasty (B.C. 206-A.D 220) riding on a white elephant.

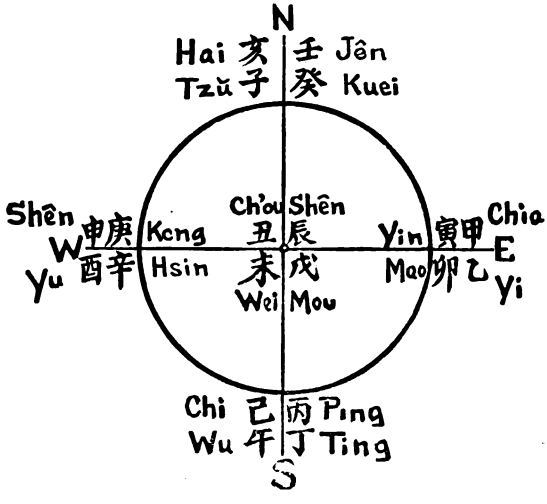
sacrificial ceremony, although it is a widely famed spot. I have visited this place and consulted the local historical annals in order to acquaint myself thoroughly with it. But unfortunately the records are more or less incomplete. Hence these pictures. If one wishes to understand the mountain let him carefully inspect these pictures, for they deal with every place in detail. This drawing, as you can see, serves only as an introduction."

"From Omeihsien to the Returning Dragon Monastery[1] (回龍寺 Hui Lung Ssü).

"The South Gate of Omeihsien is situated 237 paces from the Returning Dragon Monastery. The city gate is on the north[2] but faces south. The monastery is to the east, but faces west.[3]

---

1 The varied names in Chinese for Buddhist places of worship baffle the translator. Often a title is no longer appropriate to the small edifices which now remain. I have tried to find English words which will convey the meaning of the Chinese characters: 寺 Ssü, temple or monastery; 廟 Miao, monastery; 院 Wan or Yüan, convent; 堂 T'ang, hall or chamber; 樓 Lou, tower or storey; 所 So, station or spot; 店 Tien, lodge; 社 She, altar; 殿 Tien, hall, court, chapel; 庵 An, shrine, hermitage, cloister; 閣 Ko, balcony, arcade portico; 亭 T'ing, pavilion, arbour, lodge; 叢林 T'sung Lin, meditation hall: 禪林 Ch'an or Shan Lin, monastery; 道場 Tao Ch'ang, a Buddhist centre; 刹 Ch'a, monastery, shrine or spire; 室 Shih, apartment for private meditation; 陀 T'o, Buddhist temple. I realize that many of these terms may have wider interpretation. The Wade System of romanization is used throughout.



2 The author of the *O Shan T'u Shuo* has made use of the Chinese celestial system of zodiacal and astrological signs to indicate the positions of the temples. I have translated these, using simply the four English terms: north, east, south, west and central (whatever that may mean).

3 The first brief paragraph describing each temple is a translation of the written characters on its picture.

"The name of Omeihsien was formerly not what it is today. It was known in the Han Dynasty as Nan Anhsien (南安縣). In the Later Chou Dynasty it was changed to P'ing Ch'ianghsien (平羌縣). It received its present name only in the early years of the Sui Dynasty.[1] According to the *Yüan Ho Annals* (元和志) "Omeihsien lies on the eastern range of Mount Omei, hence the name. In the 13th year of the first king of the Sui Dynasty (A. D. 593) it was placed under the jurisdiction of the Mei (眉郡) district During the T'ang and Sung dynasties it belonged to the Kiating Prefecture. In the Yüan Dynasty it belonged to the Kiating Road. During the Ming it was under the Kiating Prefecture. During the Ch'ing Dynasty, in the year A. D. 1735, it was named Omeihsien and belonged to the Kiating district."

"Omeihsien has the following gates: on the north and on the east each one; on the west and on the south each two. Pilgrims to the mountain go from the Great South Gate which is called Conquering the Summit Gate (勝峯 Sheng Feng). There all the peaks stand revealed in a splendour of verdure. After passing the stone bridge called The Confucian Ancient Chameleon Dragon Bridge (儒林古化龍橋 Ju Lin Ku Hua Lung Ch'iao), otherwise known as the Summit Conquering Bridge, one then arrives at Confucian Street. Less than one hundred families live here. If one pass towards the South Gate again he will come to The Returning Dragon Monastery. It is small but breathes the atmosphere of sequestered beauty. Nuns dwell here. In front of the temple murmurs a jewelled stream. Looking westward one beholds an ancient shrine in the midst of hoary trees. It was built in the year A. D. 628 of the T'ang Dynasty. Formerly it bore the name of The Temple of Holy Longevity in the Western Hill (壽聖西坡寺 Shou Shen Hsi P'o Ssü). It has now crumbled into decay".

"From the southwest of The Returning Dragon Temple one walks 190 steps to The Monastery of the Omei Divinity (峨神廟 O Shen Miao). The latter lies to the west but faces east.

"Formerly the Mountain Divinity had no official sacrifice. It was only in the 11th year of Kuang Hsü (A.D. 1885) that the Duke Wen Ch'eng[2] His Excellency Ting Pao-chen asked His Majesty to confer a Spring and Autumn Official Sacrifice on the Mountain Divinity. He stated in the Memorial that the Divinity controls floods, famine and cholera; he gives benefits to the people. Therefore he should enjoy sacrifice. His Majesty consented to the proposal, and in the following year The Monastery of the Omei

---

1 Just before the T'ang Dynasty, *ca.* A. D. 618.

2 A posthumous title.

Divinity[1] was rebuilt by contributions from the Deputy-Governer Yu Chih-k'ai, a former Inspector of Szechuan.

"The monastery was situated in Hsüeh T'ang Shan (學堂山) outside the South Gate of the City. Many utensils were bought for the Ceremony of Sacrifice. Every year an official came to pay homage. In front of the temple are the remains of an ancient pool. Mr. Fu Shih-an of Chin-ai writes thus in his *Journey to Mount Omei* (登峨道理記 *Teng O Tao Li Chi*): 'In the Confucian temple one sees a pool formed of three streams. The water is like a green field with attractive lotus plants and sportive turtles.' Such was the pool lying before the temple.

"Indeed, to the front one beholds only the old pagoda, and to the rear the grandeur of the hills is seen. On each side stand many clusters of superb trees. All that can be seen far and near is simply a mass of purple verdure. One's enchantment with this beauty leads him to believe he is standing as it were in a lofty lacey net of cotton clouds (兜羅綿雲 tou-lo mien-yuin)."

"From The Monastery of the Omei Divinity one walks southwest 498 paces to The Hall of Szechwan's Patriarch (川主宮 Ch'uan Chu Kung). The latter stands midway facing centrally. Its gate is similarly located. Then if one walk to the right 67 steps he arrives at the Universal Welcome Convent (什方院 Shih Fang Wan) which lies to the north but faces south.

"Travelling uphill from The Monastery of the Omei Divinity and after passing through the ancient stone arch one comes upon The Hall of Szechuan's Patriarch on the right hand. Here in the Great Hall is the statue of Li Erh-lang (李二郎).[2] A theatrical stage stands before the image. To the rear one finds a temple called The Universal Welcome Convent.[3] The paths outside are very rough, but midway is a pavilion—a good resting place especially in summer and autumn. While one reposes here light zephyrs caress the body. Frequently weary pilgrims find relaxation in this spot."

---

1 The hand of time has been heavy during the 46 years since these descriptions were penned. The O Shen Miao is now but a great barn-like lodging for pilgrims.

2 Szechwan's first irrigation engineer.

3 One of the magnificent banyan trees (Huang Ko Shu 黃葛樹) measured 32' 2" in circumference 5' from the ground. Two panels inside this structure read: The Lucid Heart of Myriad Ages 萬古丹心 Wan Ku Tan Hsin, and The Hall of the Three Sages 三聖宮 San Shen Kung.

The Temple of the Holy Treasure (聖積寺 Shên Chieh Ssŭ) as it was some 46 years ago as depicted by Mr. T'an the Szechwan artist, and printed as a woodblock in *The Omei Picture Guidebook*. The temple precincts now include the two great banyan trees, while the pilgrim's road has been moved out beyond them. The exquisite tower is fallen, burned, broken.

"From The Hall of Szechwan's Patriarch one walks southwest for 634 paces to The Monastery of the Walled Mountain[1] (壁山廟 Pi Shan Miao) standing in the east but facing west.

"One walks out of the Universal Welcome Convent and pursues his way along a smooth road. First he passes through Yeh Chia Tien (薛家店) to The Monastery of the Walled Mountain. It is a humble but ancient retreat. Within is the god who controls the wind, cloud, thunder and rain.

Along the road widespreading banyans cast their shadows over large tracts of land.[2] During summer downpours one finds refuge there."

"From the Monastery of the Walled Mountain one walks southwest 684 paces to the Bodhi Shrine (菩提菴 P'u-t'i An) standing to the north but facing south.

"The latter is some 2 *li* away and lies on the left side of the highway. Omei Peak Number Four (四峨 Ssü O) towers opposite like a jade parasol. From the left of the shrine one continues his way more than 100 paces to pass a number of old cottages. Here the fields appear scattered. Nearby flourish luxuriantly many wax trees from which the people make their living."

"From the Bodhi shrine one walks southwest for 256 steps to the Temple of the Fortunate Ones (興聖寺 Hsing Shen Ssü) which stands and faces centrally. In front is a bootshaped stone.

---

1 I am in some uncertainty concerning the translation of this temple name. I have done it literally; but I am not sure but what the expression pi shan 壁山 is reminiscent of that Zen (Chinese Shan or Ch'an) phrase 面壁 mien pi or 壁觀 pi kuan, to face the wall, or to peer within the mystery of one's own absolute being while gazing, as Bodhidharma did for 9 years, at the vacuity of a towering cliff wall. Perhaps a good Ch'an Buddhist would say the temple name should be translated: The Mountain Contemplating Monastery.

However, within the temple stands the image of 壁山菩薩 Pi Shan P'u-sa, the Bodhisativa Pi Shan, evidently a saint of Buddhist history. But he may have attained arhatship by wall-contemplation, as Suzuki calls it.

Among various Taoist images which indicate Taoist influence at Omei is a large image of 關羽 Kuan Yü of "Three Kingdoms" fame. Other Omei temples which contain Taoist images are the 華嚴中頂 Hua Nien Chung Ting, The Central Lotus Ridge, and the 古觀心頂 Ku Kuan H in Ting Ancient Ridge of Heart Contemplation. The Abbot P'u T'ien 普天 of Wan Nien Ssü, 萬年寺 Temple of Myriad Ages, informs me that "Omei was Taoist before it was Buddhist." His own shrines pay reverence still to Taoist divinities, but this may well be a later adaptation, not necessarily an indication of original priority.

2 One of these giant gnarled Huang Ko Shü measured 36' 4" in circumference 5' from the ground.

3 Today, between the P'u-t'i An and the Hsing Shên Ssü there stand the Temple of Complete Awakening (圓覺寺 Yüan Kioh Ssü). Reflected within the two pools of its court are miniature Omeis with the Elephant Rock, old fellows chess playing, caverns, rugged steps and shrines.

"Leaving the Bodhi Shrine one walks along among cottages to luxuriant bamboo groves. On the left is The Temple of the Fortunate Ones. This building stands in two sections. The images here wear a solemn mien. Outside the portal, sunk deep in the ground, one finds the bootshaped shoe, so named because of its likeness to a high shoe.[1] Here one may count Omei's peaks and behold the Golden Summit rising majestically.

"Incidentally, according to the former *Omei Annals*, a certain Temple of the Fortunate Ones was near to The Temple of the Holy Treasure (聖積寺 Shen Chieh Ssü). One wonders if this Temple of the Fortunate Ones is the same as the old one."

"From The Temple of the Fortunate Ones[2] the traveller walks southwest for 1231 paces to The Temple of the Holy Treasure (聖積寺) Shen Chieh Ssu), that is, Old Treasure Tower (老寶樓 Lao Pao Lou). The main hall stands to the west but faces east. The chief portal is to the south but faces north. Inside the temple precincts are two Lohan pine trees 6' 5'' in circumference.[3] To the left is a bronze bell 9' high weighing 2500 catties.[3] To the right is a bronze tower totalling fourteen storeys. 4700 Buddhas were cast in bas-relief. On its sides has been engraved the complete Lotus Scripture.

"From the Temple of the Fortunate Ones the pilgrim follows the road to the Stone Arch which was built by a monk named Hsing Lin in the year A.D. 1745 of the reign of Ch'ien Lung. To the left of the road is The Temple of the Holy Treasure, the old Convent of Mercy and Joy (慈福院 Ts'i' Fu Yüan). Mr. Kao Chung in the year A.D. 1582 during the reign of Wan Li of the Ming Dynasty inscribed a tablet in seal characters to be set up outside the temple. Mr. Kao was at that time Advisor to the South Prefecture of Szechwan. It was at this very temple in days

---

1 This queerly shaped stone may be seen today sunk level with the other stones of the walk leading from the road to the temple door. It is the shape and size of a Canadian ice-pack mocassin. But to the monkish eye it probably resembles a thick-soled Buddhist or Confucian shoe, or perhaps the leather boot worn by Tibetan pilgrims.

2 Between The Temple of the Fortunate Ones and The Temple of the Holy Treasure there has been built in the intervening 46 years since this record The Temple of Universality (圓通寺 Yuan T'ung Ssu). Its court contains pretty conventionalized trees and flowers. There is the usual Omei trinity; P'u Hsien, Kuan Yin and Wen Shu. Here the artisan monks manufacture the great wooden clapper bells out of tree stumps. I measured one "wooden fish" (木魚 mu yu) 7' in circumference and 2' 5" high, hollowed out and shaped at prodigious labour.

3 Chinese measurements and calculations.

long ago that the Yellow Emperor enquired of the Way, so the report goes.[1] In the year A.D. 1508 which was the third year of the Ming Dynasty Emperor Wu Tsung, a certain Mr. Wang from Luei Chiang had the old Convent of Mercy and Joy renovated. In the year A.D. 1597 of the reign of Wan Li, Mr. Wan Jen, the Szechwan Inspector and Mr. Yang Kuo-ming, the Provincial Treasurer, rebuilt the Hall of Chieh Yin. Again in the 11th year of the Ch'ing Dynasty Emperor K'ang Hsi, A.D. 1672, Mr. Tung Ming-min, one of the Censors, reconstructed the main hall of the temple.

"In this chief hall we find a bronze image of P'u Hsien astride an elephant. It is 16' high and of the same size as the recumbent elephant. On both sides of the hall are numerous images all of bronze. Furthermore one sees a Pa Kua (八卦 Eight Diagrams) bronze bell hanging outside the temple to the left. It is 9' high and 8' in diameter, weighing 2500 catties. Beside it to the right is a bronze tower 20' high. It is constituted of 14 stories with 4700 images. The complete Lotus Sutra (華嚴經 Hua Yen Ching) was engraved at the expense of Mr. Wan Hua-shuan, a man from Yung Ch'uan. Vis-a-vis[2] one perceives yet another tower named The Land of Reality (眞境 Chen Ching), otherwise known as Lao Pao (老寶). From the latter name it is often confounded with Liao Pao (了鳥 a bird). It was built formerly by the monk Huei Pao with the name of Omei Summit's Land of Reality (峨峯眞境 O Feng Chen Ching). This title was penned in four great characters by the venerable Wei Hua-fu, otherwise known as Ho-show, of the Sung Dynasty; and it is further reported that a bamboo scroll written by Fan Shu-kung was in time past hanging here. But now one sees it no more. It is said that the scroll bore words like these:

'In heaven's dome appears Buddha's pavilion;
In earth beneath appears man's dwelling-place.'"

The Shen Chieh Ssü (place where the royal holy gifts accumulated) is four or five *li* from the city of Omeihsien on the main road to Mount Omei. It is under the jurisdiction of the Wan Nien Ssü. The old buildings are in serious disrepair but a large new central hall is in process of erection. The lumber comes from the hills around the Wan Nien Ssü some 20-30 *li* distant. The cost for carriage equals the cost of the lumber itself. An outer compound wall has been erected so that the road does not run through the temple precincts as it did formerly. The ugly whitewashing and

---

1 This report is also made concerning the Fu Fu Ssu.

2 The Chinese expression used here (前有 ch'ien you . . .) is ambiguous, It may mean: "Formerly there was..." or "In front (opposite) there is .." at any rate, this "Land of Reality" tower seems now to have vanished into the land of Unreality!

ornaments of the wall and gate resemble tawdry modern militaristic taste rather than temple design. Two huge banyan trees (黃角樹 huang ko shu) lend an air of serenity. One measured 54' 10" in girth 5' from the ground. They were planted, we were told, at the same time that the splendid old stone tablet just beneath them was set up: in the 10th year of the Ming Dynasty Emperor's reign of Wan Li, in April of A.D. 1582. The tablet bears this date and the four beautiful old characters: The Old Convent of Mercy and Joy (古慈福院 Ku Ts'ï Fu Yüan) which was the former name. I visited the spot at the end of winter. The leaves from the twin heaven-darkening trees were just beginning to flutter down. The farmers of the district all aver that this is the peculiar idiosyncrasy of the banyan: it changes its leaves not by season but at the time of year in which it was first planted. There is a singular confirmation of this belief, for among the great banyans which grow along the Omei road, each seems to choose its own different time for changing clothes.

The huge bell of bronze hanging in a small wooden bell tower measures 7' 4" in diameter at the base, 22' 1" in circumference just above the deep scallops at the bottom, 10' high including hanger, 7' 5" height of bell alone. The boom and its profound reverberation lasted one minute and fifty seconds. The names of donors are inscribed on the outer and inner surfaces. The bell is Ming Dynasty, as are also the fine incense urn (化錢爐 hua ch'ien lu), and the splendid bronze trinity group of P'u Hsien, Chieh Yin and Kuan Yin, of which the second (central) figure is some 20' high. The Emperor Wan Li is probably the donor of all these images, urns and tablet. The right hall contains a bronze seated Sakyamuni some 8' high. The Chieh Yin image is partly covered with clay to conceal it from the cupidity of the generals who have transmuted so many of Omei's priceless heirlooms into coppers.

Most beautiful and precious of all this temple's "treasures" was the 14 storied bronze pagoda described by T'ai-Hsü Fa-shih as the oldest and finest in all of China. It was 5.6 metres high, 98 centimetres broad at the base. The nine plans for the development of the spirit from the Hua Yen Sutra are all carved upon it, with accompanying pictures. From the very bottom to the top, on both the inner and the outer surfaces, are engraved quotations from that scripture in distinct and graceful characters containing most of the contents of that eighty-one volume classic. This priceless work of art and religion has therefore been known throughout the Buddhist world as the Hua Yen Pao Ta (華嚴寶塔 The Precious Lotus Pagoda). The nine different assemblies described in the Sutra are here inscribed.

Yet today what of this heritage from the past? It lies in seven pieces, defaced, melted and broken by fire, in a dark corner of one of the halls. The wooden framework caught fire and this pile of ruined metal is the result. The present abbot proposes to

tack the thing together somehow and put it up again. But it will never again be a thing of beauty or inspiration. It is astounding that irreplaceable treasures like this should be left in the hands of ignorant and careless novices!

Rev. Virgil C. Hart's *Western China: A Journey to the Great Buddhist Centre of Mount Omei*[1] describes his visit of 1887. I have not seen his account surpassed in vividness of language or breadth of detail either before or after his time. While some of his observations will bear correction his personal descriptions are of the highest order. I quote here[2] a few paragraphs relative to that section of the Omei road which we have been discussing, since his volume is now inaccessible to most travellers.

"Beggars, small and large, were out in force at this early hour, and, posted at their accustomed places, told their piteous tales. Banyans of thirty and forty feet in girth stretch their giant arms across the road in front of temples, and above curious shrines. A delightful hour's walk[3] brought us to the Shen-chi monastery, where on this side of the city begin a series of wonders which extend in ever-increasing interest to the highest crag of Omei, which is one hundred and twenty *li* away and 11,100 feet above the sea. Without warning we found ourselves standing within the precincts of an unpretending temple court, surrounded by a number of very large and unusually well-executed works in bronze. The first to attract my attention was a fifteen-storied tower or pagoda about thirty feet high. Each segment or storey displayed a vast number of images and intricate designs, each differing in form and design from bottom to top. The priest said the tower was of great age, and of no later date than the Han dynasty. After researches, however, showed it to be of the Min.[4]

"Upon its surface were 4,700 images of Buddha, besides many other queer figures, eminently worthy of careful study. The symmetry and fine workmanship are manifest at first sight, but a closer inspection proves that all the figures of ornamentation and lettering are most exquisitely wrought. Vandals have broken off

---

1 Published in Boston, Ticknor & Co., 211 Tremont St., 1888. The party left Hankow 11 April, 1887. Section specifically relating to Omei, pp. 175-271. The book is now out of print. Dr. Hart and Mr. Huang (author of the *Mt. Omei Guidebook*) were visiting and describing the mountain in the same year, 1887. I wonder if they met!

2 *Ibid.*, pp. 186 189.

3 From the city of Omeihsien, South Gate.

4 Dr Hart was quite right not to heed information regarding dates proffered by the priests. Most of them are ignoramuses. Dr. Reichelt thinks this pagoda may come from the early years of the T'ang, but I am inclined to agree with Dr. Hart that it belongs to the Ming, awaiting further research and inspection when the now dismembered sections shall have been brought out of their dark resting place where they now repose.

many of the heads of the smaller images, and done some other slight damage to the monument, but on the whole it is wonderfully preserved, possessing as it does so many delicate figures. After an hour or two of careful study from every possible quarter, I am confidant in saying that China has few monuments equal to this, and none excelling it in symmetry of design and excellence of execution.[1] Some of the lower projections have suffered much from the hands of pilgrims, who consider a copper cash brightened upon the sacred metal as possessing very great merit, and to be worn as an amulet. This, as well as all the better works of art, is covered with a wooden structure,[2] which serves two diverse purposes,—protection from the weather and from destruction by fire. I noticed subsequently that many of the larger and more valuable monuments have thus greatly suffered during the past hundred years. Only a few yards distant I saw a mammoth bronze image of the god Pu-hsien, thirty feet high, standing upon a reclining bronze elephant. Pu-hsien is called the eldest son of Buddha, whose marvelous glory is exhibited above the 'diamond pillars' east of Mount Omei. This statue is of early date, going back nearly a thousand years.[3] It is in good condition, and is a rare work of art; the trunk has been polished almost as bright as a mirror by constant patting and rubbing.

"Over the gateway-tower hangs an immense pure bronze bell weighing twenty thousand pounds, and covered with finely engraved characters, detailing doubtless many incidents connected with the early history of the place, but my limited time did not permit an attempt at translation. These old Min bronze bells and colossal idols scattered over the empire indicate the religious condition of China at that date, as well as the great wealth of the empire. I

---

1 Dr. Hart's amazingly shrewd surmise coincides with T'ai-Hsū's statement that this miniature pagoda is the finest of its kind in China.

2 As a matter of fact, these crude wooden structures have proved a fearful liability. They are always catching on fire, with the flames destroying or seriously damaging the heirloom they were supposed to protect. This has now occurred in this very spot; and also at the sister monastery of the Wan Nien Ssu, conflagration of the superfluous wooden superstructure destroyed the great tusks of the bronze elephant. These bronze monuments should all be in high open courts, or in brick or stone buildings, protected by impassable iron or stone enclosures at sufficient distance from the objects to prevent mutilation at the hands of pilgrims and visitor.

3 I do not know Dr. Hart's evidence for this statement. Without the definite proof of characters engraved on the image, the presumption is that it would not antedate the Mings.

claim to have discovered in this quiet retreat[1] some of the richest and most interesting monuments to be found anywhere in the province, and I sincerely hope future travellers will turn aside, and at least look upon the wonderfully wrought tower. These unexpected discoveries under the very walls of the city whetted our appetites for the richer works of man and God, which we were confidant must be revealed to us in our upward journey.

"The silvery tones of the grand old bell had died away in the echoing hills as we resumed the lines of march . . . .

"The evanescent clouds disclosed anon to our upturned eyes the distant peaks towering in sublime grandeur above the placid valleys humbly veiled in purple mists."

Chengtu, Szechwan, China,
24 February, 1933.

1 E. Colborne Baber, who passed along this road in 1877, and who seems to have been the first Englishman to have visited and climbed Omei, does not mention this temple and its treasures in his observations published by the Royal Geographical Society in 1882. I think Dr. Hart's claim cannot be challenged, although I have not yet gained access to the literature concerning Mount Omei in French and German. Certainly the whole spirit of Dr. Hart's sympathetic and scrutinizing study of the Omei temples is far removed from and superior to the blasé supercilious accounts by some later tourists who naively display only their own ignorance and irreverence.

LECTURE ON CHINESE MYTHOLOGY

Delivered before the
West China Border Research Society,
May 7, 1932.

BEULAH E. BASSETT

"We all know that to our ancestors the world seemed peopled with uncouth forces, mysterious presences, and supernatural beings, all delightfully free from present-day limitations. Every natural object, every natural power, hid or disclosed some god-like personality who might do the most surprising things upon the instant. Born of this condition are most of the Greek, Roman and oriental myths."

As one writer says, "The main cultural function of mythology is the establishments of precedent, the vindication of the truth of magic, of the binding force of morals and law, of the real value of religious ritual by a reference to events which have happened in a dim past, in the golden age of old, when there was more truth in the world, more divine influence, more virtue and happiness."

When we speak of the myths of certain peoples, or the mythology of nations, we are apt to think in the past tense, as though the myths were records of *past* beliefs, many of them beautiful tales, connecting us with ancient times. In general, this may be true of such countries as Greece, Italy, Norway, etc., but it is only half true of China. The *origin* of many of the Chinese myths may be in the dim romantic past, but the myths themselves are surprisingly vivid and vital in the lives of millions of Chinese men and women of the present time. It is true that hundreds of these tales have become saturated with superstitions, but it is only as we know more of the mythology of this massive nation "that we can ever hope to get at the roots of the jungle-forest of superstitions which choke and shadow the Chinese mind." ("Dips into Chinese Fiction", by Dr. G. T. Candlin.)

We are all familiar with the column or page run in some of the present day magazines giving the score of popularity for a book or play during one month. A few of these books and plays carry over into one or more months. But in China books are not so short-lived in their popularity. If we should ask which book is the most popular in all of this huge country for one month, or one year, or one century, or even for many centuries, the immediate

reply would be, "The History of the Three Kingdoms" (三國誌). This book of one hundred and twenty chapters is a combination of history and mythology and written in good style. Dr. Candlin of the University of Peiping says of this remarkable piece of fiction, "For simplicity, force and fertility of imagination, it is unsurpassed in any language."

Next in popularity for nearly one thousand years, and still going strong, is a book entitled "Travels to the West" (西遊記), or "The Western Excursion". This book heads a long list of the mythical type. Some of the others are, "The Exorcising of Demons", "Diversions of a Chinese Studio", "The Apotheosis of Spirits", "The Mirror of the Hundred Flower Fairies (Spirits)", etc. We have probably all seen Dr. Giles' translation of "The Diversions of a Chinese Studio", and I am working on a translation of the "Mirror of the Hundred Flower Fairies". The last contains some very beautiful ideas regarding the Flower Kingdom, besides giving a clever and fantastic explanation of the wickedness of the Empress Wu Tseh T'ien (武則天) of "Wu H'eo", of the T'ang Dynasty. She became a powerful ruler and, in spite of her terrible cruelty, is considered one of the great figures of Chinese history.

A few years ago, while scanning Dr. Arthur H. Smith's book of Chinese Proverbs, I noticed that quite a group of these were associated with two characters from the book "Travels to the West". I proceeded to buy a copy of the book, which turned out to be a set of twelve volumes divided into one hundred chapters. In this casual way I was introduced to what I later discovered through my own translation to be an almost inexhaustible mine of both Buddhist and Taoist mythology.

This book, at which we are glancing, is based on the pilgrimage of the noted monk, Hsüen Tsuang (玄莊), also called T'ang San Tsang (唐三藏). The Buddhist priest who was in search of sacred writings is probably the only historical character in the whole book. During the reign of the emperor T'ang T'ai Tsong (唐太宗), 600 A. D., the priest Hsüen Tsuang, had an irrepressible desire to visit the sources of Buddhist literature in India. He really started in the year 629 on the long and dangerous journey across desert and over mountains till he arrived in the country of Buddha. He was absent from his native city of Chang-An fourteen years but returned with very substantial evidence of his journey. He presented to the emperor, Tang T'ai Tsong, twenty-two horses carrying 657 Buddhist works, 115 grains of relics, a gold statue of Buddha and many others of silver and sandalwood. The emperor requested him to write an account of his trip and the first book, "Travels to the West" (西遊記) was penned and has become an invaluable record to men of recent times. Sir Aurel Stein and others have based their plans for expeditions into India on Hsüen Tsuang's record of centuries ago, and they marvel at the accuracy of the great Chinese pilgrim.

"From The Hall of Szechwan's Patriarch one walks southwest for 634 paces to The Monastery of the Walled Mountain[1] (壁山廟 Pi Shan Miao) standing in the east but facing west.

"One walks out of the Universal Welcome Convent and pursues his way along a smooth road. First he passes through Yeh Chia Tien (葉家店) to The Monastery of the Walled Mountain. It is a humble but ancient retreat. Within is the god who controls the wind, cloud, thunder and rain.

Along the road widespreading banyans cast their shadows over large tracts of land.[2] During summer downpours one finds refuge there."

"From the Monastery of the Walled Mountain one walks southwest 684 paces to the Bodhi Shrine (菩提菴 P'u-t'i An) standing to the north but facing south.

"The latter is some 2 *li* away and lies on the left side of the highway. Omei Peak Number Four (四峨 Ssü O) towers opposite like a jade parasol. From the left of the shrine one continues his way more than 100 paces to pass a number of old cottages. Here the fields appear scattered. Nearby flourish luxuriantly many wax trees from which the people make their living."

"From the Bodhi shrine one walks southwest for 256 steps to the Temple of the Fortunate Ones (興聖寺 Hsing Shen Ssü) which stands and faces centrally. In front is a bootshaped stone.

---

1 I am in some uncertainty concerning the translation of this temple name. I have done it literally; but I am not sure but what the expression pi shan 壁山 is reminiscent of that Zen (Chinese Shan or Ch'an) phrase 面壁 mien pi or 壁觀 pi kuan, to face the wall, or to peer within the mystery of one's own absolute being while gazing, as Bodhidharma did for 9 years, at the vacuity of a towering cliff wall. Perhaps a good Ch'an Buddhist would say the temple name should be translated: The Mountain Contemplating Monastery.

However, within the temple stands the image of 壁山菩薩 Pi Shan P'u-sa, the Bodhisativa Pi Shan, evidently a saint of Buddhist history. But he may have attained arhatship by wall-contemplation, as Suzuki calls it.

Among various Taoist images which indicate Taoist influence at Omei is a large image of 關羽 Kuan Yü of "Three Kingdoms" fame. Other Omei temples which contain Taoist images are the 華嚴中頂 Hua Nien Chung Ting, The Central Lotus Ridge, and the 古觀心頂 Ku Kuan Hsin Ting Ancient Ridge of Heart Contemplation. The Abbot P'u T'ien 普天 of Wan Nien Ssü, 萬年寺 Temple of Myriad Ages, informs me that "Omei was Taoist before it was Buddhist." His own shrines pay reverence still to Taoist divinities, but this may well be a later adaptation, not necessarily an indication of original priority.

2 One of these giant gnarled Huang Ko Shü measured 36' 4" in circumference 5' from the ground.

3 Today, between the P'u-t'i An and the Hsing Shên Ssü there stand the Temple of Complete Awakening (圓覺寺 Yüan Kioh Ssü). Reflected within the two pools of its court are miniature Omeis with the Elephant Rock, old fellows chess playing, caverns, rugged steps and shrines.

But the mythological record of this same trip was written in the twelfth century and deals largely with the three imaginary companions of the monk, Hsüen Tsuang. As Dr. Reichelt says in his book, "Truth and Tradition in Chinese Buddhism", "From the Taoist and Buddhist points of view, 'Travels to the West' is in many respects comparable to 'Pilgrim's Progress' . . . It has exercised a strong influence during times when spiritual life was at a low ebb."

Dr. Arthur H. Smith states that in this book, "Taoism, Buddhism and Confucianism are made to coalesce as easily as clouds blend into one common vapor." It reminds one of the blending of Buddhist and Taoist practices which we see or hear in the daily life of the people all about us. However, there is a great deal of symbolism running through the whole book in spite of its oft repeated humor.

In Japan and Korea it is a classic throughout the land. Parts of the book have been acted as a mystery play in Korea for the last five hundred years. As with the writings of Shakespeare, the theaters find many of their best plays in this marvellous and fascinating work. Though written in the twelfth century and dealing with characters and supposed happenings of the seventh century, it is vastly popular in China today. In many temples we see some of its stories depicted in carving and painting; ceremonial lanterns and scrolls of all kinds keep before the people scenes from this semi-religious book, and professional story-tellers use these tales to attract the people.

There is a little uncertainty as to the author's name, but I find that most commentators agree that he was a saintly monk who for a while was religious advisor to the great general, Genghis Khan. It is claimed that the author's purpose in writing this book was to give, in popular form, some of the spiritual experiences of a human being on his journey through life and this brings us in contact with the Buddhist and Taoist pantheon.

The story opens with a fascinating biography of the Monkey Spirit who is really the hero of the whole book. This Monkey, Sun Wu K'ong (孫悟空) or Sun H'eo Er (孫猴兒), is supposed to represent the restless, active, everseeking mind of man. Some of us have read translations by Giles, Dore and others, of the origin of the Monkey Spirit, so I shall review it briefly. On the first page of the first chapter we find an enchanting tale of evolution from stone to monkey, and monkey to man. We read, "In the Great Sea there rises a fairy mountain called "Hwa Go Shan" (花果山). On the peak of this mountain there was a fairy stone thirty feet in height. Gradually the elements shaped it like a stone monkey and later this became embued with life and bowed to the four quarters of the earth. Golden light flashed from his eyes, and the god of heaven sent out of the south gate of heaven to discover the source of this brilliant light. The messenger found the new-born monkey

on the Fairy Mountain and reported to the god of heaven, Yü Hwang (玉皇). "Ah", said he, "that object far below is the living principle of life in the universe. It is the Mind of Man."

As the Monkey Spirit formed the ordinary habits of monkey life, the golden light in his eyes diminished, but even later when living with other apes he would sit by himself and watch things about him and question the Why and the Where of everything. He had an insatiable curiosity and great ambitions. Before long his mind ruled the herd of monkeys and he was unanimously voted their king. By his wisdom and ability the monkeys fought and became conquerors of various groups of evil spirits and from the king of demons, Sun Wu K'ong learned many tricks of magic. He learned to excell any rapid-change artist, for he could change himself at any time into seventy-two different shapes. Also he could beat any long-jump record, for in a moment he could turn a somersault the length of a mere 35,000 miles.

But in the heart of this Monkey Spirit there was a constant longing and its counter-part, fear. He longed for immortality and feared old age and death. The great cry of the Taoists was ever in his heart, "Ch'ang Seng Puh Lao (長生不老)", long life without old age; immortality. He learned many things, his mind developed and much wisdom came to him, but he abused the powers that were his. After many years of going to and fro in the earth, he returned to the Water-fall Cave and led his monkey subjects forth to further victories. Each new victory increased his self-confidence, and his magic power "went to his head", as we sometimes say. He sought a weapon better suited to one of his high standing and was satisfied with nothing less than the iron rod formerly stuck by the Great Yü (禹王), in the bottom of the ocean to measure the height of the tides. The Dragon King of the Eastern Seas proffered this mighty rod to the Monkey King and it was gladly accepted. He immediately condensed it to the size of a needle which he stuck behind his ear till needed. By the way, the Chinese ocean must have a wonderful collection of curios! Among other things, we hear of a large circular stone that measures the length of dragons. In other words, a standard measure. Whenever there are land slides, or new rapids, or other upheavals of the earth, it is because a dragon is breaking away to get down to the ocean and measure himself. If the tail and head meet around this flat circular stone, the dragon has reached maturity.

Well equipped with magical powers and weapons, the irrepressible Monkey King went the limit in his mammoth escapades. He not only terrorized men and demons on earth, but entered the watery world of dragons, and even blustered around in Hades. He demanded to see the register of the living and dead. When he found his own name, he tore out the pages indicating the length of mortal life for himself and his monkey tribe.

Representatives from the Dragon Kings and from Yen Wang (閻王) of the underworld appeared before Yü Hwang, (sometimes called the Pearly Emperor) demanding redress for the presumptuous actions of Sun Wu K'ong, the Monkey King. The Pearly Emperor wished to give him a chance to mend his ways and so appointed him to a position of service in Heaven. First he was made keeper of the stables and later became guardian of the heavenly peach orchard. The peach, as is well known, is symbolical of long life. The wood of the peach-tree is used to make demon-chasing swords. Taoist priests use it for seals and amulets. Carved peach-stones are used as charms against disease and death. The god of longevity is often pictured as issuing from a peach. Sun Wu K'ong knew all of this, so when no one was around he climbed up into the trees and ate his fill of the heavenly peaches. "Now", said he, "I need never fear death or old age again."

But he was not content for very long in any one place. By subterfuge he secured an invitation to the "Flat Peach Festival" given by Hsi Wang Mu (西王母), Queen of the Western Heavens. These peaches took 3,000 years to bloom, develope and ripen. When they were ripe Hsi Wang Mu always gave a feast to specially invited fairy friends. The word "fairy" (神仙) always includes the idea of some degree of immortality. The Monkey King flew away early to the Queen's realm and by magic caused all the keepers of the wine to sleep. He immediately gorged himself with the wine of immortality and then scampered off to another one of the twenty-seven Buddhist Heavens. There he found the cave of Li Lao Chuin (李老君), the founder of Taoism. In this cave the old man prepared his pills with the elixir of life, but Li Lao Chuin was not at home. The insatiable Monkey King swallowed all the pills he could find. By this time his conscience began to bother him and he hurried away from the heavenly regions, back to his Cave on the Fairy Isle.

There is so much action in these first chapters of the book that one's head whirls with the flights from earth to heaven, from heaven to hell, and back to earth again. We have not time for many of these fascinating stories, but I wish to describe part of a long battle between the gods and Sun Wu K'ong which finally ended in victory for the heavenly powers. I have chosen this incident for two reasons. Firstly, because it is located near Kwanhsien (灌縣) where some of us spend our summers; and secondly, because I have not seen it translated anywhere else.

Complaints were pouring in to the Pearly Emperor (玉皇) and a punitive expedition was sent out with the intent of capturing this abnormally active and presumptuous creature. Hundreds of of lesser spirits, servants of the Pearly Emperor, harassed him at the mouth of his cave. We cannot take time to describe all the battles, but in one day thirty attacks were made and the Monkey King outwitted all his opponents. Many of them also had the

power to transform themselves and one group resembled men 1,000 feet tall with many hands, faces black, and long red hair waving wildly on their heads. But Sun Wu K'ong could out-do them in hideousness and activity, and his weapon was the wonderful rod, changed from a harmless needle to an iron weapon, 1,000 feet long.

At the end of the day as Sun was about to enter his cave, Er Lang (二郎) and the six powerful brothers came with fresh vigor to fight the Monkey King. Instantly he changed into a sparrow and flew up into a tree. Er Lang and his helpers looked everywhere for him and finally guessed he was the sparrow. So one of them changed into the same kind of bird to fight him. But Sun Wu K'ong became a crow and flew higher. The enemy changed and then Sun became a crane, wading in the water. Er Lang and his attendants looked all around in the air, high and low, and then discovered the crane. In a twinkling the crane was missing and a fish was swimming in the water nearby. From fish to watersnake, and from water-snake to Hwa Pao (花鴇), a mythical bird, were swift changes. But the Monkey King decided to leave the world of fish and fowl. Looking around for a new idea, he spied a small temple not far from the riverside.

At once he was absorbed by the temple. His mouth became the gate way, his eyes the windows, his teeth the curtains before the idols, his four legs became the central pillars, but his tail was hard to change. However, being a speedy thinker, he turned it upright and the tail became the lamp-post. When Er Lang and his helpers arrived at the temple hunting for the Monkey King, they did not at once guess his latest transformation. But when they spied the lamp-post at the rear of the building, Er Lang laughed aloud and said, "This is an odd temple with its lamp-post in the rear and not at the front door." Then Sun knew he was discovered and he flew to another hiding-place.

This time no one could find him, so Li T'ien Wang (李天王) was called upon to use his magic mirror. By means of this mirror he could see anywhere on earth, Soon Li reported that Sun Wu K'ong had gone to Kwan-k'eo (灌口), an old name for Kwanhsien. Sure enough this daredevil to a monkey had gone into the temple of Er Lang and had the audacity to enter into the image which was empty during Er Lang's pursuit of Sun Wu K'ong. The smaller idols all bowed to Er Lang's impostor, fresh incense was lighted by the priests and he rested on the idol's platform, enjoying the worship of unsuspecting pilgrims.

Before long the real Er Lang arrived and called in a loud voice, "Have you seen that wretch, Sun Wu K'ong? Li T'ien Wang reports him as being here in my temple." "That is very strange", said one of the lesser idols. "We saw you come in a while ago and did not see you leave. Now you enter again." Er Lang was in a rage at such talk and began quarrelling with the

guardian spirits of the temple. Then Sun's voice called from the image of Er Lang, "Don't quarrel with them. I am here, so this is my temple. Behave yourself." For a moment Er Lang was stunned, then he ran forward and struck the Monkey King. The two fought all the way to the front entrance of the temple.

Er Lang reported back to heaven, where all the gods were in conference, that Sun Wu K'ong was incorrigible and begged them to think of a way to capture the rebel. He was so full of the Elixir of Life (金丹) that he was too vigorous for his opponents. One of the gods had a net much used in the capture of evil spirits and Li Lao Chuin had a diamond that would knock down anyone whom it struck. So between them Sun Wu K'ong was finally caught.

Many more interesting things happened to him before he was brought into the presence of the great Buddha, Ruh Lai Fu (如來佛). Probably we all know the story of the famous trial before Buddha, the Monkey's presumptuous claims and Buddha's method of showing him at last what an inferior creature he really was compared to the great god of all the heavens.

For punishment, and time for reflection and repentance, he was imprisoned under a great mountain and a charm placed on the side. After five hundred years of this kind of subordination, the spirit of Kwan Yin drew near to the mountain and heard the cry of the Monkey King, "Save me and pity me, and I will live a new life." He was promised release if he would no longer attempt to reach heaven by false means, but as the servant of a holy man who was then starting on a pilgrimage to the land of Buddha.

Before long the monk, Hsuen Tsuang, reached the mountain of imprisoment and was astounded in that lonely place to hear a cry like thunder, "O master, my Master! You have come." He broke the charm that held the monkey king bound, and in return for his freedom, Sun Wu K'ong vowed to accompany the monk on his perilous and pious journey into the far west. Unlike the Monkey King of old with his exaggerated superiority complex, this repentant spirit assumed the roll of disciple and servant-companion to the saintly monk. All his former prowess and supernatural powers were thenceforth harnessed to the service of others. Here are a very few illustrations, and more of these you will see pictured in the embroidered and printed scrolls about us.

One day they met a fierce tiger which Sun Wu K'ong slew and the skin was made into a warm garment for the monk. Another time they met six thieves,—Mr. Eye, Mr. Ear, Mr. Nose, Mr. Tongue, Mr. Thought and Mr. Emotion. These in turn tried to prevent the pilgrims from continuing their journey, but Sun Wu Kong worsted them and said to the Master, "If you cannot overcome these, how do you expect to see the great and glorious One.?"

All kinds of temptations were set before them in disguise, appealing to the senses, but it was usually Sun Wu K'ong who found

a way of escape. Many obstacles, prepared by demons, beset their path. These are symbolical of the sins and temptations in the life of one searching for true immortality. At one time they found the lonely road blocked by the Mountain of Fire, Ho Yen Shan (火焰山). Flames leaped out constantly from all its sides as well as from the peak. One could not go near it without fear of death. There was no path around it and the monk was ready to turn back when Sun Wu K'ong gave him hope. He told the other pilgrims to rest while he went off to fight the Demon, Niu Mo Wang (牛魔王) who possessed a magic fan. For a long time the Monkey King fought the cow-headed demon and finally returned with the magic fan in his hand. A few waves of the fan, the fire went out, and a safe path was cleared on one side of the mountain.

There were times when Sun Wu K'ong's spirit of mischief led him to do things of which the monk could not approve. In fact, the saintly man was often vexed by these pranks and beseeched the gods to curb the merciless zeal of the Monkey King. In answer to his prayers, Kwan Yin 觀音 (Goddess of Mercy) prepared an interesting hat for the Monkey King to wear. Sun Wu K'ong was very fond of clothes that made him look like a human being and so he was delighted when the monk presented him with a brand new hat. He never suspected that it was to bring him much suffering. Kwan Yin secretly informed the monk of the real purpose of the hat. She said, "When Sun Wu K'ong becomes obstreperous, silently repeat a charm and the hat will pierce his head, giving him severe pain." In other words the Monkey King knew the pangs of conscience.

Not long ago while looking over books for children at the Commercial Press I found two volumes entitled, "The Jin Sen Fruit" (人參果). They were printed only a few years ago and contain one of the tales from "Travels to the West". It was interesting to see this ancient story among scores of modern story-books. Probably some of you already know this tale, if not, you will find a brief translation in Arthur H. Smith's book "Chinese Proverbs." It relates a visit by the four pilgrims to the Wan Sheo Shan (萬壽山). This temple was noted for the Jin Sen Tree which was planted when the heavens and earth were separated at creation. Like the peach of immortality, the fruit did not ripen under 9,000 years and naturally gave immortality to any one fortunate enough to eat of it. Even a smell of the ripe fruit increased one's life three hundred and sixty years! In this tale we find the second character, Chu Pah Chai (猪八戒) quite active. He was also securing salvation by accompanying the monk Hsüen Tsuang on his pious journey to the west. Chu Pah Chai is supposed to represent the gluttonous side of man's nature, and many a familiar proverb, I am told, has this pig-headed man as its center. I use 'pigheaded' in a literal sense as you can see from the pictures on the scrolls. One of the commonest proverbs in which Chu Pah Chai features is 'Tan Er Wu

Wei' (淡而無味). This refers to the time when he ate one of the Jin Sen fruits stolen by Sun Wu K'ong. His mouth and throat were so large that he swallowed the fruit in one gulp and then asked his comrades what flavor it had. The proverb is used of anything without flavor, such as uninteresting or unintelligible talk.

We haven't time to review the history of this strange character, or to tell more of his part in the happenings of the journey to the west. Neither can we speak at length of that colorless pilgrim, Sha-Ho-Sang. (沙和尚) The last named was actually a Dragon King in disguise doing penance for his sins.

All along the way Kwan Yin hovers near and appears in various forms to help them thru difficult places and to guide them in the right way. She is sometimes called 'the Spirit of God', and is always preparing happy surprises for them, such as a beautiful place to rest when night-time finds them in the wilderness or on a desolate mountain without shelter. One of the finest symbolical experiences on the whole trip is near the close of the journey when the four pilgrims and the white horse come to a terrible river, supposed to be the River of Death, and the Monkey King courageously crosses on the bridge of rotting trees. But he returns to help the monk who is fearful and looks for some other way to cross the raging torrent. A tiny boat appears and the pilot beckons to them. The Monkey King is willing to venture on the frail craft, but the monk still dreads the passage of the cruel current. Sun Wu K'ong and the pilot urge the Master to try the boat as there is no other way to reach the 'Pure Land' (淨土) of Buddha. He finally goes onto the boat in fear and trembling and as he looks at the raging river, he sees a dead body floating by. Sun Wu K'ong remarks, "Yes, Master, that is your old, worn-out body. We have crossed the River of Death and now are free from the fetters of the body." When they reached the farther shore, the pilot and boat disappeared and the four pilgrims went on their way to the Hero Hall where they were presented to "Ruh Lai Fu". In company with holy spirits they knelt in worship and praise before his throne.

After quite a visit in the heavenly regions the monk was presented with 657 copies of sacred writings and the companions returned to their own land and to the emperor Tang T'ai Tsong. Hsüen Tsuang was eventually canonized as "The Buddha of Sweet Incense". Sun Wu K'ong became a lesser Buddha with the title, "The Conquering Buddha", and in any group of the O-Lo-Han his image with a monkey face is seen and a peach is in his hand. Even the White Horse was given a place in the Buddhist pantheon. The book "Travels to the West", closes with an all-inclusive anthem sung by the Buddhas, saints and deities in their joy over the successful life pilgrimage of man, as symbolized by these four pilgrims.

Summary.

I would like to focus our thoughts on one or two ideas that have come with many others during the little study I have done along the line of Chinese Mythology.

1. When in the home-land we are sometimes asked this question,—"Do the Chinese actually worship an unresponsive image, or a spirit supposed to be inside the image?"

I am not trying to answer this question, but from my reading and inquiry, it appears that there is a general belief that the image is the house in which the spirit resides during part of its time on earth. The spirits seem to go back and forth between earth and the heavens. There is no one god in the whole pantheon who is omnipresent, omniscient, or omnipotent. Each is a fragment of a whole system and individual powers vary.

2. There are times when a god or goddess comes down to earth to live the span of a human life. But so far as I have been able to ascertain, such a thing is done as a punishment for some misdeed in the heavenly life of the god or goddess. This is an interesting distinction to know when you are giving the Gospel message to illiterates. In reference to Jesus coming to earth, the Chinese phrase is "Kiang hsia lai" (降下來), or "Kiang Shih" (降世). The same term is used in speaking of some god coming to live in the form of a human being from birth to physical death. With the idea of punishment for the god, it is well to explain that Jesus did not enter human existence as a punishment, but came of His own free will and for the best of motives.

3. As I hinted in the lecture, the Taoist idea of Immortality is not at all the same as the idea of Life Eternal given in the Bible. The former is one of degree, while the latter is without beginning or end.

If we have some idea of the background of belief already filling the minds of an audience, we can better word our message with tact and clarity. We will avoid unnecessary puzzlements or false ideas.

4. While this has not been a scientific lecture, one could mention some interesting comparisons growing out of "The Travels to the West". In this book we have one of the oldest known stories of evolution from ape to man, and no link missing.

Also we find the Taoist cry, "Ch'ang Shen Puh Lao" (Long life without old age) is still the aim of some in foreign countries. Tho science does not produce the pills of immortality, still we read of glandular treatments that bring miraculous results. And I have been wondering whether after all some of the wise men who discovered the charm of the monkey gland may not have heard the tale of the Monkey Spirit, the immortal ancestor of all other monkeys.

MEASUREMENTS OF THE KIATING BIG BUDDHA

L. A. LOVEGREN.

Heights:			Feet (Eng.)
From Base of Footstool to Top of Crown			204
Bottom of Left Big Toe to Seat			55
		Top of Right Knuckle	81.2
		Base of Neck	151.1
		Center Line of Eyes	175.2
		Top of Crown	195.8
Seat to		Base of Neck	96
		Top of Crown	141
Base of Neck to		Center Line of Eyes	24.1
		Top of Crown	44.7
Right Hand Tip of Middle Finger to Top of Knuckle			26.5
Bottom of Nose to		Center Line of Eyes	8.6

Distances:			
Front to Back			
Front of Big Toe (Left)			
		to Crown	129
		Finger Tip in Front of Right Knee	44
		Front of Neck Base	119
		Bridge of Nose between the Eyes	117
Bridge of Nose Between the Eyes			
		to Crown	12

The open right hand of the idol rests on the right knee with the fingers down in front of the knee.

The above measurements were made by triangulation from across the river at a distance of around 1500 feet from the Big Buddha, with a base line of close to 300 feet. The table of heights is not far off, and in the cases which had to be more or less of estimates I have given the heights in even feet only. The base of the footstool is not exactly level, and the height of the seat could not be determined exactly from where I stood. Distances from front to back are not exact for two or three reasons: the angle was not very large so that small errors in the angle would make large errors in distances; neither of the two ends of the base line was directly in front of the idol; some of the points at which I aimed could not be positively identified as exactly the same, as, for instance, the top of the crown was well above me so I had to aim at the middle of an area from each of the two directions instead of at a definite point. The error, however, in this case would not be more than a couple of tenths of a foot at most. The bottom of the toe was 16 ft. above the water level on June 7th, 1933.

Estimates of the height of the Big Buddha run all the way up to "more than 36 djang" (or nearly 400 English feet), which is the height given on a stone tablet near the top of the idol. They seem to have gotten the height just twice what it actually is.

Just a few days ago the Big Buddha "lost face" literally. Within the last couple of years the face was resurfaced with Portland cement mortar. The portion of the face below and to the right of the right end of the mouth has come off, as the part added in the resurfacing had not adhered very well to previous surface there.

A PRELIMINARY SURVEY OF THE LIZARDS OF SOUTH-WESTERN SZECHWAN*

By

K.H. Pen and W.C. Ho†

CONTENTS:

---

*Thesis submitted by Miss K. H. Pen to the West China Union University in partial fulfillment of the requirements for the degree of Bachelor of Science.

†Curator, Division of Natural History, West China Union University Museum.

INTRODUCTION

This is a preliminary study of the lizards collected by the Department of Biology and some other staff members of the West China Union University from various localities of the south western part of Szechwan. About seventy specimens are dealt with in this paper, among which are two that are probably new to science. One is a variety of Eumeces chinensis Gray and the other a species under the genus Sphenomorphus. Because of the lack of sufficient reference material and specimens for comparision, the writers have not given names to the specimens which may be new to science.

Since this province has large areas which are isolated by streams and high mountains, and thick forests in the south western part, it naturally possesses a rich and interesting fauna of reptiles. It is probable that many more new forms may be found if a comprehensive and thorough collection is made, especially in the south western region.

MATERIAL AND METHODS

1. Material.

The specimens treated in this paper are about seventy in number and may be listed systematically in four families, five genera, seven species and one variety.

Family	*Species*	*Variety*	*Specimens*
Gekkonidae	Gekko sulpalmatus		16
Agamidae	Japalcura splendida		28
		flaviceps	2
Lacertidae	Takydromus intermedius		1
Scincidae	Eumeces chinensis Gray	var. nov.	1
		tunganus	1
	Sphenomorphus		19
		indicus sp. nov.	2

2. Methods:

A. Time for collecting.

The time for collecting lizards in this province is from March to October. In mid-Spring, the lizards pass from their dormant condition and become active because of the warm weather and the abundant plant and insect life. At this time, many of them are easily caught with the hands. In Summer, they are very active, and it is quite impossible to catch them with the hands and various means of capturing them are necessary. In late Autumn, they tend to start hibernating and gradually become sluggish while moving about or feeding, so they are again easily caught at this time.

B. Methods for securing the specimens.

A great many kinds of lizards may be caught easily with the hands, but others must be caught by some of the following methods:

(A) Shooting is the most effective means of securing most of the large and quick moving lizards.

(B) Catching with forceps.—The larger species of lizards may tear the skin or muscles of the hands. Forceps will be found to be very useful.

(C) A noose of wire, string, or horse-hair, is sometimes used for obtaining specimens alive. Many lizards may be caught in this manner.

(D) Burrowing species may be turned up by the plow or driven out by throwing hot water or waste formalin on the ground.

(E) Night collecting with a flash light is very effective. Many of the nocturnal lizards may be discovered and captured in this way. The methods we most commonly use in this province are:

(F) Beating the lizard with a long branch of bamboo or of some other tree, until it becomes motionless, then catching it with the hands.

(G) It is our experience that an ordinary insect-net with a long handle can be very successfully used for catching these specimens.

C. Methods for preserving the specimens.

The specimens should be put into preservative soon after they have been killed.

Preservatives:

a. Alcohol.—The strength of the alcohol used must be adapted to the kind of specimens to be preserved. Alcohol of about 80 to 90 per cent may be used for most lizards. The Gekkos are usually preserved in alcohol of about 65 to 75 per cent.

b. Formalin.—Formalin is also commonly used for preserving lizards, but it has the disadvantage of turning the specimens black or a dull leaden gray. The strength we commonly use is about 5 per cent formalin and 95 per cent water.

GEOGRAPHICAL DISTRIBUTION

1. Number of Specimens Taken in Each Locality.

Locality	*Number of specimens*	*Forms*
成都 Chengtu	21	2
灌縣 Kwanhsien	3	1

古寺
Ku-Sze (near Chin-Chen)..... 2

汶川
Wenchwan..... 12 2

金川
Chin-Chwan River (Dan-Ba).... 8 2

湔河
Tung River (Tatsienlu)... ..... 1 1

雅州
Yachow 1 1

峨眉山
Mount Omei..... 7 2

馬邊
Ma-Pien 8 1

敘府
Suifu..... 4 1

2. New Forms and Type-Localities.

New from	*Type-Locality*
Eumeces chinensis Gray var.nov.	Chin-Chwan River.
Sphenomorphus sp. nov.	Mount Omei

3. Geographical Distribution of the Different Forms.

From	*Distribution*	*Specimens*
Gekko sulpalmatus	Chengtu	12
	Suifu	4
Japaleura splendida	Wenchwan	10
	Ma-Pien	8
	Chin-Chwan River	7
	Chin-Chen Shan	3
flaviceps	Wenchwan	2
Takydromus intermedius	Yachow	1
Eumeces chinensis Gray var. nov	Chin-Chwan River	1
tunganus	Tung River	1
Sphenomorphus indicus	Mount Omei	5
	Kwanhsien	3
	Ku-Sze	2
	Chengtu	9
sp. nov	Mount Omei	2

EXTERNAL CHARACTERS

The external characters mentioned in this paper for classifying the families, genera and species may be briefly stated as follows:

I. THE HEAD.

(1) The Covering of the Head.

A. Shields.

(A) Upper head.

a. Rostral; b. Nasal;
c. Supranasal; d. Postnasal;
e. Frontonasal; f. Prefrontal;
g. Frontal; h. Supraocular;
i. Loreal; j. Frontoparietal;
k. Interparietal; l. Parietal;
m. Supralabial; n. Nuchal;
o. Temporal;

(B) Underside of head.

a. Mental; b. Postmental;
c. Lower labial.

B. Granules.

(2) Nostril.

(3) Eye.

A. Eyelid.
(A) Scaly. (B) Not scaly.

B. Pupil.
(A) Vertical. (B) Round.

(4) Ear-Opening.

A. Hidden.

B. Distinct.

(A) Tympanum.
a. Distinct. b. Sunk.

(B) Lobule

II. Body Proper.

(1) Scale.

A. Form.
(a) Cycloid; (b) Squarish; (c) Granular.

B. Structure.
(a) Keeled; (b) Smooth; (c) Granular;
(d) Tubercular.

C. Arrangement.
(a) Imbricate; (b) Series.

D. Dorsal crest.

(2) Appendages—Legs.

A. Digits.

(A) Form.
a. Dilated; b. Compressed.

(B) Covering.
a. Lamellate; b. Granular.

(C) Webbed or free.

(D) Claws.

B. Sole.
(A) Scaly

(B) Granular.
a. Uniform; b. Mixed with tubercles.

C. Femoral pore.

(3) Preanal Pore.

(4) Preanal Plate.

(5) Color.

A. Uniform.

B. Mixed with spots or stripes.

III. Tail.

(1) Tubercle.

A. Location—on the lateral sides of the base of the tail.

B. Present or absent.

C. Number.
(a) One on each side; (b) Two on each side;
(c) Three on each side.

TAXONOMY.

1. KEY TO THE SPECIES.

(1) Synopsis.

Class Reptilia.
Order Squamata.
Suborder Sauria.
Family Gekkonidae.
Genus Gekko.
Species sulpalmatus Gunther.
Family Agamidae.
Genus Japaleura.
Species splendida Barbour and Dunn.
flaviceps Barbour and Dunn.
Family Lacertidae.
Genus Takydromus.
Species intermedius Stejneger.
Family Scincidae
Genus Eumeces
Species chinensis Gray var. nov.
tunganus Stejneger.
Genus Sphenomorphus.
Species indicus Gray.
sp. nov.

(2) Keys and Descriptions of Species.

Key to the families.

A. With Large Symmetrical Shields on Top of Head.

(A) Ventral scales cycloid ..... *Scincidae*

(B) Ventral scales squarish, in longitudinal and transverse series..... *Lacertidae*

B. No Large Symmetrical Shields on Top of Head.

(A) Digits dilated ..... *Gekkonidae*

(B) Digits compressed..... *Agamidae*

FAMILY GEKKONIDAE.

Body more or less compressed; tongue moderately elongated, smooth or papillose; teeth small, numerous; eye usually large, frequently with vertical pupil, covered by transparent lid; ear

distinct; scales soft, granular or tubercular on the dorsal surface, usually roundish or hexagonal and imbricate on the ventral; limbs well developed, digits often dilated; femoral or preanal pores frequently present, but only in the males.

Genus Gekko Laurenti.

Body covered with small granular or tubercular scales; belly with imbricated scales; digits dilated, free or webbed at base, with undivided lamellae below, all but thumb with claws; pupil vertical.

Gekko sulpalmatus Gunther.

Plate II.

Gekko sulpalmatus Gunther, 1864, Rept. India, P. 104, pl. 12, fig. B, (type-locality, Chikiang, China; type in Brit. Mus.; Robert Fortune, collector.

Sixteen specimens are referable to this species: four from Suifu and twelve collected from the vicinity of Chengtu.

Description.—Body depressed; head moderate, somewhat triangular; rostral squarish, about twice as wide as high; eye pupil vertical; diameter of the eye about one half the distance between the eye and tip of snout; distance between nostril and eye equals distance between eye and ear-opening; ear opening small, oval; head covered with granules, those on the snout considerably larger; supralabials eleven; lower labials nine; mental pentagonal, scarcely larger than the adjacent lower labials; behind mental, a pair of median, somewhat elongated chin-shields, on either side of which another similar shield of about the same size; behind these several polygonal smaller shields; no tubercles on the back; ventral surface of body and limbs covered with imbricate scales except on the throat and anterior portion of neck, which are covered with granules of the size of those on the back; fingers distinctly webbed at the base as well as the toes; ten preanal pores; a single large tubercle on each side of the base of the tail; tail subcylindrical, fragile; color gray above, whitish below.

Dimensions

Total length	119 mm.
Head length	15 mm.
Head width	12 mm.
Tail length	61 mm.

Variation.—The greatest amount of individual variation is seen in the number of supralabials, number of preanal pores and the color on the dorsal surface. In most specimens the dorsal color is gray, while in others it is yellowish gray washed with black. The number of supralabials varies from ten to eleven and the number of preanal pores from nine to eleven.

Habitat.—This species is widely distributed from the west to the south of Szechwan as indicated by the collections of Fortune from Chikiang, Graham from Suifu and the specimens the writers studied from Suifu and Chengtu.

Family Agamidae

Teeth present; tongue thick; pupil round; eyelids well developed; tympanum exposed or concealed under the skin; no large symmetrical plates on head or abdomen; crests, gular pouches frequently present; digits usually keeled inferiorly or denticulated laterally; femoral and preanal pores usually absent.

Genus Japaleura Gray

Tympanum hidden; dorsal scales hererogeneous; a dorsal crest; gular pouch small or absent; an oblique fold in front of the shoulder; gular fold present or absent; tail feebly compressed; no preanal or femoral pores.

Key to the Species

A. With a pair of distinct dorsolateral rows of keeled scales - - - - - - - - *flaviceps Barbour and Dunn.*

B. Without a pair of distinct dorsolateral rows of keeled scales - - - - - - - - *splendida Barbour and Dunn*

Japaleura splendida Barbour and Dunn.

Plate III.

Japaleura swinhoii Swinhoe, Proc. Zoo; Soc. London, 1870, p. 411 (Chungkingfu, Szechwan)

Japaleura yunnanensis Boulenger, Cat Eiz. Brit. Mus., Vol. I, p. 310. 1855 (Szechwan).

Japaleura splendida Barbour and Dunn, Proc. New England

Description.—Body compressed; upper head scales rugose or many-keeled; rostral low, separated from nasal by one scale; nostril round, prominent, in a single somewhat swollen nasal; supralabials eight or nine; lower labials eight to ten; back covered by imbricated keeled scales of different size; dorsal crest, a serrated ridge being continuous to the base of the tail; ventral scales rather uniform, strong-keeled; digits pentadactyl, all with claws; third and fourth finger nearly equal; fourth toe the longest; tail more than twice as long as the head and the body

Color dark-brown above with transverse dark dorsal markings included between striking broad light dorsolateral bands; tail with alternating dark bands.

Dimensions

Total length	237-280 mm.
Head length	19—22 mm.
Head width	14—17 mm.
Tail length	165-193 mm.

Habitat.—Twenty-eight specimens of this species were studied: ten from Wenchwan, eight from Ma-Pien, even from Chin-Chwan River, and three from Chin-Chen Shan. These lizards are fairly abundant in the sandy spots of the Chin-Chwan River banks and are also commonly found at high altitudes in the south western part of this province.

Japaleura flaviceps Barbour and Dunn

Plate IV.

Japaleura yunnanensis Gunther, Am Mus. Zool. Acad, St. Sci Petersbourg. Vol. 1, p. 203, 1896 (River T'ung, Szechwan).

Japaleura flaviceps Barbour and Dunn, Proc. New Eng. Zool. Club, Vol. 7, Oct. 10, 1919, p. 16 (type-locality, shores of T'ung River, Western Szechwan).

Description.—This species agrees so closely with the preceeding one that a detailed description is unnecessary. The differences consist chiefly of a pair of distinct dorsolateral rows of keeled scales and rugose scales on the upper head, and also a smaller size, and less dorsal markings than the J. splendida.

Dimensions

Total length	173 mm.
Head length	15 mm.
Head width	11 mm.
Tail length	112 mm.

Habitat.—Two specimens of this species were collected from

Family Lacertidae.

Head with symmetrical shields; pupil round; eyelids well developed; ear distinct; tongue flat, elongated, bifid in front and behind; dorsal scales juxtaposed or imbricate, usually smaller than the ventrals; limbs well developed; femoral pores usually distinct; tail long, fragile.

Genus Takydromus.

Head shields normal; nostril pierced between two nasals and the first labial; lower eyelid scaly; collar more or less distinct; back covered with large, rhomboidal, keeled shields forming longitudinal series; flanks granular; ventral shields rhomboidal, imbricate, all or part keeled; digits subcylindrical; with smooth, tubercular subdigital lamellae, the distal lamellae much enlarged; inguinal pores present; no femoral pores; tail extremely long, cylindrical.

Takydromus intermedius Steineger

Plate IV.

Takydromus intermedius Stejneger, Occ. Pap. Boston Soc. Nat. Hist., Vol. 5, July 21, 1924, p. 129 (type-locality, Shin-Kai-Si, Mount Omei, near Kiating, Szechwan, China; Rev. D. C. Graham, collector).

Description.—Head about twice as long as broad; rostral separated from internasal by anterior nasals; posterior loreal much longer than anterior; first supraocular very small, mostly indicated by a minute granule; second and third large; fourth also very small, smaller than occipital; internasal as long as prefrontals which are about two-thirds the length of the frontal; frontal hexagonal, with a median ridge, and much wider anteriorly than posteriorly; frontoparietals in contact with third large supraocular but separated from fourth by a granule; parietals large, considerably larger than frontal; temporals small, almost granular; ear-opening large, round; tympanum prominent; eight dorsal rows of keeled scales; gulars granular; six rows of ventral plates, all smooth except outer row which is slightly narrower, keeled and pointed; tail three times as head and body together with strongly keeled and pointed scales which are about as long as the large scales.

Color dark olive gray above, bluish gray below except the

Dimensions

Total length	199 mm.
Head length	12 mm.
Head width	6 mm.
Tail length	150 mm.

Habitat.—The specimen which the writers studied was collected near Yachow. It seems that the distribution of this species is confined to the south western part of this province.

Family Scincidae

Head with symmetrical shields; pupil round; eyelids well developed; tongue flat, bifid behind, nicked in front; body protected by bony plates underlying the scales which are cycloid-hexagonal, rhomboidal, imbricate, arranged quincuncially; limbs more or less developed, or absent; no femoral pores; tail usually long, fragile.

Key to the Genera

A.	*Supranasals present*	*Eumeces*
B.	*Supranasals absent*	*Sphenomorphus*

Genus Eumeces Wiegmann

Body more or less cylindrical; head moderate; eyelids well developed, scaly; tympanum distinct, deeply sunk; tongue scaly and feebly nicked at the tip; nostril pierced in the nasal; supranasals present; prefrontals, frontoparietals and interparietal distinct; limbs well developed, pentadactyl; digits subcylindrical or compressed.

Key to the Species

A. *Color above pale-gray with striking longitudinal brownish black stripes down the back* - - *chinensis Gray var. n.*

B. *Color above metallic blue with in distinct longitudinal dark brown stripes down the back* *quinquelineatus Steineger*

EUMECES CHINENSIS GRAY, VAR. NOV.

Plate I.

Diagnosis.—A postnasal; first supralabial not in contact with supranasal, but nasal and postuasal; frontoparietals smaller than interparietal; posterior loreal pentagonal, larger than anterior loreal.

Type-locality.—Chin-Chwan River, Dan-Ba, Western Szechwan.

Type.—Natural History Museum, West China Union University, Chengtu, Szechwan, China. No. 31; Mr. Y. H. Pen, collector.

Description.—rostral broadly in contact with supranasals; nostril large, in the center of a single nasal which is nearly triangular; a postnasal; first supralabial in contact with nasal and postnasal; frontonasal hexagonal, somewhat broader than long; prefrontals smaller than frontonasal in contact with anterior supraocular, anterior and posterior loreal; anterior loreal nearly twice as high as wide, squarish, in contact with second and third supralabials, posterior loreal longer than anterior, pentagonal, in contact with third and fourth supralabials; frontal larger than parietals, anteriorly somewhat wider than behind, in contact with anterior three supraoculars; first being very small, second the largest; third very narrow; ear-opening elletical, bordered by two small lobules; tympanum sunk; mental large, followed by two unpaired postmentals, the anterior narrow, the posterior larger, pentagonal; seven supralabials, seventh much larger than the preceeding ones; seven lower labials, seventh very narrow; a pair of large preanal plates; sole of hind foot granular, with two series of enlarged tubercules; tail with a median series of transverse plates underneath.

Color pale-gray above, with striking longitudinal brownish black stripes down the back; underside of head, legs and tail white; ventral white washed with blue.

Dimensions

Total length - - - - -	145 mm.
Head length - - - - -	15 mm.
Head width - - - - -	11 mm.
Tail length - - - - -	78 mm.

Remarks.—This skink is closely related to E. chinensis in its general features and the color pattern on the back, but it differs so much in the size and arrangement of the shields on upper head and in the presence of a postnasal that these may be more then sufficient to separate it as a new variety of E. chinensis.

Eumeces tunganus Stejneger

Plate V.

Eumeces xanthi Gunther, Am. Mus. Zool. St. Petersbourg. Vol. I, p. 203 (Lifangfu and Valley of T'ung River, Szechwan).

Eumeces tunganus Stejneger, Journ. Washing. Acad. Sci. Vol. 14, Oct. 4. 1924, p. 384 (type-locality, Luting Kiao, where road to Tatsienlu crossing T'ung River, W. China; Rev. D. C. Graham, collector.)

Description.—Supranasals broadly in contact behind rostral; nostril in the center of a single nasal; a postnasal; first supralabial in contact with nasal and postnasal; frontonasal broader than long, in contact anteriorly with supranasals and posteriorly with prefrontals; prefrontals a little smaller than frontonasal, in contact with anterior supraocular, first and second loreals; frontal larger than parietals, anteriorly somewhat wider than behind; four supraoculars: first smallest, second larger, third narrow; frontoparietals smaller than interparietal; an unpaired small shield behind left parietal; ear-opening elliptical; tympanum sunk; mental small, followed by two unpaired postmentals, first narrow, second large, pentagonal; seven supralabials; seven lower labials; a pair of large preanal plates; sole of hind foot granular, with two series of enlarged tubercles; tail with a median series of transverse plates underneath.

Color: upper head brownish gray, underside whitish; upper back metallic blue, with longitudinal dark brown stripes, underside whitish mixed with blue spots; tail brown above, yellowish below.

Dimensions

Total length - - - - -	132 mm.
Head length - - - - -	12 mm.
Head width - - - - -	8 mm.
Tail length - - - - -	78 mm.

Habitat.—This lizard was obtained at a place not far away from the T'ung River, the same locality in which the Russian explorer G. Potanin and Dr. D. C. Graham formerly collected specimens of this same species.

Genus Sphenomorphus Fitzinger.

Body moderate; head short; lower eyelids scaly; tympanum distinct and sunk; nostril pierced in the nasal; no supranasals; frontoparietal single or divided; limbs well developed, pentadactyl.

KEY TO THE SPECIES.

A. Frontal in contact with frontonasal...indicus Gray

B. Frontal not in contact with frontonasal...sp. nov.

SPHENOMORPHUS INDICUS GRAY.

Plate VI.

Hinulia indica Gray, Ann. Mag. Nat. Hist. (2), XII, Dec., 1853, p. 388 (type-locality, Sikkin, Himalayas; Sir J. Hooker, collector).

Lygosoma (Liolepisma) laterale var. reevesi Boettger, Ber. Senckenberg. Naturf. Ges., 1894, p. 145 (Dalanshan).

Sphenomorphus indicus Van Denburgh, Proc. Calif. Acad Sci. ser. Vol. 3, Dec. 1912, p. 230 (Huchow, Chekiang).

Description.—Rostral large, broadly in contact with frontonasal; frontonasal broader than long, in contact with anterior loreal, prefrontals and frontal; frontal long, much wider anteriorly than posterior; in contact with first, second and third supraoculars; frontoparietals distinct, in contact with third and fourth supraoculars; interparietal large; parietals short, slightly in contact behind interparietal; nostril in a single nasal; seven supralabials; lower eyelids scaly; earopening distinct, elliptical; mental large, followed by one azygous postmental; four preanal plates, median pair largest; soles nearly uniformly granular; tail with a median series of large transverse median plates underneath.

Color above pale olive brown, with small blackish spots arranged in a median series and a broad lateral row on each side; underside whitish; tail darker above, with pale brownish spots in continuation of the dorsal and lateral bands; legs above olive brownwith rounded pale spots.

Dimensions

Total length	157 mm.
Head length	13 mm.
Head width	9 mm.
Tail length	88 mm.

Habitat.—This lizard is commonly found on the Chengtu plain and has a wide distribution in the southern and western parts of this province as indicated by the collections. The writers studied five from Mount Omei, three from Kwanhsien, two from Ku-Sze near Chin-Chen Shan and nine from the vicinity of Chengtu.

SPHENOMORPHUS SP. NOV.

Plate VII.

Diagnosis.—Allied to Sphenomorphus indicus, from which it may be distinguished by its frontonasal not being in contact with the frontal, the parietals more in contect behind the interparietal, and the prefrontals in close contact behind the frontonasal.

Type-locality.—Mount Omei, Szechwan.

Type.—Natural History Museum, West China Union University, Chengtu, Szechwan; No. 18, 23.

Description of the type.—Rostral large, broadly in contact with frontonasal; frontonasal much wider than long, in contact with anterior loreal and prefrontals; prefrontals closely in contact behind frontonasal; frontal long, much wider anteriorly than posteriorly, in contact with first, second and third supraoculars but not frontonasal; frontoparietals larger than interparietal; parietals short, closely in contact behind interparietal; nostril in a single nasal; ear-opening large, oval; mental large, followed by one azygous postmental; a pair of large preanal plates; soles uniformely granular; tail very fragile.

Color; above darker olive brown, with a broad lateral band of blackish spots one on each side; underside whitish.

Remarks.—There are four known species found in China, namely S. Boulengeri, S. Formosensis, S. indicus and S. leveritti under the genus Sphenomorphus, all of which have the frontal in contact with the frontonasal. It is for this reason that the writers separates this as a different species from S. indicus and as new to science.

The authors wish to record their sincere thanks to Prof. M. C. Chang, the head of the Department of Biology, for his permission to use the material described in this paper.

BIBLIOGRAPHY

Barbour, T. and Dunn, E. R.
1919 Two New Chinense Japaleuras.
Proc. New Eng. Zool. Club., Vol. 7, 15 19.

Boulenger, G. A.
1890 Reptilia and Batrachia, The Fauna of Brit. India.

Fan, T. H.
1931 Preliminary Report of Reptiles from Yaoshan, Kwangsi, China.
Bull. Dept. Biol. Col. Sci. Sun Yat-sen Univ. No. II.

Gee, N. Gist
1930 A Contribution toward A Preliminary List of Reptiles

Ho, W. C.
1930 A Preliminary Study of Herpetology of China (in manuscript).

Mell, R.
1929 The Distribution of Chinese Reptiles in Relation to Zooleographical Boundaries.
Lingnan Sci. Journ. Vol. 6, 221-258.

Pope. C. H.
1929 Notes on Reptiles from Fukien and other Chinese Provinces.
Bull. Amer. Mus. Nat. Hist, Vol. 58, Art VIII, 335-487.

Schmidt. K. P.
1925 New Chinese Amphibians and Reptiles.
Amer. Mus. Nat. Hist. Novitates, No. 175. 1-3.
1927 The Reptiles of Hainan.
Bull. Amer. Mus. Nat. Hist. LIV, 395-465,
1927 Notes on Chinese Reptiles.
Bull. Amer. Mus. Nat. Hist. LIV, 467-551,

Slevin, J. R.
1925 Contributions to Orietal Herpetology.
II. Korea or Chosen.
Proc. Cal. Acad. Sci. Vol. 14, (5) 89-100.
III. Russian Asia and Manchuria.
Proc. Cal. Acad. Sci. Vol. 14, (5) 100-103.

Stejneger, L.
1907 The Herpetology of Japan and Adjacent Territory.
Bull. U. S. Nat. Hist. Mus. No. 58.
1924 A New Chinese Lizard of genus Eumeces.
Journ. Washing. Acad. Sci. Vol. 14, No. 16, 383-384.
1925 Description of a New Scincid Lizard and a New Burrowing Frog from China.
Journ. Washing. Acad. Sci. XV, 150-152.
1925 Chinese Amphibians and Reptiles in the United States National Museum.
Proc. U. S. Nat. Mus. LXVI, Art. 25, 1-115.
1932 The Chinese Lizards of the Genus Gekko.
Proc. U. S. Nat. Mus. Vol. 82, Art. 3, 1-8.

Sun, T. P.
1926 Notes on the Lizards of Nanking.
Contrib. Biol. Lab. Sci. Soc. China, Vol. 2, No. 2.

Tchang, T. L.
1931 Notes on Some Chinese Lizards.
Bull. Fan Memor. Inst. Biol. Vol. 2, No. 14.

Van Denburgh, J.
1909 New and Previously Unrecorded Species of Reptiles and Amphibians from the Island of Formosa.
Proc. Cal. Acad. Sci. III, 49-56.

PLATE I.

Eumeces chinensis Gray var. nov.

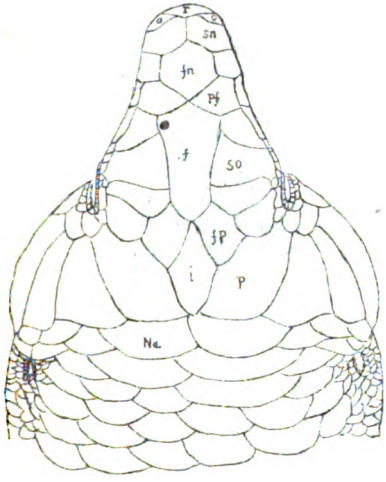
Fig. 1. Dorsal view of the head.

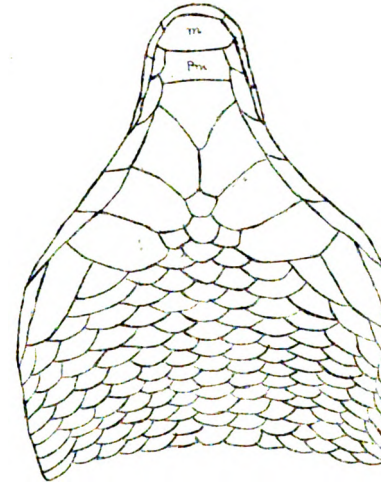
Fig. 2. Ventral view of the head.

Fig. 3. Lateral view of the head.

(4x nat. size)

Plate I.





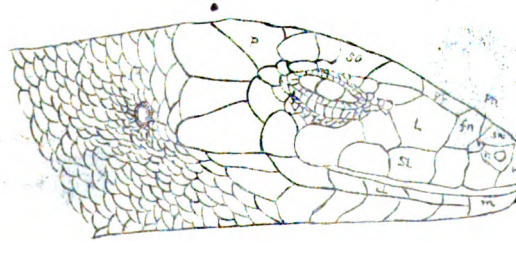
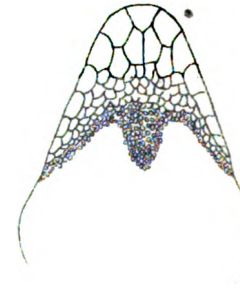


Plate. II.



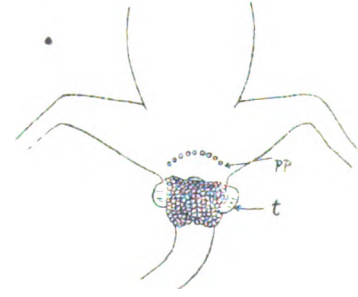


PLATE II.

Gekko sulpalmatus Gunther

Fig. 1. Dorsal view of the head.

Fig. 2. Ventral view of the head.

Fig. 3. Lateral view of the head.

Fig. 4. Ventral view of the body and tail showing the preanal pores and the tubercular scales.

(2x nat. size)

PLATE III.

Japaleura splendida Barbour and Dunn

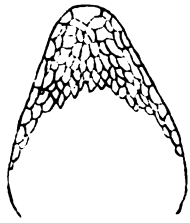
Fig. 1. Dorsal view of the head.

Fig. 2. Ventral view of the head.

Fig. 3. Lateral view of the head.

(1½x nat size)

Plate III.



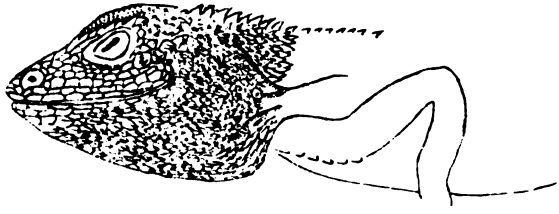
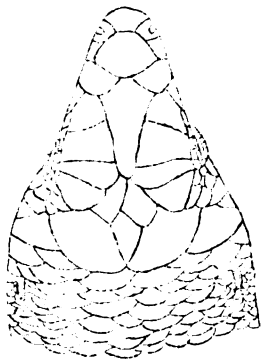


Plate VI.



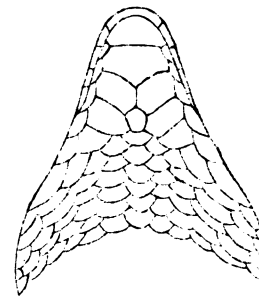


PLATE VI.

Sphenomorphus indicus Gray

Fig. 1. Dorsal view of the head.

Fig. 2. Ventral view of the head.

Fig. 3. Lateral view of the head.

(3x nat. size)

PLATE V.

Eumeces tunganue Stejneger

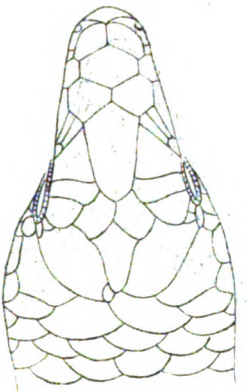
Fig. 1. Dorsal view of the head.

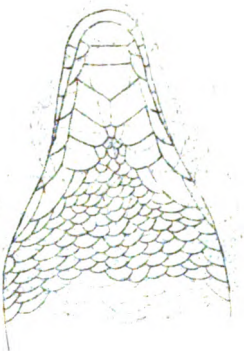
Fig. 2. Ventral view of the head.

Fig. 3. Lateral view of the head.

(4x nat. size)

Plate V





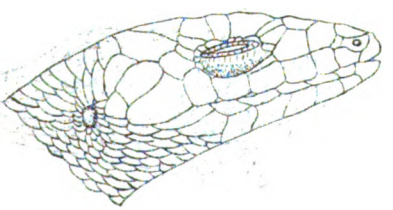


PLATE VII.

Sphenomorphus Sp. nov.

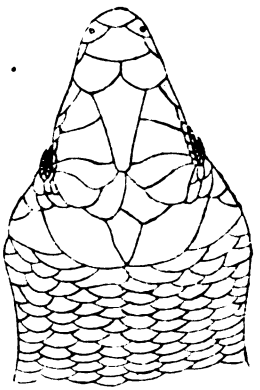
Fig. 1. Dorsal view of the head.

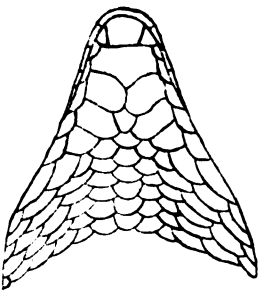
Fig. 2. Ventral view of the head.

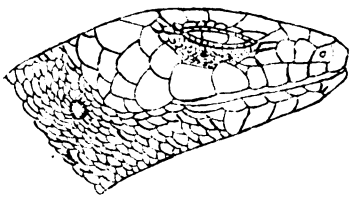
Fig. 3. Lateral view of the head.

(4x nat. size)

Plate. VII.







ABBREVIATIONS USED ON PLATES

dc	dorsal crest.
fn	frontonasal.
fp	frontoparietal.
i	interparietal.
l	loreal.
ll	lowerlabial.
m	mental.
n	nasal.
nc	nuchal.
p	parietal.
pf	prefrontal.
pm	postmental.
pn	postnasal.
pp	preanal pore.
r	rostral.
sl	supralabial.
sn	supranasal.
so	supraocular.
f	tubercle (tubercular scale).
t	frontal.

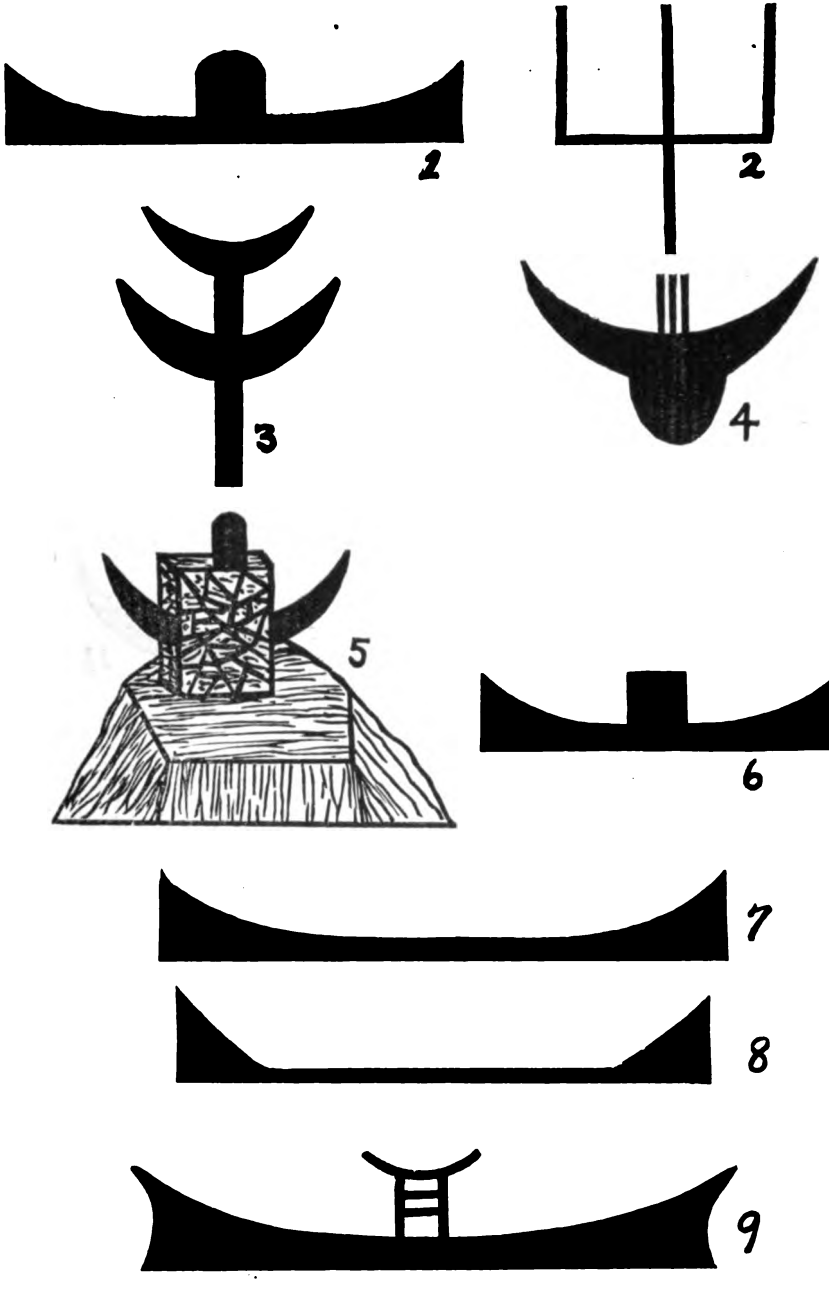
THE ORIGIN OF THE CHINESE ROOF: A THEORY.

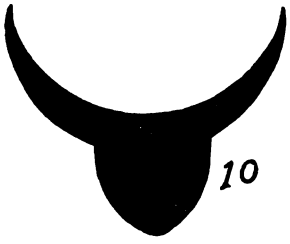
J. H. EDGAR.

The curves in the Chinese roof decorations have puzzled inquisitive minds for ages and architects have told us that in every case the explanations offered are unsatisfactory. So in stating shortly this new theory as to the meaning behind the mystery no claim is made of having reached finality.

For some years we have been convinced that the architecture of the Tibetans and frontier people is a survival from proto-historic Chinese norms. Hence much that is now obscure in temples, shrines, and buildings, if studied in conjunction with their frontier counterparts, may be connected by easy gradation with simple beliefs of a hoary past. A traveller in the non-Chinese regions of West Szechwan is soon struck with the frequency of horns, actual or conventionalized, as charms and talismans. This custom we assume, was common at one time to all peoples. "Calves" of Gold troubled the Hebrews, and horns were associated with their altars. (Ex. 27:2) Then in Greece, Egypt, Babylon, and Persia horns had their place either as talismans, or were closely associated with worship and sacrifice. In some cases this may be explained by the fact that the bull symbolized virility, an idea which is often expressed pictorially on the walls of Tibetan temples. But the Moon God in the Near East was represented by the horns of a heifer, and Ahura Mazda, as the vault of Heaven, accepted the heads of steers with horns as a sacrifice. Moreover, even today horns have an important place in Madeiran superstition. (Journal R.A.I. Vol. LV, 1925).

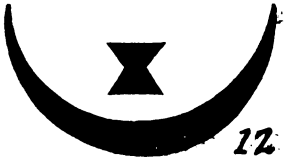
In the non-Chinese regions visited by us, horns are to be seen protruding from the sides of certain Ch'iang shrines, and also from the houses of Tibetans in Mi Nyag. The heads of yaks with horns, worked into the masonry with quartz fragments, are, also, very common; and the same conventionalized in whitewash, often surround the window openings. Again, we have seen the head and branching horns of a steer reposing on an altar platform in front of the local god; and in other regions bleached skulls are sometimes found on mani ramparts. The first step away from certainty is the crescent which is plainly shown as the horns without the head; and here, as in other lands, seems to have been connected with a Moon God. But the chief point of interest just now is the simple line of development from the horn decked head


1
2
3
4
5
6
7
8
9



10

11



12

13

to the crescent, which in turn plainly indicates the New Moon. But there are other designs such as Fig. 1 which puzzled us for years. One day, however, the peculiar head shown in Fig. 4 was discovered; then Figs. 2 and 3; and the conclusion could not be avoided that the Trident, an emblem of authority and power, and at times, conventionalized as an ornament, could be traced back to the same primitive reverence for the Head and Horns of a matured member of the Bos family. So far, then, beginning with a phase of zoolatry, we come to the crescent with a Moon God significance, and, finally, end with the trident, now an emblem of civil and priestly power, but possibly in prehistoric days a symbol of both sun and moon. Although in each case the links with the past are unsuspected, locally they all continue to retain an influence over Ch'iang, Kia Rung and Chinese either as talismans or ornaments of an unknown use or origin. The explanation in the case of the Non-Chinese is simple, and we suggest that the horns, crescents, and tridents will solve the problem of the mysterious curves on the roofs of our adopted lands. Let us assume, then, that the horns and their later modifications were at first confined to temples and shrines; what would be more natural than for them to be transferred gradually to the homes of men? The proofs of this suggestion can hardly be ignored. Designs developed from the head and horns (Fig. 10) of members of the Bos family are everywhere. They are seen as crescents Fig. 11 on walls where the top extends almost as a straight line before turning up at the ends. (Fig. 7). They exist as ornaments in whitewash at the bases of Kin Ch'wan Castles; Fig. 7 and on the roofs of the same structures as triangular corners where straight lines replace the curves as in Figs. 8 and 2. The Trident is also common. The Ch'iang horned shrine Fig. 5 is evidently the earliest phase, and in Mi Nyag, Fig. 6, where the Sun and the Moon seem to be associated is a more developed form. Fig. 1 is almost similar, and if an incense stove or stone is put in the centre of Fig. 8 the same effect is produced. We find, finally, less ambiguous forms in Figs. 2 and 3, which were talismans on the upper Hsiao Kin Ch'wan.—

An examination of Chinese buildings will give us the more advanced conventionalized crescents and tridents but with little to guide us as to their ancestry. (a) On the ridges of almost all houses we have the counterpart of Fig. 7; and (b) it is almost certain the curved corners are the same figure interrupted by the roof mass and more highly ornamented. The trident, also, is retained. The ridge type referred to above is often ornamented with a central spire or some simpler eminence which is probably the middle prong of the trident. But Fig. 9, the roof ridge of a house in the city, is even more complex, for here we have the usual crescent with the "head and horns" design acting as a central trident prong.

So in conclusion we consider the mysterious roof principle under discussion is to be explained by proto-historic talismans surviving now as ornamental, and perhaps useful, details in Chinese architecture. The evolution we suggest would be along the following lines: (a) An emblem of Divine authority in temples and shrines becomes (b) a talisman guarding human dwellings, and (c) after being conventionalized by various peoples was retained for convenience and luck. Then, (d) finally, after its original meaning was entirely forgotten, owing to superstitions developments, it became highly appreciated as a useful and artistic design. As a last word it may be pointed out that the horse shoe is considered by us as a harbinger of luck and prosperity. Is it an inverted crescent or earlier set of horns? If so it would be another proof of the unity of human ideas and an amusing comment on the persistency of hoary superstitions.

Note: The necessity of certain adaptations when the gabled roof changed from the flat one will readily suggest itself to readers of my article.

J.H.E.

SPIRITS AND MAGIC IN CHINESE RELIGION.

A. J. Brace

Edwin W. Smith of Africa, missionary, says: "Social anthropology might almost be claimed as a missionary science first, on account of its great utility to missionaries, and, second because the material upon which it has been built has so largely been gathered by them". Social anthropology deals with people. Sir James Frazer distinguishes it from sociology, which is the study of human society in the most comprehensive sense. Social anthropology is restricted to one particular area of that larger field of knowledge. Frazer calls it "that inquiry which seeks to ascertain first, the beliefs and customs of under-privileged people, and second, the relics of these beliefs and customs which have survived like fossils among people of higher culture." He divides the specialized field into two departments, study of lower types, and the study of superstitions, better known as folklore. His simple exposition of the scope of social anthropology as a practical science clearly reveals its importance to the thoughtful missionary.

R. S. Rattray, director of the Anthropological Department in Ashanti, West Africa, quotes from the report of the British Association;—"An accurate acquaintance with the nature, habits and customs of alien populations is necessary to all who have to live and work among them in any official capacity, whether administrators, executive officers, missionaries or merchants, because in order to deal effectively with any group of mankind it is essential to have that *cultured sympathy with them which comes of sure knowledge.*" Then Rattray proceeds to say, "Necessary and valuable as anthropological training is to the administrator or merchant, it should be an indispensable adjunct to the training of a missionary."

In his book he makes a strong case for administrators and others being serious students of "Social Anthropology" and tells the story of the Golden Stool of Ashanti, the sacred emblem over which two costly 'little wars' were fought by Great Britain in Africa. The Governor in 1900 in addressing the natives, is reputed to have demanded, "Where is the Golden Stool? Why am I not sitting on the Golden Stool at this moment?" Evidently he thought it a kind of throne carrying power as the symbol of authority, whereas it was regarded as the shrine of the soul of the Ashanti nation, and was never sat upon even by their king. The harsh words were interpreted as an insult and the warriors went out to

prepare for an unnecessary war. Rattray says, "I am sure if the Government of that day had ever known what the stool signified, it would not have been asked for at all, and there would have been no siege of Coomassie in 1900".

Dr. Smith tells of a missionary in Fiji who dropped his comb. A young native chief picked it up and stuck it in his thick curly locks. Turning round quickly, the missionary snatched it from his head. In doing so he touched the chief's hair. He could not have committed a more deadly offence against native custom. The Fijians regard the chief's head as sacred; it is the seat of his 'mana'; none but hereditary priests may dress his hair. By snatching the comb, the missionary not only behaved rudely but committed an inexpiable wrong. He was killed and eaten. Tactless and ignorant of custom, an otherwise useful missionary was unnecessarily lost to the cause.

Tact is not enough; neither is love. Tact needs to be based on sure knowledge; love needs to be based on a clear understanding. The report of the "British Society" phrases it well—"that cultured sympathy which comes of sure knowledge".

Robert Morrison loved the Chinese, but his love did not prevent him from throwing into the fire paper upon which his teacher had written Chinese characters for him to memorize, and thereby deeply wounding the man's sensibilities. If Morrison had been cognizant of the well-known folk-lore story of Yuan Liao Fan and his society founded three hundred years ago for "The Prevention of the Mis-use of Paper Bearing Chinese Characters", he would probably not have made such a mistake. Or if he had read the "Merit for Gathering Lettered Paper" he would have been wiser. For this priceless bit of literature tells you clearly;

"He who goes about and collects, washes, and burns lettered paper in the furnace of literature, shall have 5000 merits, twelve years will be added to his life; he will become honored and wealthy, and his children and grandchildren will be virtuous and filial."

"He who writes tracts on reverencing lettered paper and distributes them, has 500 merits; he will be forever without blame, and will beget many honored children."

"He who forbids another to wipe any unclean thing with lettered paper has 15 merits; he will become prosperous and intelligent."

"But he who uses lettered people to kindle fire has ten demerits, and he will have itching sores."

"He who in anger throws down on the ground any lettered paper has 5 demerits and will lose his intelligence."

"He who tosses lettered paper into dirty water, or burns it in a filthy place, or uses it in unclean ways, has 20 demerits, and will have sore eyes or become blind"

The dictionary defines 'tact' as 'an intuitive perception of what is fitting'. Most people in China would not see anything unfitting

in throwing a piece of paper into the fire, unless a study of social anthropology led them to an understand of the customs that mean so much to the Chinese people, much of which calls for our "cultured sympathy".

Bacon said, "A little Philosophy inclineth Mans Mindes to Atheisme, but depth in Philosophy inclineth Mans Mindes to Religion". To the point also, is, "A little learning is a dangerous thing". We need to study deeply into the customs and history of the ancient peoples we come to serve in these ancient lands. It is arrant bigotry to lightly dismiss all as superstition. "Blinkers should form no part of a missionary's outfit".(Smith)

The study of social anthropology leads to a clearer understanding of and deeper sympathy with people's motives. We discover that they are neither perfect nor wholly imperfect, but that they are really very much like ourselves. In their ancient books we shall find choice gems that sparkle with universal truth, which will draw us unrelentingly to the pleasureable task of searching for more hidden wisdom which will explain largely why their old customs persist.

For the present study let us note a number of terms to be used, and their definition according to Webster's Collegiate Dictionary.

Worship—Act of praying, or paying divine honors to a deity; religious reverence and homage.

Reverence—Profound respect mingled with fear and affection—veneration—awe.

Idolatory—Worship of idols, images, or anything not God. Excessive attachment, or veneration for any thing.

Superstition—Credulity regarding the supernatural, or unknown; belief in extraordinary events, beings, charms, magic, &c.

Magic.—The art which pretends to produce effects by the aid of supernatural beings, or by mastery of secret forces in nature. Synonyms,—sorcery, necromancy, conjuring, fortune-telling, mesmerism, geomancy, divination, occult powers, oracles.

One of the fundamental tenets of Chinese theology is, that spirits do not harm men except by the authorization of Heaven. "It is the way of the Tao of Heaven to give felicity to the good, and bring misfortune upon the bad,"—(Book of Rites).

The great war against specters in China is fought on the main principle that world specters belong to the Ying or feminine element of the dual system that controls the world; therefore the most effective weapons are derived from the Yang or male element in nature. This is the warming and luminous half of the universe.

The Li Chi (禮記) or Book of Rites, records Dzai Ngo (宰我) asking of Confucius, "What is the difference between gods and ghosts?" Confucius answered. "The Huen (魂) or spirit is God—Shen (神); the P'o is the (魄) soul, or the Kuei (鬼) or ghost. The Ch'i (氣) the breath of the gods belongs to Heaven, and the Kuei (鬼) of the ghosts belong to the earth, and under the earth—Hades.

Belief in ghosts deters from grievous and provoking injustice, because the wronged party is thoroughly sure of the avenging power of his own ghost when disembodied For the sake of revenge he will at times manage to turn himself into a wrathful ghost by committing suicide.

The plans and schemes to outwit the malevolent specters are diverse in the extreme. Man being by nature Yang is naturally an evil-dispeller. To develop aright the Yang soul he must have vitality, health and bodily strength, boldness, intellect, but above all moral rectitude or Heaven nature. He must keep the Middle, way the Tao, for "a virtuous man is beyond the attacks of spectral influences."

Many interesting stories are told in Chengtu testifying to the power of the spirits. In the daily papers some time ago was the case of a younger son who had spent the money left by his dead brother. When the mother found out she went to the city god, and bowed before him in tears and told her story. She stayed a long time and on arrival home found the boy in agony on the floor. Great red welts were on his back and he was suffering great mental and physical pain. He was alone but had heard distictly the command from the other world to give him three sets of beatings. He apologized to his mother, then wrote his sins on a lantern, and followed a man through the city streets who carried the lantern for all to see. Thus he made his peace with Heaven and his mother by this act of penitence.

A well known man in Chengtu, named P'an Hsiang Ting, has written his testimony in tract form and has given it widespread publicity, hoping that it will deter others from sin, and help them escape the punishment of hell, for twice has he been in a trance and had thrilling experiences in the world of shades.

He is 68 years of age, and was an officer in the Tao T'ai Yamen. Ordinarily he was a very good man, but his besetting sin consisted in making public the private matters of other people. In the eighteenth year of the Republic, the tenth of the seventh month, he fell into a trance, and the yamen runners came with chains which they put about his neck and led him away. They reached the court of the Land of Shades and the judge, who was a Buddhist, asked;—"who is this?" "P'an Hsiang Ting." With a deep voice the magistrate said—"This is indeed a great sinner, we shall not forgive him," and taking red-hot chains put them over his head and neck and commenced the tortures. But the judge in looking over the books, laughed and said, "Fortunately he has done some very good things in the world, take off the chains and make his body peaceful."

They sent him back, and the judge told him when starting—"When you return to the world you must warn others of their sins, because this place is the same as on earth in the law courts, inasmuch as if you do wrong you must be punished. When he came

out of the trance his two sons were bending over him thinking him dead. They asked him many questions, but he could'nt talk because he was so tired with the tortures he had been through. He was sick until the 8th of August, then on 22nd, he had a second trance. A yamen runner in black clothes said, "Mr. Hu sent me to call you." He followed and met Mr. Hu who accompanied him again to the Land of Shades. On arrival he was led to a big platform on which was erected "Nien Ching T'ai" (孽鏡台) or in reflector. The demon leader said, "Look here and see all your past life." But he dare not look in. He saw the cauldron of boiling oil there, then the heated post for adulterers, then the mountain of swords for liars, and the mill and saws of torture for other sins. Then he was led over the bridge, Nai Ho Chiao (奈河橋), to a Garden, Shan Kuo Yüan (善果園), and here he saw the beautiful fruit of paradise. Over the entrance he saw the beautiful scrolls, (善多能掩惡。果結登無因) (Shan to neng yen we Kuo chieh ch'i wu ying). "If you have abundance of good deeds you can cover your evil deeds. All fruits are based on reason."

In paradise he saw birds, flowers, tame animals. Then he saw some old people with walking-sticks strolling about. Then he saw one like his father, and it turned out to be his father. His father asked him why he had come. He replied that Mr. Hu had brought him. His father said, "You are fortunate to have such a good friend. When you return to the world you must reform or you will go to Hell." Then he came to the yamen doors with wooden announcement boards with names of living people. He recognized many of his friends names. Then he heard the barking of dogs, and came back to life. Just before dawn he heard the cock crow, reviewed his life, reformed and so came to write his warning.

The reference to cock-crow is very significant, as it is a universal belief in China that from the midnight hour until near dawn the demons reign supreme, and their most triumphant hour is the last hour before dawn, but at dawn they flee, reminding us of Shakespeare's --

> "The cock that is trumpet to the morn,
> Doth with his lofty and shrill-sounding throat,
> Awake the god of day, and at this warning.
> Whether in sea or fire, or earth or air,
> The extravagant and erring spirit hies
> Away to his confine".

The cock is supposed to have the vitality necessary to drive away demons, and so is always used at funerals. He is not killed, but brings good luck to the geomancer to whom he is alway presented. Often one cock is not sufficient—two and more are used. The white cock is especially efficacious and is much used in oath-taking in secret societies.

The peach tree and its wood, are especially potent in demon-

dispelling. History records the fact that two brothers, Shen T'u (神荼) and Yü Lei (鬱壘) formerly wrote inscriptions and carved them on peach slabs on board panels. These were accounted very effective with demons, but peach-wood proved too expensive, and paper was used giving rise to the ubiquitous "Tui Tzu" (對子) or scrolls now seen everywhere, and used on all festive occasions. At the New Year time the names of the two brothers are written on red paper and used widely as door-gods (門神). 秦雄胡敬德。(唐太宗).

Noise is another effective frightener of ghosts and evil spirits. Before gunpowder was discovered in China, the practice of Pao Chu, (爆竹) or burning bamboo, was the valuable precursor of the omniscient firecracker. Li T'ien (李畋) in ancient times used this with great effect. The invention of gunpowder displaced it and put cheap firecrackers within the reach of all rich and poor alike. Wang Ngan Shih, famous premier of the Sung Dynasty, has immortalized this custom in verse—

1. When we hear the crackling bamboo we know New Year is here.
2. We feel the Spring's warm influence even in our wine so clear.
3. A thousand doors and ten thousand windows now open to the sun's bright rays.
4. Each home displays the new peach charm scrolls through these happy days.

The red blossoms of the peach reveal the power of the Yang influence in Spring, and reveal the destruction of the Ying or Winter. The sun is also the acme of the Yang's influence, so light by fire, candles, lanterns, torches, firecrackers are all very effective in destroying evil influences. Noise brings great merit. Gongs, drums, cymbals, all add their measure of protection and insurance against evil spirits. The modern wedding with clanging bells and rude siren horns on rushing motor cars means added merit and great felicity.

Common deterrents to the evil influnce of demons are every day and everywhere seen in "pa kua" (八卦) symbols, the "t'un kou" (吞口), mirrors of "i shan" (一善), "three turns" (三倒拐), curved roofs (彎曲屋頂), the Almanac of Lucky Days (玉匣記), and the whole gamut of numberless Taoist charms.

By burning written charms evil spirits are caught, imprisoned and tortured. They may be pursued, caught, warded off and even killed. When a "kuei" (鬼) dies he becomes a "chan" (魃) a very malignant type of blood-sucking and dangerous vampire. This is something so terrible that it terrifies all specters when they see even the character posted over doors in time of pestilence. Many charms are clever devices of religious magic used as instruments for reducing specters to submission, and counteracting their evil influences, and further preventing them from injuring men in the present or future.

Rich and poor, educated and illiterate use charms. Many are worn as amulets on the person. Most charms are burned and mingled with water or wine, and administered as a specific against bad influences, diseases and evil spirits.

Stellar charms enjoy a reputation for conducing to happy marriage, and promoting harmony between husband and wife.

Many charms and mystic formulas are largely unintelligible jargon, the Chinese copies being generally mere transliterations of Sanscrit or Tibetan sounds.

The following six popular charms are typical of the many to be found;—popular charms the ubiquitous "pa kua" (八卦), and the "Five Elements" (五行), metal, wood, water, fire, earth. They also represent the "Five Directions" (五方).

East-Ruler-"Tung Wang Kung" (東王公)-Duke of Wood-Royal Father, and Registrar for Male Immortals.

South-Ruler-God Of Longevity (壽星). Registrar of Deaths.

West-Ruler-"Wang Mu" (王母) Western Royal Mother. Registrar of Female Immortals.

North-Ruler-"Chen Wu" (眞武) Immortal-directs "Tortoise and Serpent". Ruler of and stars of the Dipper. Registers birth of ordinary mortals.

Middle-Ruler-Yellow Emperor-to Nourish Nature (養浩然之氣) are stellar spirits; their chief is "Chiu Wang"-Nine Kings. (九皇) "Kuei Hsing" (鬼星), god of literature and distributor of literary degrees in the Taoist pantheon. The character "Kuei" (鬼) makes the picture of the deity with a few deft strokes added by adept Chinese caligraphers. He is associated with Wen Ch'ang (文昌).

"The Milky Way" (天河) is popular and has a connection with Chengtu. "Chien-Niu" (牽牛) comprises portions of Capricornus and Sagitarius. Cowherd and (織女) Spinning Damsel story-bridge made once a year over T'ien Ho, Milky Way, by magpies to allow the lovers to meet on the seventh of the seventh moon. Chang Chien (張騫) was sent by Han Wu Di (漢武帝) to seek the source of the Yellow River. He travelled west and arrived at "Tien Ho" (天河), and saw the Spinning Damsel who gave him a stone—her loom. He brought it back and showed it to Yen Chuin P'ing (嚴君平) of Chengtu. He was a diviner who lived on a hundred cash a day. He looked upon this as conclusive evidence that Chang had visited the Heavenly River, and placed the stone (meteorite) in a building in Chih Chi Shi Kai (之機石街)-Chengtu. The present Chuin P'ing Kai is named after Yen the famous diviner.

Not only do the Taoists believe in charms, but Chinese and Tibetan Buddhists have a large share in the charm traffic. Buddhistic prayers play a leading part in preparing the heart and mind against evil influences and leading the devotee to thoughts of Nirvana.

A short paragraph from J. H. Edgar's inimitable "Geographic Control" aptly expresses it thus; "A pitiless climate, a rapacious government and a malevolent spirit world would hardly induce the Tibetan to view eternal existence as a blessing. Indeed a suggestion that eternity might end sometime would be eagerly entertained. And this is what the Nirvana salvation implies. At times everything speaks of this mysterious and elusive state. The heavens are so vast and inspiring, so calm, and so mystifying! The earth too, with its expanses of enthralling green, brilliant flowers, and fragrant shrubs are like sweet opiates to the senses; and the towering peaks of virgin snows and crystal ice suggest the stern purity of endless death. Somehow it is always pleasant to rest on the soft sward, and allow oneself to be immersed in the welling silence of a scented atmosphere as soft as velvet and as clear as glass. And it is no uncommon experience to feel a dimming of the sense of time and space, and a hazy consciousness of a gradual uniting of all that is material in man and nature with the Nirvana of golden ether around you. That is, the negation of all that is material seems possible, and the absorption into one great Impersonality partakes of the nature of an experience being realized". (This Journal, 1924-25, II, 10-11).

Archibald Little in his well written, "Mount Omi and Beyond", most beautifully expresses the rapture experienced by the worshipper as he views the "Kuan Yin Teng" (觀音燈), or "Lamps of Mercy" and the "Glory of Buddha" "The clouds had sunk, the stars shone clear in the sky overhead, while some hundreds of feet below the summit, the white surface of clouds spread out as far as the eye could reach. Dotted among the clouds almost as thickly as the stars above, were what looked like shining lamps of extraordinary brilliancy these were the "Lamps of Mercy" I should never have imagined that will o'-the-wisps, if such they be, could have shone forth with such striking brilliance the phenomenon is probably electric.

"The Glory of Buddha (佛光), Fu Kuang, is the grand phenomenon of the sacred mountain. Below was a sea of cloud, at our backs the sun, now shortly about to sink in the West, was brightly shining. Sure enough there was a circular halo reposing on the cloud surface, its bottom just cut off by the shadow of the mountain edge so that the rainbow (for such it apparently is, having all its colors) shorn of a portion of its circumference, appeared of a horseshoe shape, and in its center was the greatly magnified shadow of the observer's head.—Pilgrims threw themselves awestruck on the ground in silence prayed. A word spoken would have broken the spell and driven away the gracious spirit of Buddha. Many have thrown themselves over the cliff in the ecstacy of religious frenzy, and looking for the open arms of Buddha are dashed to pieces on the jagged rocks below."

Small wonder the Chinese illiterates think the lights are spirits when this phenomonon a of lights known as St-Elmo's fire, or

"Ignus Fatuns" (Foolish fire) is so little understood by western scientists. In Canada, for instance, we have the "Fire Ship of the Bay of Chaleur" that defies explanation.

This leads to our final section in this study which is *Ancestor Worship*-at once most baffling of questions, the ground of dissentions innumerable, and a field prolific in misunderstanding and controversial interpretations, yet, in reality the corner-stone of a great people's faith and practice. It is certainly deserving of more than passing notice.

Aristotle in his "Ethics" stigmatizes as "extremely unloving the denial that ancestors are interested in, or unaffected by the fortunes of their descendants;" and in effect ancestor-worship is the staple of most religions, ancient or modern, civilized or savage. Herodotus describes the burial rites of an ancient Scythian king at whose tomb were strangled his concubines, cupbearer, cook, groom, lackey, envoy and several horses, to assist him in next world. This sounds like China where the mighty dead are present with the living to protect and help them in the battles of life. In China live attendants were buried with ancient royalty. Later wooden and metal and clay models were interred to accompany the high and mighty to the Land of Shades. Now paper models are used and burned. Chu Ko Liang (諸葛亮) when among the mountain tribes west of Tatsienlu taught them, instead of using their prisoners as live victims, to make heads of bread, which the did. Today bread is called "Man-tou"(蠻頭)head of aborigines.

In the worship of Lares, the head of a Roman household commemorated and reinforced the blood ties which made one flesh of all its members living or dead. In the beginning a "will" or "testament" was but a mode of indicating on whom devolved the duty of conducting a parent's funeral, and together with that duty the right of inheriting his property. The term "Manes" is of Roman origin, signifying the spirits of the dead and gods of the lower world—hence ancestral spirits worshipped like gods. A pit existed on the Palatine at Rome, where the Manes were supposed to issue forth at stated times. Offerings were made to propitiate the spirits—libations of holy water, wine, fruit flowers and incense. Lamps were lighted and the mourners partook of the meal presented to the spirits. The Christians use of flowers at funerals probably began at this time.

"Preparing for death" has a different signification for Chinese than for the Westerner. He is not only preparing his soul for the next world, but makes a serious business of preparing coffin and clothes well in advance. He is exceedingly practical. The four heavy pieces of wood made into a coffin are purchased by the filial son years before they may be needed, in order to avoid the possible chance of being poverty-stricken when he needs to bury his parents. Old people have the character "Shou" (壽)-Long Life, worked into their clothes for the grave, and engraved on the

coffin. On birthday anniversaries they are congratulated by their friends on their preparedness. Often the inscription is written on the coffin that will be their home some day, "Enduring as the Heavens, and lasting as the Earth" -(天長地久).The story is told of a poor widow who came into the large sum of fifteen dollars and decided to invest in gold ear-rings for use in her lifetime, and gave her friends instructions to sell them to purchase her coffin when death overtook her. It means added merit to be dressed well and properly coffined when the call comes. Death-days mean more in China than birth-days. When a parent dies the eldest son does the honors for the family. At the grave he kneels and prays "Let the bones and the flesh return to the earth, and may the spirit reside with us in the tablet". Later at home, an official, or the eldest son, takes a red pencil and dots the "Wang" (王)—king making it into "Chu"(主) of Lord. After this the tablet takes its place at the family altar. Every home has its sacred chapel. No one is allowed to sleep above it. It opens out to the roof and Heaven.

The Book of Rites is the great compendium of knowledge and inspiration to every filial son in China. It opens with sayings of the Master—Confucius-"It is by the odes that the mind is aroused; by the rules of propriety that the character is established; from music that the finish of education is received".

"Without the rules of propriety, respectfulness becomes laborious bustle; carefulness, timidity; boldness, insubordination; and straightforwardness, rudeness".

The character "Li" (禮) according to "Shuo Wen" (說文) is defined as "a step or act"-whereby we serve spiritual beings and obtain happiness." Confucius and Mencius both used it for propriety. It has the two-fold symbolism - religious and moral. "Li Chi" (禮記) means, "Rules of Propriety and Ceremonial Usages". Dr. Legge observes, "The framework of society is built on the truth underlying ceremonies, and music is the necessary expression of satisfaction in the resulting beauty and harmony".

The "Grand Course" (大一) —The Tao - is the result of the "Great Union" (大同). It makes for a real national and international relationship. "Therefore it is said that the ruler being a sage can look on all under Heaven as one family. Seven feelings belong to men without their learning them: Joy, Anger, Mourning Fear, Love, Desire, Dislike.(喜怒哀懼愛惡欲)

Ten things are considered right for all:—

Kindness of father; filial duty of son;	父子有親
Gentleness of elder brother; obedience of younger;	兄弟有序
Righteousness of husband; submission of wife;	夫婦有別
Kindness of elders; deference of juniors;	朋友有信
Benevolence of rulers; loyalty of ministers.	君臣有義

Truthfulness in speech, and cultivation of harmony constitute what are called 'advantages to men.' Hence when a sage would

regulate the feelings of men, and cultivate the five relationships, if he neglect the rules of propriety, how can he succeed?

All the rules of ceremony must be traced to their origin in the grand course (大一). The grand course separated and became heaven and earth. It revolved and became a dual force in the universe.

Medhurst, in his "Dissertations on Chinese Theology," observes:—"There can be no doubt that the reference to the whole passage is to the Almighty One who rules over all things. He is the Source of all things, and existed before the powers of nature divided, and before the myriad things were produced—the only One Being."

It is clear, too, that worship of God and reverence to ancestors were two distinctly different things. Note—"It is only the Sage who can sacrifice to God, and only the filial son who can sacrifice to his parents. How well sustained was their reverence! How complete was the expression of loyal devotion! How earnest was the wish and prayer that the departed should enjoy the service of worship!

All things originate with Heaven and man comes from his ancestors. This is the reason why sacrifice is associated with God. It is an expression of gratitude to the great Source, and a going back in thought to the beginning of all beings. Sacrifice is not a thing coming to man from without; it issues from within, and has its source in the heart. When the heart is deeply moved it finds expression in ceremonies, and hence only men of ability and virtue can completely exhibit the idea of real sacrifice.

All the living must die, and dying return to the earth—this is the Kuei (鬼). Bones and flesh moulder below and hidden away become the earth of the fields. But the spirit issues forth and is displayed on high in a condition of glorious brightness.

In sacrifice the calf was used because it had not felt the appetency of sex and is unconscious of any 'dissipation.' Dr. Medhurst observes, "This is a refinement on the Hebrew idea of the victim lamb 'without blemish'".

The sacrifice was an expression of the greatest reverence, but the taste was not valued. What was held in honor was he fragrance of the offering—the wine, incense, and offerings fragrant with spices. Such was an offering "of sweet savor" to incite the worshippers to add to their sincerity and reverence all the graces of character.

Worship with sincerity, faithfulness and loyalty; with reverence present the gifts with music-do not demand blessings."

Then this passage—"The filial son should not forget the looks of his parents, nor their voices; he should retain the memory of their aims, likes and wishes; as he gives full play to his love and devotion they will live again before him, and in their presence how can he worship without deep reverence? Thus in three days of

purification and prayer, he will actually see them and hear their voices."

This reminds one of the Tantric cult of Tibet and the Yogi concentration in breathing, mentioned by Yeats-Brown in "The Lives of a Bengal Lancer";—"The Lama made me place one hand at the pit of his stomach, the other at the small of his back. Then he swelled with air and collapsed with rhythmic speed, each inhalation seeming like a light hammer-tap. Finally with breath retained and eyes upturned, he remained still but strangely vibrant. Through his hidden energy I drew through him a sense of power, not directly from his physical envelope, but coming perhaps from all the thoughts in the world. I saw distant minds and souls of the dead, and reached out with fingers of the spirit, but grasped only air—I could'nt enter."

Nathaniel Peffer in "The Collapse of a Civilization:", says—"The term Ancestor Worship carries connotations of superstition. These are unfortunate and misleading. However it may be construed, in the acts of the illiterate its origins and its significance are at the extreme of the primitive. It is fundamentally the veneration of the principle of continuity—continuity of the race, of the unity of past with the present, and extension of the present into the future. The dead are not lost but detached. Not to do them respect by the proper ceremonies, is to cast them off in to oblivion, insult one's line, and isolate it in the universe."

The effort to find Christian contact with Ancestor Reverence is an old problem. The early Jesuit missionaries found in the veneration of ancestors not a mere form of idolatry to be abolished, but a great power for good to be Christianized and conserved. Reactionares objected and the Pope ruled against them. The result was that the whole Catholic Church was expelled from China, Abbe Hue defends the action of the Pope, but Dr. Carter sbserves—"The reader lays down the book with the feeling that after all the emperor was right, and that the Church lost a golden opportunity to make Christianity a vital force in Chinese life—only a broadminded understanding of the deep springs of the Chinese culture, and an equally clear undestanding of the essentials of Christian truth will enable Chinese Christian leaders, to effect a reconciliation.

Prof. Thayer Addison, late of St. John's College, has given serious thought to this subject, and in the September, 1924 Chinese Recorder, contributes a most thought-provoking article. He says, "Both for the student of religion and the Christian missionary the most important factor in Ancestor Worship is its meaning. The question of its significance has been debated for centuries, and the expression of conflicting opinions still continues. The key to its meaning is to be found not in any summary of its outward forms, but in a sympathetic understanding of the motives which lie behind them. What ancestor worship is, is not necessarily what it seems to the outsider to mean; it is what it means to those who practice it."

From these and many other sources we have been attempting to discover the underlying prominent motives. Among them we notice the widespread belief that the dead depend on the living for support and care. Conversely the dead mean much to the living, and are always watching them from the other world. The solicitude for the departed is prompted by an urgent sense of filial piety. A man worships only his own ancestors, he pays no particular respect to others. It is a family affair. The deceased as well as the living are all members of the family. Death does not separate. Immortality is very real. There is perpetual communion with the spirits of the departed, and these take active interest in the daily doings of the living. The true filial children live, act and work as if parents and foreparents saw every thing they did. The offerings and ceremonies are only incidental to the communication and the principal motive is to maintain respectful contact with the venerated deceased. It is a great memorial of reverence. Confucius "served the dead as if they were living, and sacrificed to the spirits as if they were present." Filial piety is found in no other non-Christian religion, and this is unique in Chinese theology. This is the most potent factor and is fundamental in their religion. There is no doubt that among the masses there is ample evidence that ancestor worship is a real religion although it is mixed with magic and superstition.

To scholars and educated Chinese all this seems a perversion of the true meaning of ancestor worship. For him the ancestors have no greater powers than when alive, and are not propitiated to secure blessings and avoid disaster. He believes no 'worship' will prevent merited punishment or extract undeserved prosperity. The moral law or Tao is operative and filial piety is real. He cares for the aged and remembers and reverences the departed. He believes in the fifth commandment, and believes China has achieved longevity for this reason.

In order to arrive at a fair concensus of the opinion existing among Chinese Christian leaders I submitted the following questions to half a dozen close friends;—"What do you think constitute the strong and weak points of ancestor worship? In how far can we incorporate the main tenets, or beliefs and practices of ancestor worship in the Christian faith?

The answer revealed keen and enthusiastic interest in the subject and it merits immediate treatment and faithful consideration.

The strong points enumerated were as follows;-

1. This is the high point of morality in Chinese life. Christianity claims to be the highest, therefore it ought to include this, because Christianity also teaches filial piety.
2. It is a sure bond of union and draws people together at the New Year and at other important holidays. It makes for social solidarity.

3. The spirits of ancestors can certainly have fellowship with their descendants that is highly profitable and moral.

4. Ancestor Reverence is quite different from idolatry—because idolatry is to love something less than one's own personality. A real Christian could never regard his ancestors as gods, or equal to God.

5. As a man becomes old it is natural for a man to wish that his children will reverence his memory when gone. There is nothing wrong about this, and it ought to mean much for the children.

6. In the face of this materialistic and godless age it is the Christian's duty to inculcate reverence in his children at all times.

7. A good family naturally wants its influence to extend more than one generation. They wish to hand down all that is noble and good to the children, and keep the influence of good forefathers with them.

8. Showing reverence to one's ancestors makes for good character foundation. The past cannot help much, but the present is highly important. Lessons from the past can help for present and future.

The Weak points—enumerated were as follows;-

1. The fear that idolatry may be encouraged.

2. The fear that the unintelligent might have cause for stumbling.

3. The highest form of remembrance is spiritual, no form is needed. Still, Europeans use flowers at funerals, and remember questionable customs at Easter, Hallow'en and Christmas—of heathen origins.

4. If our good ancestors are with God they do not need our poor aid. Still there is value in the Communion of Saints if really spiritual.

5. There is danger in communion with spirits; some are bad. Saul had communication with evil spirits to his undoing.

6. Many ancestors were bad men and their example is not praiseworthy. Still we must encourage people to see good in their parents. Even bad men may be used for warning. The Bible contains good and bad characters.

7. Remembering the past too much may be a dead hand on the present and future. This will not be the case if we make our ancestor reverencing a spiritual festival. Even our Lord when he rose from the dead met his disciples and ate broiled fish and meat with them. If our children are pure they can

have real fellowship with the past without fear of injury, and indeed receive sacramental help.

How can we incorporate the best beliefs in the Christian faith?

1. This is imperative because modern science is making students skeptical of all religion. The real things must be kept and made real.
2. Nature abhors a vacuum. Many have no faith today. We have enough truth in our sacred books made vital with Christian faith and experience to save our young people.
3. Filial piety reverence for old age, and thoughts of Immortality are vital to the Christian faith and are found in ancestor reverence.
4. All that is good in ancestor reverence can be retained under Christian sanctions as long as it is understood that ancestors are not divine. Their memories can be as helpful as Church Saints and great characters of history constantly held up before youth.
5. Practical use of Easter Sunday as day for visiting tombs can be made very effective. Thanksgiving can be taught in 8th moon feast.

   New Year family reunions can be made of great religious value– first five days are supposed to be free of disputes. Have many taboos.
6. A real spiritual view of God as Creator and Father instead of the God of Israel so often preached would be much more effective.
7. It is our duty as Christians to protect the best of our culture from idolatry. Claim it for God. Do not destroy, but fulfil as Jesus did.
8. Christians should preserve the spirit of reverence in ancestor reverence and change the forms to fit the present needs. The spirit of worship is badly needed in these days. We can learn much in quiet meditation.

This study has convinced me that we must do as suggested at the beginning-"with cultured sympathy which comes of sure knowledge help our Chinese friends make this greatly needed contribution to the Chinese Christian Church. Missionary social anthropologists can help considerably by education, experiment, aid and encouragement, but the problem will be ultimately solved by the Chinese Christian leaders themselves. Only those who are truly Chinese and truly Christian can be trusted to make an adequate solution. For one, as a result of this study, I cannot again use the term

"Ancestor Worship". From now on it must be for me "Ancestor Reverence".

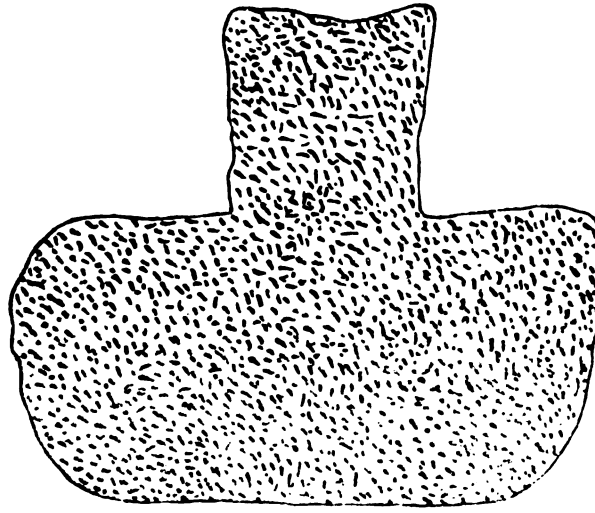
To some of these old scholars I have met, Jesus would say—"Thou art not far from the Kingdom of Heaven". An old Lama at Kong Jei told me the story of the musk deer running for days with the smell of the musk in its nostrils. It was seeking the musk, and ran till hungry and tired, then lay down to die. In self-commiseration it licked its own body and discovered the musk bag, but too late to be of any use. Truly "The Kingdom of God is within you". Can we not then, "with that cultured sympathy which comes of sure knowledge" help our friends discover again the Great Source of Life,

A KOREAN ARTIFACT AND THE "SHANSI SHAE SHEN."

J. H. EDGAR

Two items of information which may interst readers of the JOURNAL came to my notice when in Seoul and Shanghai respectively.

(1) In the Government Museum there is a very limited exhibition of stone implements. One of them, however, in shape and material seems to be identical with some found in the Suifu region. They are roughly represented in the following sketch:



It is certainly of interest to find this peculiar type appearing in Northern Korea and Western Szechwan.

(2) White stones in groups of three are said to be common in the Shansi regions of P'ing Yang, Yoh Yang and Hung T'ung. The former is intimately associated with the great and ancient T'ang Ti Yao (唐帝堯). Mr. George Hunter of Eastern Turkestan also informs me that white stones as talismans and objects of reverence are common in that distant region. In Yoh Yang they are called "Shae Shen" or Earth Gods, and if suitable material is not forthcoming white-washed stones are used instead. 社 (shae is the 土神 or Earth God, and we are told that 社之神用石 for the Earth God a stone was used. In the west of Szechwan the 社神 are very often associated with trees and in some places with branches. With the above information in view, the writer is more than ever inclined to look upon our western litholatry as a survival from proto-historic

A VOLUME FROM THE HANLIN LIBRARY IN THE WEST CHINA UNION UNIVERSITY MUSEUM.

D. C. GRAHAM.

In June, 1900, the great Hanlin Library, "The oldest and most famous library in the world," was burnt by the Boxers. Among other literary treasures, the famous encyclopaedia called the Yung Lo Ta Tien was destroyed by the flames. A few volumes of the great encyclopaedia, and a few printing boards, were saved by the British soldiers.

H.B.M. Consul Sir Meyrick Hewlett, then secretary to Sir Claude Macdonald, secured one of these precious volumes, number nineteen thousand seven hundred and ninety one, and ten printing boards. Later he gave them to the West China Union University Museum, where they are being carefully preserved The following letters from Prof. Giles and from Consul Hewlett give interesting information concerning this great encyclopedia.

SELWYN GARDENS

CAMBRIDGE

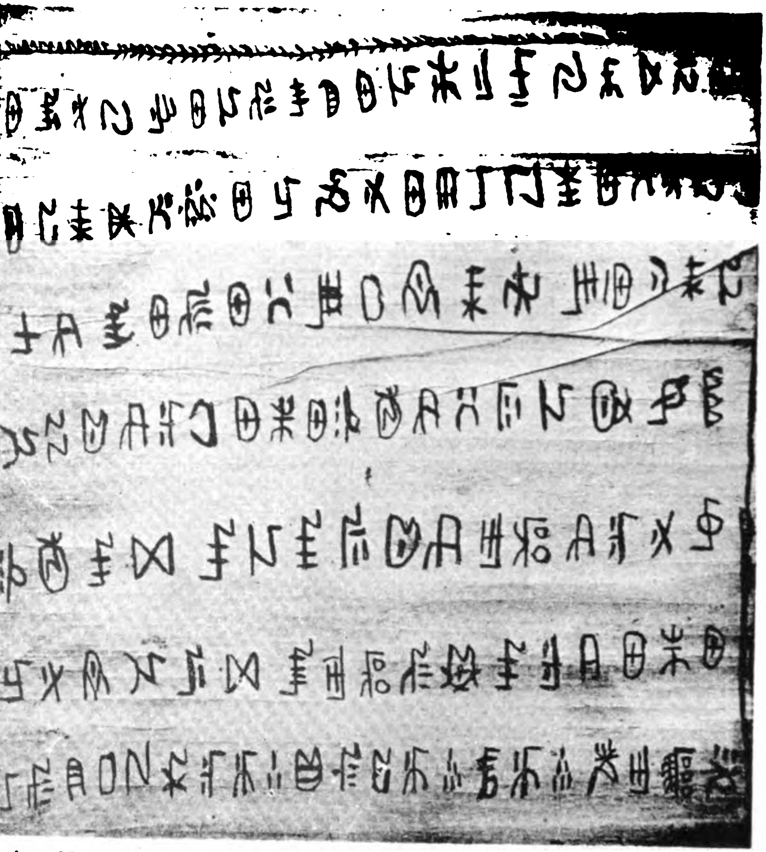
1 Sept., 1901

Dear Hewlett:

In the *XIX Century & After* for last April your brother will find a sufficiently full account of the famous Encyclopaedia of which he possesses the $\frac{1}{11,100}$ th part.

Of the five vols. which came to me, one is now in the Br. Museum, another in the Cambridge University Library, and the remaining three in my family archives.

The characters 晦庵 form one of the fancy names under which the great commentator Chu Hsi (= Choo Hi) is known, 語類 being the equivalent of "notes" or "remarks."



eft: Nosu or "Lolo" script. A page from a book of incantations for the exorcising of the demons of disease. *West China Union University Museum.*

ight: The title page of the volume of the Yung Lo Ta Tien, rescued from the burning Hanlin Library in 1900 by H.B.M. onsul-General Hewlett, then secretary to Sir Claude Macdonald, and presented by the former to the Museum of the West hina Union University when he was consul-general in Chengtu in 1922.

The characters 一屋 mean "No. 1—Wu," and refer to the tones under which the subjects in the Encyclopaedia are arranged, 屋 being No. 1 or first of the 入聲 entering tone group, in which 服 vestments is to be found.

I have vivid recollections of Takow, but have never felt any great desire to revisit the spot. Even China could never again be what it once was to me. Perhaps that is partly due to the fleshpots of Cambridge.

With kind regards,

Yours faithfully,

H. A. GILES.

Chengtu, February 26, 1922.

Dear Mr. Dye:—

Herewith the notes you require taken from my diary written at the time, also a letter from Prof. Giles to my brother about the Yung Lo Ta Tien.

"June 23 (1900). 10 a. m. Sir Claude Macdonald, the British Minister, gave an order to hack a hole in the wall to the Hanlin, so as to have a ready communication to put out fires and pull down houses. 10.30. Heavy firing; north and west attacked: 11.15. First fire in the Hanlin where the Boxers and Chinese were entrenched; by 11.45 a good hold was got over the fire, and in the afternoon we began pulling down houses which were a danger to our north defence. An attack was made by us on the Hanlin and the place cleared . . . . . 12.15. The Hanlin quite clear and houses being pulled down by us as stated above, the refuse so far as possible being thrown into the canal. In the morning the fire committee and officers were divided in opinion as to the question of pulling down houses and occupying the Hanlin in a military sense; so they settled as a compromise to make the hole in the wall, and occupy a small part, but it was agreed that the Chinese would never burn so old a monument of the country's literature. However, they did it, and the oldest and most magnificent library in the world has been destroyed; the value cannot be estimated. 12.45. Sir Claude gave orders that an attempt should be made to save the valuable books and prevent stealing them and that all be brought to the Central Hall of the Legation; but, of course, many have been destroyed, and only a

minimum saved. (Note; the task was too stupendous, and had now to be abandoned. W. H.) They wanted, but no messenger could be got to go, to send a message to the yamen, to ask some civil authorities to come and see for themselves that the Chinese soldiers had set fire to the Hanlin, as hundreds of cartridges bore witness, and that we were trying to save the library. 1.15-The second fire in the Hanlin. The Chinese set fire to the main entrance, which is opposite the Imperial City . . 4.45 A third fire in the Hanlin, a huge building 50 yards from us and separated by a wall, so no danger . . . . at 7.30 a fourth fire in the Hanlin threatened the north stables. They had made most determined attempts to burn us out but, owing to the fearlessness and promptness of individuals, aided by the coolies, none have as yet succeeded."

The blocks you have were rescued by me at the time. I was Sir Claude's private secretary and working directly under him. Not a fraction of the library was saved, and what was saved was useless as a united collection, so we were allowed to keep a few blocks as a memento. The Ta Tien was utterly ruined.

I am very glad they now find a resting place at the University.

Many thanks for your most kind letter.

Most sincerely yours,

W. Meyrick Hewlett.

A page from one of three Na-shi or Mo-so sacred books presented to the West China Union University Museum by Dr. Joseph F. Rock. Such books are used by the Na-shi priests during religious ceremonies. The writing is pictorial.

Picture of a rubbing of an ancient stone tablet at Suiling, Szechwan Province, secured by Rev. Mr. Rodwell and presented by him to the West China Union University Museum. An old banyon tree blew down uncovering, the stone tablet. These are not Chinese characters, and it is suggested that this is a script which was used by the aboriginese who lived in Szechwan before the arrival of the Chinese.

A MEMORANDUM ON THE CHINESE PROCEDURE OF ACUPUNCTURE.

W.R. Morse, M.D., C.M., F.A.C.S., LL.D.

Department of Anatomy, West China Union University, Chengtu.
Associate in Anthropology, Peabody Museum, Harvard.

"Out of nothingness was born the Great Extreme; this produced the Yang and Yin; these then produced the four Symbols; and they the sixty-four hexagrams;" Chinese Saying — Plopper.

"The Cosmic Spirit embraces Heaven and supports Earth. It stretched the four corners of the Universe and generated the eight points of the firmament it endowed heaven and earth with the primary elements . . . . . Expanding, the Cosmic Spirit overspread every part of the firmament, earth, time and space . . . . . it holds, as in a net, the four poles and comprehends the active and passive forces of creation . . . . In the beginning the two forces *Yang and Yin* having obtained the essence of the Cosmic Spirit became the central organizing power . . . . . Without apparent doing, things came into existence under the inspiration of the Cosmic Spirit . . . . . Its energy is imparted to the minutest thing . . . its virtue gave flexibility to nature and harmonized into unity the operations of the *Yang and Yin* . . . . . It produces all phenomena . . . ." Huai Nan, translation of Evan Morgan, Jour. N. China Branch, Roy. Asia. Soc.

"The universe with its dual forces is a macrocosm. Man is microcosm, a little universe. Thus we read that as heaven is round and the earth square, so a man's head is round and the foot square. As heaven has its sun and moon, its order of stars, rain and wind, thunder and lightning, so man has two eyes, a set of teeth, joy and anger, voice and sound. The earth with its mountains and valleys; rocks and stones; trees and shrubs; weeds and grasses; has its parallel on the human body in the shoulders and armpits; nodes and tuberosities; tendons and muscles; hairs and down. The four limbs correspond with the four seasons; the twelve joints with the twelve months. There are nine "Chous" (州) or provinces, man has also nine openings, viz: two ear holes, two eye slits, two nostrils, one mouth, one anus and one urethral opening. There is a brain reservoir, an air reservoir, a blood reservoir and a water reservoir to agree with the four seas. The pulse is of twelve kinds to agree with the twelve rivers. The heart contains seven stars, and the human skeleton has 360 bones for the simple reason that

there are the same number of degrees in a circle." History of Chinese Medicine, p. 12, Wong and Wu.

The more lucid the explanation of the theory of Chinese Cosmology or Cosmogony, the more logical, if not reasonable will be the view point or interpretation of Chinese medical procedures and especially of acupuncture. This theory underlies all Chinese social relationships.

I will try to very briefly convey a conception of Chinese cosmology with a slightly longer description of the **Yang and Yin* and the Five Elements which are corollaries under that general theory and are the groundwork for Chinese medical procedures. Chinese Cosmogony. (See Table I).

In the beginning there was the "Extreme Limit", or, "Absolute Nothing", chaos, called *wu chieh* 無極; this is pictorially represented as a circle in black. The *wu chieh* evolved of itself, and there was formed the *t'ai chieh* 太極, the "Great Absolute", "Great Limit", "Great Ultimate", or "Primordial Matter"; this is represented as a black dot. Lao Tsu has defined the *T'ai chieh* to mean two things;—the "Great Principle" that formed the Universe, and "Primordial Matter", from which the earth was made.

The *t'ai chieh* then revolved and congealed, and generated by unions and disunions the *liang I* 兩儀 or "two vital essences" of the Universe. These two are the Great Principles of the Cosmic Energy or Breath, or Ch'i 氣 and are called the *Yang I* and the *Yin I.* They are represented pictorially by the circumferance of a circle which is equally divided by a curved line shaped something like the letter S. Quite frequently the *Yin* half is coloured black with a white dot, and the *Yang* half remains white with a black dot. The *Yang* 陽 and the *Yin* 陰 are the positive and negative principles of the dualism of the Chinese Cosmogony.

The soul of the universe is *Li* 理. This influenced the immaterial *Ch'i* 氣 of chaotic conditions before the world was formed, and primary matter *chih* 器 or, "substance" resulted. The *Li* contained the great monad *ta'i chi* 太極 which produced the *Yang* 陽, which in turn produced the *Yin* 陰. These two originated all things in earth or heaven through the Five Elements and by *Chi* 繼 or "succession" the world is built up and destroyed

*The exact transliteration of Chinese names and sounds requires the use of certain diacritical marks such as are used in dictionaries to distinguish sounds as differently pronounced by various phonologists. Additional confusion of terms and ideas is encountered because there are different standards according to distinct national peculiarities of speech—there are several so-called standards for romanisation of Chinese phonetics in English besides other in German, French, Japanese, etc. In this article there has been followed the so-called Wade's romanisation and the dictionary followed, in the main, is Giles, but the diacritical marks are omitted owing to local printing complications.

TABLE I

THE CHINESE COSMOGONY

Before the world was formed there was
"Absolute Nothing", Chaos, Wu Chi 無極 Represented by ○,

THE COMPLETE REPRESENTATION  OF YANG, YIN AND PA KUA

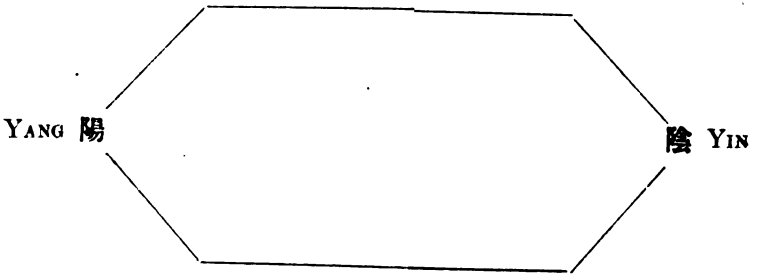
The Yang and Yin formed the Five Elements

Wu Shin 五行

金 Chin 木 Mu 水 Sui 火 Ho 土 T'u
Metal Wood Water Fire Earth

Which are the Constituents of all Creation, Animate and Inanimate
萬物生 Wan Wu Seng
Literally: Ten thousand things born.

T'ai Chi 太極 Great Absolute



Wu Shin 五行 Five Elements

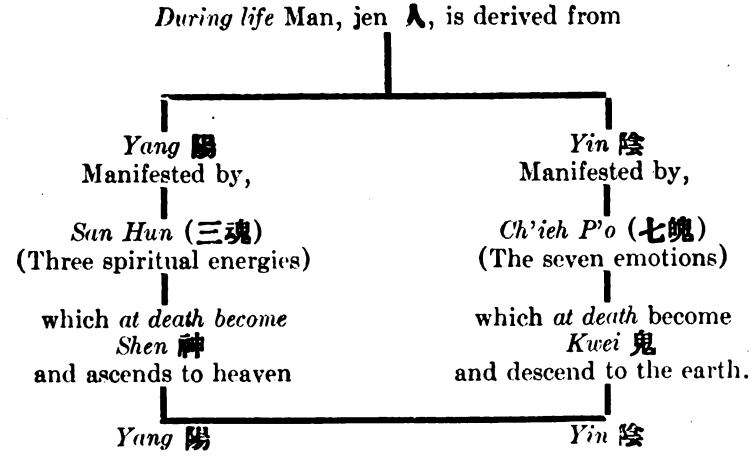
Thus were Formed all Creation, Wan Wu Seng
萬物生

TABLE II

Man is included in all things and in him the Five Elements are represented by the organs written below each

Metal 金	Wood 木	Water 水
Lungs 肺	Liver 肝	Kidneys 腎
Large Intestine 大腸	Gall Bladder 胆.	
Fire 火		Earth 土
Heart 心		Spleen 脾
Small Intestine 小腸		Stomach 胃

To show how Man returns to the Unknown from which he was evolved is hereby illustrated.



The Yang 陽 *and the Yin* 陰 *are the principles underlying Chinese philosophy and metaphysics, and are therefore the fundamental principles to be considered in any discussion of the sciences, arts, crafts, religion, magic, astrology, astronomy, feng sui, divination, necromancy, ancestor wroship, or medicine, as well as all the social processes of Chiness life. Everything animate and inanimate is composed of the same things, (Five Elements), which were formed by the Yang and the Yin. All things therefore, in essence are conceived by these two forces, and consequently contain them, but in varying proportions. All things, also at death return to Yang or Yin.*

In their continuous productions and decays, unions and disunions, which have continued from the beginning of time and are still going on, there is followed an inscrutable and inevitable plan in strict accord with arbitrary, unchangeable mathematical principles. The law is called the *li* 理 or *tao* 道 and the fixed form the *su* 數. And the final result is succession 繼 which includes the idea both of *evolution and devolution.*

The *tao* is the mother of all things—the originator with limitless resources, unseen, all-powerful—it cannot be apprehended with the finite senses. Thus we have a fundamental principle, highly idealistic and profoundly abstract.

The *li* 理 or *tao* 道 is by nature good, hence man is by nature good. But the *tao* is inseparable from the material *ch'i* as its grossness more or less impedes the spiritual *ch'i*, *Moral differences and diseases are consequent on the degree and amount of the fineness of the ether. Grossness in the ether impedes the progress of ethical principles and causes disease. Fineness of the ether allows illustrious virtue to be displayed and all being in harmony, good health is produced.* To obtain long life and immortality it is necessary to obtain the *tao. It is to be remembered that everything existing on the earth has its counterpart in the heavens and vice-versa—all are ruled by the tao which in its subtle essence is the celestial bodies.* The sun is the male and the moon the female principle, and the 5 planets have their counterparts in the ceaseless changes of the Five Elements. The number five is most important in the Chinese theory of nature. The five elements have their counterparts in a bewildering series of fives, almost endless, deviating into every social process, with complicated adjustments comprehensible and incomprehensible applications. Each element has a parent, child, enemy and friend element corresponding to it, e.g. water has metal for a parent, wood for a child, earth for an enemy, and fire for a friend. In compounding drugs all of these have to be considered more carefully than the Western physician thinks of the properties of his drugs. It is the idea in incompatibles extended to the n-th degree. To each element there correspond 5 tastes, 5 colors, 5 musical notes, 5 ranks, and 5 qualities. There are also 5 minerals, 5 grains, 5 fruits, 5 sacrificial animals, 5 guardian mountains, 5 virtues, 5 degrees of mourning, 5 blessings, 5 shapes, 5 smells, 5

senses, etc. When one takes into account all of these with the sun and moon, constellations and planets, 12 signs of the zodiac, 28 asterims, and from 54-72 varieties of pulses, one need scarcely wonder why there are so few real doctors in China. The above is a beginning of the complexity of the problem, all these and far more peculiarities are to be reckoned in the diagnosis, treatment and prognosis of disease according to Chinese principles of medicine.

To the Chinese philosopher and medical man, climatic change is directly related to the moral as well as the physical well being of man. *From instant to instant the force and direction of the cosmic currents, Yang and Yin, the spiritual progressive and destructive movements, the negative and positive magnetic energy, if you care to so designate it, are modified by the sun and moon and other heavenly bodies.* The constant changes in the heavens are correlated with the constant changes in the earth, the seasons, life and death, growth and decay. Heaven, or it might be said "climate" rules all. The power exerted by heaven on earthly things varies with the position of the heavenly bodies in the eliptic *hwang tao* 黃道 and in the azimuth. Hence the importance of the compass and almanac in medicine. Each of the planets exercises a special action on a definite part of the body, and at the same time is associated with a metal, which in turn cures certain ills of the body. The science of these influences is called Astrology, and the art of suiting the metals to the needs of the body is called Alchemy. In early times astrology was the eye and alchemy the mouth of medicine.

The abstract and speculative pseudo-science of alchemy was founded on the assumption that from the continued unions and disunions of the *Yang and Yin* the five elements of which inanimate and animate matter are composed gradually change into each other. Since man is formed of these elements, the same principles are at work and consequently an intimate interrelationship has developed between medicine and alchemy.

Man as a product of the universe, is composed of the five elements, and consequently is governed and controlled by the same laws as all other objects. He arose from the vital essences, the Yang and the Yin and returns to them he, therefore, shows the same properties as do those two forces. He is a micro-organism in a macro-organism. He a miniature heaven and earth "*jen shen ih hsiao t'ien ti*" 人身一小天地. Man's body has a material soul or *kwei* 鬼 and a spiritual soul *shen* 神; the first is the coarser part of his being and the second the finer, subtle, spiritual essence; both are from the 5 elements. At death, these two parts of his being separate, the *shen* goes on high to heaven or the *Yang*, and the *kwei* returns to the earth or *Yin*. Thus the souls of deceased ancestors are ever present in heaven and earth. (See table II.)

The *Pen Ts'ao* 本草, the famous pharmacopea of the Chinese, shows that the various drugs prescribed for different ailments are selected mainly for their symbolic application rather than for their medicinal properties.

It is the duty of the physician, in case of disease, to harmonise these series of fives, which are both antagonistic and complementary in action so that the ebb and flow of the *Yang and Yin* is restored to equilibrium and thus produce health through the regulation of excesses and deficiencies of the essences, principles or humours of the body.

*Chinese mystical philosophy in modern terms is illustrated as follows:

TABLE III

CHINESE COSMOLOGY	*LI* 理	*SU* 數	*CH'I* 氣	*HSING* 形
MODERN PHILOSOPHY	ORDER	NUMBER	MOTION	MATTER OR FORM
	LAWS	MATHEMATICALLY EXPRESSED	EVOLUTION INVOLUTION	FORMS ARE THE INTEGRAL OF CAUSES
PSYCHIC	MIND	SUCCESSION OF (MOTIVES)	POLAR STATES (EMOTIONS)	EXPRESSED IN FORM, MATTER OR MOTION
THE UNIVERSE	MONISM	MATHEMATICALLY RELATED	POLAR DIFFERENTIATION-NEGATIVE AND POSITIVE	SUCCESSION OF MATTER OR FORM

"Vibrations express themselves as forms of *ch'i* 氣, the vitalising Breath of the Universe, when considered in the form of Energy. This "Energy" is precisely equivalent to the Chinese 氣 and can be indentified with *shen* 神, Spirit, or God, it being the indestructible infinite source of all change. It has two forms (Potential *Yin* 陰 and Kinetic *Yang* 陽) and a vibration consists in the interchange of these two. From inception to climax, the Kinetic Energy decreases, being converted to Potential. From climax to reversal Potential decreases and becomes Kinetic. From reversal to anti-climax Kinetic decreases becoming Negative Potential and from Negative Potential we return to Positive Kinetic energy at the inception of a new vibration. The *Ssu Hsiang* 四像 picture this change well:—

*"Chinese Mystical Philosophy in Modern Terms," Herbert Chatley D.Sc., China Journal of Science and Arts, March 1923.

Positive Kinetic is 陽上 *Yang Major* ⚊

Positive Potential is 陰下 *Yin Minor* ⚋

Negative Kinetic is 陽下 *Yang Minor* ⚊

Negative Potential is 陰上 *Yin Major* ⚋

Add to this the idea of increase and decrease and we get the *Pa Kua* 八卦

+K. Decr. ⚊ ● ○ ○		−K. Decr. ⚊ ● ● ○	
+P. Incr. ⚊ ○ ○ ●		−P. Incr. ⚋ ○ ● ●	
−K. Incr. ⚋ ○ ● ○		+K. Incr. ⚊ ○ ○ ○	
+P. Dect. ⚊ ● ○ ●		−P. Decr. ⚋ ● ● ●	

One of the latest conceptions of the workings of the laws of the universe, according to scientists working in the field of thermodynamics and applying Einstein's theory of relativity, states that the universe goes on through reversible processes at a definite rate and that there is an unending succession of expansions and contractions like a limitless breath acting on the universe in an unknown way. This is rather strikingly like the theory of the *Yang and Yin*.

It is not that the Chinese anticipated modern scientific advance, nor pophesied it. Their Cosmological theory is so broad all-inclusive and general that it may be applicable to almost, if not any theory, ancient or modern. Therein lies an indication of ability and intelligence that cannot be gainsaid.

Yang and Yin

These creative and destructure forces *Yang and Yin* are the underlying principles of the Chinese system of creation. Heaven and Earth, which the *Yang and Yin* respectively manifest or represent are in essence looked upon in a physical sexual light. They are constantly uniting and separating. There is the definite idea of marriage with the generation of all things in the world, animate and inanimate. The *Yang and Yin* at the same time possess mutual affinities as well as mutual antipathies. They conflict but do not annihilate. They are contradictory but are not opposed in quality and quantity. In morals the differences are more theoretical than

practical. Their interaction creates and their separation destroys all objects in nature. They are never entirely and absolutely distinct, there is always some of the one connected with the other. Even in periods of greatest expansion of the one, the other is present. Their pictorial representation is an egg-like figure distinguishing the two principles, containing a contrasting and equally sized double yolk in black and white. There is in the white part a black dot and in the dark part a white dot which conveys this idea.

As soon as the Yang fluid reaches a climax, there is a reversal to the Yin, when the Yin fluid reaches a climax it reverses to Yang (See translation *Chen Jen T'u* chart), e. g. in spring *Yang* rises and all products originate, in summer it ceases to rise and products grow and there is a reversal to *Yin*. In autumn the *Yin* descends and products are harvested and in winter it reaches its limit and reverses to *Yang*. Thunder is the intermingling of the *Yang* and *Yin*. Lightning is the mutual excitation of the two. Fog is the confusion of the two elements and rain is the harmonious union of them.

There is a parallelism and there are broad general likenesses but there are also differences between the *Yang* and *Yin* theory as compared to *Osiris and Isis* of the Egyptians, the numerical conception of Pythagoras, Plato's dualism and the *Chrimuz and Ahriman* of Zoroaster. The *Yang* and *Yin* theory is, on the whole, a theory of physical things and not so much religio-mystical. The moral side is more, as it were, a corollary of the physical rather than fundamental to the theory itself. The ethical-political phase is probably an application by Confucius of the *Yang* and *Yin* theory.

Yang and Yin originally meant the bright sunlit side and the dark cold side of a hill. *A definition of all the qualities of these forces would include an interminable list of terms, that would fit into every imaginable event of animate and inanimate life.*

In this appended table a few of their many qualities are set forth :

TABLE IV

Yang	*Yin*	*Yang*	*Yin*
Monad	Duad	Sunshine	Clouds
Sun	Moon	Summer solstice	Winter solstice
Light	Darkness	Spring, Summer	Autumn, Winter
Male	Female	Rain and Dew	Frost and Snow
Life	Death	Drought	Inundation
Heaven	Earth	Dryness	Humidity
Day	Night	Warm air	Watery vapour
Spiritual	Material	Tenth month	Fourth month
Spirit	Ghost	Hail	Sleet
		Raised Land	Valley-Streams

Developement	Degeneration		
Vigour	Quiescence	Good	Bad
Limited	Unlimited	Clear	Turbid
Increase	Decrease	Raised	Flat
Creating	Destroying	Highest	Lowest
Construction	Destruction	Flowers and Fruit	Trunk, Roots and Leaves
Vitalising	Weakening	White, Red	Black
Joy	Sorrow	Fast	Slow
Benevolance	Justice	One	Many
Wealth	Poverty	Light	Heavy
Virtue	Vice	Strong	Weak
Reward	Punishment	Hot	Cold
Generosity	Egotism	Above	Below
Music	Rites	Broad	Narrow
		Tall	Short
Positive	Negative	Straight	Crooked
Anode	Cathode	Hard	Soft
Active	Passive	Fire	Water
Acid	Base	Thick	Thin
Expanding	Contracting	Full	Empty
Energy	Inertia		
Penetration	Absorption	Hairy animals	Crustaceans
Kinetic	Potential	Birds	Fish
Climax	Anticlimax		
Motion	Repose		
Irritibility	Non-irritibility		
Universal	Particular		
Escaping	Concentrating		
Advancing	Retreating		

IN MEDICINE AND MEDICAL PROCEDURES

Fecundating	Breeding	Organs (empty)	Viscera (solid)
Arteries	Body	Left side	Right side
Head	Feet	Delirium	Unconsciousness
Nose	Mouth	Fever	Cold
Eyes	Ears	Breathing	Circulation
Back	Abdomen	Strong (pulse)	Feeble (pulse)
Coating of vessels	Lining of vessels	Anterior	Posterior
Speaking	Silent	Hot, dry skin	Cold, wet skin
Exterior	Interior	Drinking	Eating
Outside	Inside	Breath	Blood
Upper part of body	Lower part of body	Expiration	Inspiration

Anabiotic	Catabiotic	Heavy breathing	Light Breathing
Assimilation (constructive metabolism)	Retrograde metabolism	Skin of surface Fever	Interior of body Chills
Anabolism	Catabolism	Respiratory	Circulatory
Heart	Spleen, Lungs	Disease with sudden onset	Disease with gradual onset
Liver	Kidneys	Stimulants	Astringents
Upper body diseases	Lower body diseases	Resolvents	Purgatives
Cannot bend back	Cannot lie on back	Expectorants	Haematics
		Sweet	Bitter
Pulses strong bounding and large	Pulses weak and of low tension	Higher nerve centres	Lower nerve certres
		Mania	Coma
Hot decoctions	Cold infusions	In insanity the entire *Yang* is concentrated in upper half of the body. the entire. *Yin* in the lower half of the body.	
Disease due to external causss	Disease due to internal causes		
Yin predominating causes	*Yang* predominating causes		
Yang disease.	*Yin* disease		

Five Elements.

In "The Great Plan 洪範 of the *Shu Chin* it is set forth that the *Yang and Yin* generated the Five Elements. *Every object in the cosmos is composed of these Five Elements.* This theory is peculiarly Chinese. The Chinese Sacred Books clearly show the intimate relation of human kind to all of the rest of nature.

The Five Elements are partly physical and partly metaphysical. They are perpetually active, in the process of growth and decay through the influence of the *Yang and Yin* principles. "They are both friendly and antagonistic to each other-"相生相剋" *hsiang seng hsiang k'eh.* They are water 水, fire 火, wood 木, metal 金, and earth 土. They interrelated as follows :

Water produces wood but destroys fire;

Fire produces earth but destroys metal;

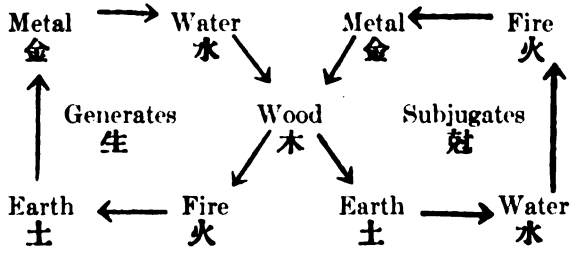
Wood produces fire but destroys earth;

Metal produces water but destroys wood;

Earth produces metal but destroys water.

DIAGRAM I

Diagram of the Five Elements interacting on each other*



Chu Shi 朱熹 says "that the Five Elements are not identical with the five objects whose names they bear, but are subtle substances whose nature is, however, best manifested by these five objects."

Man as the foremost amongst 365 naked creatures belongs to the element earth, but the parts of his body and his moral qualities are connected with all the Five Elements, and produced by them. The correspondencies of the five constituent parts of the body, muscles, veins, flesh, skin, hair and bones and of the viscera with the elements is intimate.

Man is the union of the *Ying* or grosser animal parts of the Five Elements as well as the spiritual finer *Yang* or ethereal matter of those elements. Thus man's body, mind and spirit are intimately related.

"The cosmic breath which animates vegetation, animal life, man and the dead, waxes and wanes with the cycles of the sun and moon."

The Five Elements govern the Four Seasons Rain 雨, sunshine 陽,暘, heat 煖,煥, cold 寒, wind 風.

Each element predominates during one season, while so doing, it may be well balanced and have its proper quality and quantity or it may be excessive or deficient. Excess or deficiency each prognosticates calamity and/ or disease.

Each element in equilibrium is governed by a select part of the body, e. g. eye, tongue, mouth, etc.

Each element has a special sickness assigned to it, e. g. convulsions to fire, coughing to metal and constipation to earth. Irregularities of the elements entail much disease, e. g., if wood is in excess the earth and spleen suffer and as a result one has pains in limbs, flatulency, diarrhoea and vomiting; if wood is scarce there are pains in ribs and stomach and one has coughs, catarrh,

*"History of Chinese Medicine", Wang and Wu p.11.

eruptions, sores and ulcers; if fire is scarce there are pains in breast, back and shoulders, arms, heart, rheumatism, cramps, paralysis, swooning etc.

They are in constant motion and alternatly exhaust each other. Each of the five sounds, five tastes, five colours, etc., are not said to be identical with the five Elements but are closely connected and declared to undergo similar regular revolutions by which each sound, taste, colour, etc. becomes the principle one and is then changed into another.

From the operation of the five Elements proceed the five atmospheric condition 五氣, five kinds of grain 五穀, five planets 五星, five metals 五金, five colours 五色, five tastes 五味, etc., each of which is governed by its appropriate element, and should not be rashly mixed together or disater will ensue. The ten celestial stems are also influenced by the Five Elements. See table IV and V for their complete scheme of affinities or "correspondents".

"Five was first written X being four lines and a centre, or five parts. Then these were placed between two lines representing heaven above and earth beneath or the Dual Powers *Yin and Yang* begetting the Five Elements."

"The Spirits of the five Elements are known as Five Ancients who are also regarded as the Spirits of the Five Elements."

Acupuncture or Needling Operation

"To understand the present, one should examine antiquity, but for antiquity things would not be as they are now." Chinese Proverb, Foster.

"The ancients saw not the modern moon, but the modern moon shone on the ancients." Chinese Proverb, Scarborough.

"Man is an infant born at midnight, who when he sees the sun rise, thinks that yesterday never existed." Lao Tsi.

"The swiftness of time is infinite, which is still more evident to those who look back upon the past." Seneca.

"To complete a thing one hundred years is not sufficient, but to destroy, one day is more than enough." Chinese Proverb.

"The twelve vessels are deeply hidden between the muscles and cannot be seen." Lan Chin.

"The mass of humours now dissolved within, to purge themselves by spittle shall begin." Frascatorius.

"Through all thy veins shall run a cold and drowsy humor, which shall seize each vital spirit." Romeo and Juliet, IV,1.

TABLE OF THE FIVE ELEI
CORRESPONDEN

Five Elements 五行	Wood
Four Seasons 四時,	spring
Five Emperors 五帝	太昊 (T'ai Hao)
Five Spirits 五神	Kou Mang
Five Sacrifices 五祀	inner door
Five Animals 五牲	sheep
Five Grains 五谷	wheat
Five Intestines 五臟	spleen
Five Numbers 五數	8
Five Stems 天干	chia 甲 yi 乙
Five Colours 五色	green
Five Sounds 五音	chio 角
Five Tastes 五味	sour
Five Smells 五臭	goatish
Five Points 五方	east
Five Creatures 五蟲	scaly
Five Parts of body 五體	muscles
Five Souls	mind 魂
Five Senses	smell 臭
Eive Impulses 五志	joy
Five vituos 五德	benevo-lence

*··World-Conception of the Chi
A. Forke, 1925. Probsthain an

s, and a Complete Scheme of Affinities or

Shown in the Table Below.

Lesser Negative			Shao Yang Lesser Positive
Ho Hsing Mars	Mu Hsing Jupiter	T'u Hsing Saturn	Hsing Fixed Stars
Dark			Light
8			7
Mouth			Nose
Wei 尾 6 Shih 室 13 Tsui 嘴 20 Yi 翼 27	Chio 角 1 Teo 斗 8 K'uei 奎 15 Ching 井 25	Ti 氐 3 Nü 女 10 Wei 胃 18 Liu 柳 24	
Heart	Liver	Stomach	
Bitter	Sour	Sweet	
Red	Green	Yellow	
Fire	Wood	Earth	
Wood	Water	Fire	
Earth	Fire	Metal	
Water	Metal	Wood	
Metal	Earth	Water	
Ping 丙+3 Ting 丁-4 South	Chia 甲+1 Yi 乙-2 East	Wu 戊+5 Chi 己-6 Middle	
Sze 己 6 Wu 午 7 Wei 未 8	Yui 寅 3 Mao 卯 4 Ch'en 辰 5	in the center	
Torch Lamp	Fir Bamboo	Mountain Plain	
Serpent Horse Goat	Tiger Hare Dragon		
So	Mi	Do	
Affairs	Subject	Prince	
Worship	Love	Faith-fulness	

p. 184, Pt. 1.

"I feel my liver pierced, and all my veins, that there begin and nourish every part mangl'd and torn." Tamburlane pt. III, IV.

"All the infections that the sun sucks up from bogs, fens, flats on Prosper fall and make him by inch meal a disease." Tempest II, 2.

"Swift to their several quarters, hasted then the cumbrous elements earth, flood, air, fire." Milton.

"Man is Heaven and Earth in miniature." Chinese Proverb, Scarborough.

"The principles of Heaven revolve in a circle with not a hair's breadth of deviation." Chinese Proverb.

"No one should intrust his health and life to one who is not versed in Astronomy." Hippocrates.

"When the members work joyfully the head rises grandly and the duties of all the offices are fully discharged. When the head is intelligent the members are good, and all affairs will be happily performed". Shen Lung (2258-2206 B. C.) in Shu Ching.

The operation of acupuncture is supposed to be a strictly Chinese procedure. The medical history of no other nation, as far as can be ascertained by the writer, contains an account of this practice; for that reason, and, because it is, perhaps one of the best objective practical exemplifications of the Chinese theory of cosmogony as applied in medical practices, there will be herein recorded a more or less detailed explanation of the process.

The actual origin of this procedure dates from the remotest antiquity but the date of the beginning of the theory, and the first exponent of it are unknown. The theories concerning the acupuncture channels, are said to have been originated by Hwang Ti, an Emperor of China during the Legendary Age about 2697 B. C. That was the supposed origin and is the basis of the present day ideas on the subject. There has been little modification of the original ideas since that time, practially nothing new has been added in forty centuries.

The operation of acupuncture consists in the introduction of hot or cold metal needles into the living human body as a remedial agent. There are nine kinds of needles used, viz., arrow headed, blunt, puncturing, spearpointed, ensiform, round, capillary, long and great. These needles may be silver, gold, brass, copper steel, or iron. In ancient times flint needles were used. The needles are either fine, or coarse; short, or long (3 to 24 cm.).

The object of the procedure is to puncture and penetrate at certain definite points one or more of certain hypothetical, invisable, undissectable channels or "chin," which according to theory contain the vital essences the *Yang and Yin*. These channels, cannot contain blood for they are nonexistent, but their supposed contents are said to exert a very profound influence on the circulation of the blood and every organ and tissue of the body.

Apparently these channels are what might be designated as, the "outside" control of the blood vessels which are themselves "internal" and which more intimately connect the organs and viscera. There is *no direct connection* between the twelve channe' system and blood vessel or circulatory system.

The channels are supposed to be deeply set in the muscles.

According to the Chinese idea of splanchnology and angiology, the five organs of the body work harmoniously and serve to develop the body. They are related to the six viscera, with which they are reciprocal, as follows:—

The lungs 肺 relate to the large intestines 大腸 which respond to the skin 皮.

The heart 心 relates to the small intestines 小腸 which respond to the arteries 脉.

The liver 肝 relates to the gall bladder 膽 which responds to the ligaments 筋.

The spleen 脾 relates to the stomach 胃 which responds to the muscles. 肉.

The kidneys 腎 relate to the three burning spaces 三焦 and bladder 膀胱, which respond to the bones 骨 and hairs 毫毛.

Table VII illustrates this in tabular form and Diagram II furthur demonstrates the interrelationship.

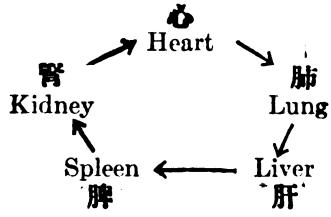
TABLE VII

The Management and Inter-relationship of the Five Organs.

Organs 器官	lung 肺	heart 心	liver 肝	spleen 脾	kidney 腎
Relation 合	large intestine 大腸 (skin) 皮	small intestine 小腸 (lung) 肺	gall bladder 胆 ligament 筋	stomach 胃 muscle 肉	bladder 膀胱 3 burning 三焦 (bone) 骨
Response 應	skin 皮	vessels 脉	ligament 筋	muscles 肉	sweating pore 腠理 hair 毫毛
Nutrition 營	hair 毛	kidney 色	nail 爪	lips 唇	head hair 髮
Managers 主	heart 心	kidney 腎	lung 肺	liver 肝	spleen 脾

DIGARAM II

Diagram of the Managerial Inter-relationship of the Five Organs.



The operative procedure in acupuncture is as follows: the patient sits down and while coughing the needle is inserted through the taut skin by a twisting motion, by pressure or by light taps of a hammer. It is then screwed or twisted home to the required depth. When the needle is entered correctly some black blood oozes out, which is said to be the malicious ingredients relieving the stagnation of the vital essences. The number of needles used, the site of the insertion, the time to be left in, the direction of the needle point, the twisting of the needle to right or left during insertion, whether hot or cold needles be used, whether or not the operation be repeated, depend on the disease, the theory of the treatment, and, or, the individual doctor and patient. The details of the procedure are carefully worked out.

On withdrawal of the needle, firm pressure may be applied to the puncture spot, or moxabustion at the site is practiced. Acupuncture or moxabustion may be used separately, or in conjunction.

Moxabustion is the burning of powdered leaves of mugmort (artemesia vulgaris) on the skin. Sulphur or rush pith soaked in oil may be used instead of the artemesia. Frequently at our hostpitals we find patients with scars (sometimes over a hundred) resulting from this procedure. The moxa is rolled in small pellets mixed with saliva and lighted with a taper or burning incense stick. When it burns to the skin the burning mass is crushed into the blister formed. There are moxabustion charts distinct from acupuncture charts These modes of treatment, that is, acupuncture with or without moxabustion are very common in China. It is a sort of universal panacea, but is used chiefly for fractures, stone in the bladder, rheumatism, sprains, swollen joints, lameness and deep seated pains from any cause and in any part of the body. It is doubtless true that this procedure must have been empirically successful or it would have been discarded. Probably more harm than good results from the procedure. Acupuncture is used in leprosy and the following explanation from the Nei Ching, (Hwang

Ti's classic written 5000 years ago), very plainly expresses the reason for the procedure. "The wind scatters through the muscles and comes into conflict with the defensive forces. The channels being clogged, the flesh becomes nodular and ulcerates. And because of the stagnant movements of these defensive forces numbness results."* Acupuncture relieves the stagnation and hence cures (sic) the leprosy.

The procedure was introduced into Europe at the end of the seventh century. Acupuncture has been used by Sir James Cantle on sprains and in chronic rheumatism and reported upon favourably.

The sites for acupuncture are many, varying with authorities from three hundred to over six hundred. Usually about three hundred and sixty-five are recognised.

When the needles puncture the different tissues, for example, the ligaments, muscles, etc., at various depths, there will be a reaction in the organ to which the tissue is related; that is, when the skin is punctured the lungs are affected, when the muscles are pierced the spleen will be affected, etc. This channel system is thus connected indirectly with all the parts of the body, and causes the blood and air to circulate, and nourishes the male and female principles, it moistens the bones and ligaments, and lubricates the joints.

Chinese pathology is strikingly similar to the old humoural pathological idea and the acupuncture needles allow the morbid juices to escape from the affected parts. But the Chinese theory includes much more than that of the humours, it regulates the electrical flow of gases which underlie health conditions.

From a detailed memorandum made by a Chinese physician-teacher at my request, for information regarding the use of acupuncture needles, I have translated but one example, as follows: "A patient comes with severe pain in shoulder, arm and lumbar region. Pain is unbearable, especially in the back. It is caused by wind, cold and vapours. The treatment is; use needle and cautery (moxabustion) in following places; at *pai feng* 背縫. (the groove of back), on the right and left sides, at end of the shoulder bone; and below the shoulder bone insert a needle for 2 inches to go straight into the axilla, then use moxabustion 7 times and the disease may be cured".

The actual procedure as witnessed by the writer is as follows— While walking in the street at Suifu, Szechwan, I was attracted by a large crowd in the market place surrounding a Chinese surgeon (?) who was *executing* the art of surgery by means of needles in the operation of acupuncture.

*Translation by Dr. K. C. Wang, China Medical Journal, XLIV p. 737.

The operator was standing in a small square formed by four benches on which sat the patients, and the dense crowd pressed in closely behind them to watch and listen to him. The patients seemed like the chap with the itch, who said "he was silently suffering extensively"

That man was an orator of the patent-medicine class. He had personality and his oratory was of no mean type. He traded on human curiosity, credulity, faith—and won; a misguided genius who in the face of great need seized his opportunity with overwhelming optimism and great skill, and moulded the psychology of the crowd to his will. His expertness was remarkable and the patients were not a few. He was dressed in a long gown which was originally blue, but which had become glistening, smooth, shiny and variegated through varying degrees of accumulated droplets of soup and grease dropped while inhaling his food. To judge from the front of his gown he had "static" and there had been many a slip betwixt bowl and lip.

On his feet were cloth soled shoes which had incorporated in their texture material of the general colour and consistency of mud. This adventitious material was accumulated from passing through the wet streets where dogs, chickens, pigs, ducks and children, equally careful in their toilet, had contributed their quotas. These streets are marked and marred with copious nasal and buccal discharges, as well as being lavishly fertilized by continual droppings from pails of liquid night soil. His shoes were an entomologist's paradise of uncountable specimens. His nails were very long, thick and stained with opium. On the ground before him were spread four large charts, (see figures). These charts explained something of his supposed theory and were attractive because of their heritage of four thousand years. They very deeply impressed his audience. These charts showed the places which talented ancients had indicated as safe for the needles' entrance.

Suggestively placed on the charts were coins, moxa and an assortment of twelve needles 3-24 cm. in length.

I saw needles inserted deeply into the suprasternal notch and in the grooves above the clavicle. These needles were vibrating from juxtaposition to the great arteries of the neck. Needles were inserted 5 to 15 cm. into the liver and epigastrium. Needles pierced the thigh, forearm, arm, foot, hand, leg; transfixed the knee, elbow, wrist and ankle joints. Another needle passed through the lachrymal sac and proceeded inwards along the inner wall of the orbit, apparently deeply enough to enter the brain.

Some of the needles were inserted before I arrived, but I saw several inserted. One insertion was rather striking and gruesome. The needle entered the nose until it reached, I would think from its direction, the ethmoid plate and then was struck a considerable blow and it pierced I presume, the ethmoid plate and entered the brain.

One patient with trachoma had a needle inserted for an inch into the upper part of the ear and another for the same disease had a needle transfixing the nose. No place seemed sacred or free from the ubiquitous needle.

The operator's procedure for sterilization (sic) varied. No application was made to the skin. He "cleaned" the needle with his thumb nail, rubbed it through his hair, or rubbed it off on his gown, or the sole of his shoe, or all of these, then lubricated the needle with spittle and drove it home!

After a suitable time he removed the needle, applied moxa, set it on fire, and crushed the ashes into the formed blister with his finger nail. The procedure was complete—until complications arose—which, by the way, are explained as being due to the disease and are not caused by the operation.

One might conjecture the reasoning somewhat as follows. The organs of the body severally concur in the maintenance of the whole body. Each organ contributes to the system; they are all under control of the *Yang and Yin*. There must be routes through which the essences travel to regulate the body, therefore these "channels" must exist though invisible to the eye. They are actualities to the philosopher of medicine. To a profound Chinese scholar, principal of *Kueh Yuen* College at Chengtu who visited our dissecting room on several occassions I said "You have seen us dissect this body from the skin surface in front to the surface of the skin on the back of the body, and no channels have been found, how do you explain it?" Without a moment's delay he answered "Yes, they were not found; but they are there," and turning to a Piersol's chart demonstrating the venous and arterial systems in a diagrammatic manner he said, "the principle of the *Yang* and *Yin* is explained somewhat as you explain that chart" Could it be possible that the old scholar had a conception about metabolic processes?

THEORY OF ACUPUNCTURE AS EXPLAINED BY COSMOLOGY:—

The Chinese theory of cosmogony premises that all nature possesses the two vital, invisible, intangible, creative and destructive essences the *Yang and Yin*. It also states that all nature is from one source and is guided by an unalterable universal law,—the *Tao*. Man as a part of nature is of course governed by these forces or essences or breaths. These essences exactly conterbalence each other in all nature, that is, theoretically they are qualititively and quantitatively of equal amounts but are in a continual state of ebb and flow; they are continuously causing successive changes of energy. The distribution of these essences is not uniform at any time or place in the body. Certain parts, for example the organs, are female and the *Yin* predominates, the viscera are male and in

them the *Yang* predominates. There are other situations, especially on the head and particularly near the eyes and ears, where the essences congregate as force in a storage battery. If the state of flux is continuous and uninterrupted and there is no stagnation of the essences in certain parts there is harmony and health, but if the conduction and radiation is interfered with there is disharmony and disease.

The "twelve channels" are supposed entities or anatomical facts taken for granted by Chinese philosophers in order to draw conclusions regarding the actions of the *Yang and Yin* principles. The descriptions in Chinese medical books vary somewhat with the ability and imagination of the authors. There seems general agreement about the origins of the channels near the fingers and toes, which start from there and proceed to distant parts; for example, to eye, ear, or nostril. How it is accomplished is a question not made clear by the Chinese medical writer.

The "twelve channels" are the transportation system of the *Yang and Yin* principles. It is somewhat similar to the old doctrine of the circulation of the humours. The needle allows the overbalanced and therefore, harmful humour to escape, removes obstruction caused by malicious excesses, draws away morbid juices, relieves the stagnation of vital principles, fresh vital essence is introduced, equilibrium is restored and health ensues.

To adjust the body and its organs to the theory there must be premised certain anatomical assumptions. These are the twelve "double" and eight "single" channels, "three burning spaces,"* and the "gate of life."† *The burning spaces may by regarded, theoretically, as probably storage batteries of the Yang and Yin and are connected with the twelve channels.*

The *Yang and Yin* principles each have respectively three degrees of quality; these are the male and female great principle, the male and female principle proper and the male and female young

---

*The "three burining spaces" and a subject of much controversy. They are said to be of no form by some, and formed by other writers. One theory contends they are similar in action to storage batteries or reservoirs of energy and that they control the gas and blood in the arteries. Another authority claims the upper burning space is above the stomach and controls the heart, lungs and stomach. The middle space controls digestion and sends products of digestion to the lungs to nourish the body. It controls the small intestines, spleen, diaphragm and kidneys. The lower spacecontrols the great intestines and bladder. Its function is excretion of faeces and urine. The three burning spaces control and correlate heaven, man and earth. The earth receives food from heaven, gives it to man who returns it to earth; a circle.

†The "gate of life" is between the kidneys, or is designated as the right kidney, which in the male contains the semen and in the female contains the uterus.

or lesser principle. According to the theory, it is necessary to assume these qualities. Each of these six principles influences the pulse in a definite and distinct manner, because they control the proportion of blood and air in the arteries *and the "feel" of the pulse explicity indicates each and all of these conditions.*

The Diagram of the Nine Acupuncture Needles

The description begins with the first needle to the right and follows consecutively across the picture in order to the ninth needle.

Tsan chên or, chisel needle—it is 0.5 inch* wide and 1.6 inches long. It has a large head with a sharp pointed tip. It is used in the treatment of skin diseases. It is used while hot. The present name is the "arrow head" needle.

Yuîn chên or, round needle, the shaft of this needle is cylindrical and its tip is shaped like an egg. It is 1.6 inches long. It is used in massage and for separating muscles.

Chih chên, or, spoon needle, is like spikelets of barley. It is 3.5 inches long. When the "pulse and gas are weak" do not use. It is now called the "three bordered" needle.

Fêng chên, or lance or spear needle, has three edges and is 1.6 inches long. It is used in chronic diseases and when a considerable sized hole is required. It is now called the three bordered needle.

P'i chên, or stiletto needle, so called because its blade is like a sword blade. It is 1.5 inches wide and 4 inches long. Its use is to release chronic diseases from the vessels.

Yuân li chên, or, round, sharp needle "like the tail of the yak", it is round and sharp. Its tip is somewhat enlarged. It is 1.6 inches long. It is used in acute pain and paralysis, but is not used to make a large opening.

Hao chên, or long "soft hair" needle. It is like a hair, its point is similar to the proboscis of a mosquito. It is 3.6 inches long. It is used in treatment of pain and paralysis and chronic disease (e. g. rheumatism). It is used cold.

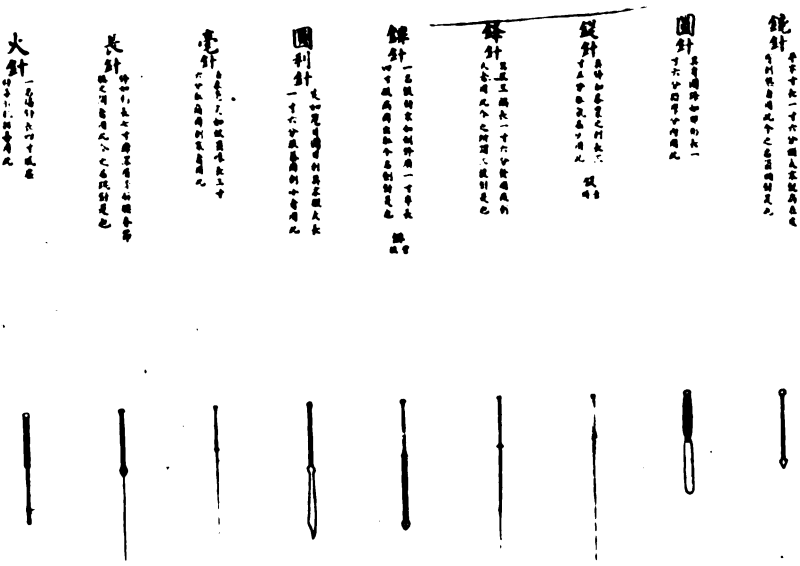
Ch'ang chên, or long needle. It is 7 inches in length. and its point is very sharp. It is used in treatment of chronic diseases, pain deep in joints and the lumbar spine and where ligament and bones meet. It is also called the "jumping" needle.

Ho chên, or fire needle, also called "roasting" needle. It is 4 inches long. It is used in diseases caused by wind, in swellings, for separation of muscle and to drain away poisons.

---

*The Chinese inch is considerably longer than the English inch.

九針圖



Chiu chên t'u, or "The Nine Acupuncture Needles".

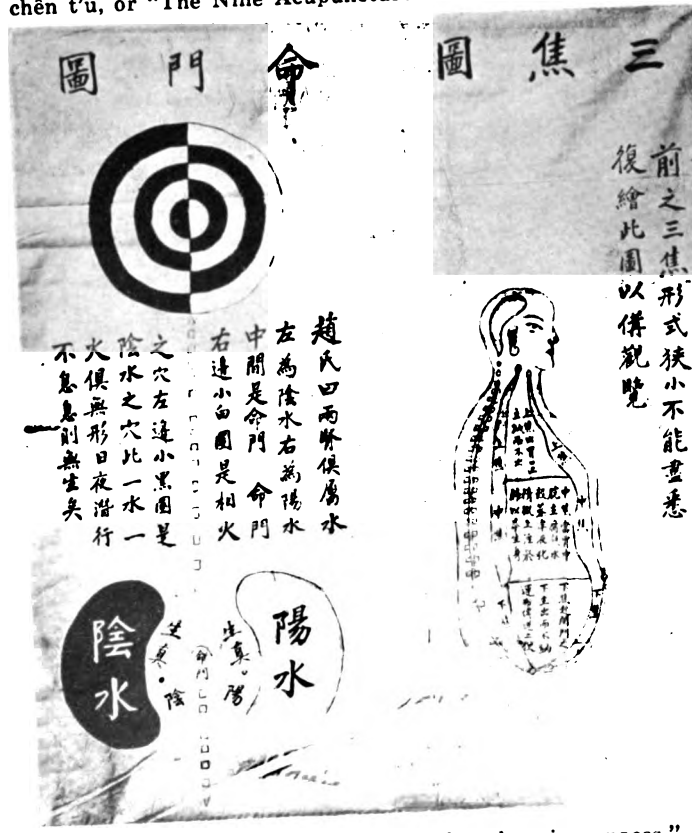


Diagram of the "Three Burning Spaces"

The upper burning space is about the "opening of the stomach." It receives but does not give out.

The middle burning space is situated "at the centre of the stomach." It governs the grinding and dissolving of the water and rice (i. e. food), and changes them into vapour and fluid, essence and element to support or nourish the living body!

The lower burning space begins below the caecum. It gives but does not receive. The faeces and urine come out from this space.

Diagram of "Gate of Life".

"Both kidneys belong to water but the left kidney is *Ying* water while the right one is *Yang* water. Between them is the "gate of life".

In the diagram on the right side of the "gate of life" there is a white spot which represents the cave or pit of the minister of fire, *Yang*. On the left side of the "gate of life" there is a black spot which represents the cave or pit of *Ying* water.

The water and fire are without form and invisible they circulate day and night without ceasing. If the action should stop death occurs.

The diagram at the top, i. e. the inter-related circles, illustrates the ceaseless flowing of the elements *Yang* and *Yin* into each other.

The great male principle causes much blood and little air in the arteries; the male principle proper is the main spring that induces both blood and air in good quantity and quality In the circulation; the young male principle produces little blood and much air in the blood vessels; the great female principle is the leaven from which comes little air and little blood; the female principle proper induces air and blood in right proportion; and the young female principle is the agent through whose influence there is little air and much blood in the circulation.

The three male *Yang* tracts of the hand are on the dorsal surface of the hand 手之三陽手外頭; the three female *Yin* tracts are on the palmar surface of the hand 手之三陰胸內手; the three male tracts of the foot are on the dorsal surface of the foot 足之三陽在足內側; and the three female tracts of the foot are on the sole of the foot 足之三陰在足內側.

The great female principle of the lungs is conveyed by the hand *t'ai yin* 太陰 channel. The great female principle of the spleen is conveyed by the foot *t'ai yin* 太陰 channel. The female principle proper of the pericardium is conveyed by the hand *chüeh*

yin 厥陰 channel. The female principle proper of the liver is conveyed by the foot *chüeh ying* 少陰 channel. The young female principle of the heart is conveyed by the hand *shao yin* 少陰 channel. The young female principle of the kidneys is conveyed by the foot *shao yin* 少陰 channel. The great male principle of the large intestine is conveyed by the hand *t'ai yang* 太陽 channel. The great male principle of the bladder is conveyed by the foot *t'ai yang* 太陽 channel. The male principle proper of the small intestines is conveyed by the hand *yang ming* 陽明 channel. The male principle proper of the stomach is conveyed by the foot *yang ming* 陽明 channel. The young male principle of the three burning spaces is conveyed by the hand *shao yang* 少陽 channel. The young male principle of the three burning spaces and of the gall 胆 bladder region is conveyed by foot *shao yang* 少陽 channel.

Beside the 12 channels are 8 vessels with identical functions but these are single not double, they are the *yin wei*, 陰維 "to hold together the negative"; *yang wei* 陽維 "to hold together the positive"; *yin chiao* 陰蹻 "negative of heel"; *yang ch'iao* 陽蹻 "positive of heel"; ch'ung 衝 "rising"; *jên* 仁 "responsible"; *tu* 督 "superintendent" and *tai* 帶 "girdle". Two of these are of special import, the *j n* (the official or responsible channel) contains the *Yin* or female principle and arises at the lower lip and courses along the front of the body to the pubis; the *tu* (the superintendent or viceroy) contains the *Yang* or male principle, and arises at the upper lip, goes up over the top of the head and down the back, ending at the tip of the coccyx.

Large junctions of vessels with muscles are called *hui* 會, smaller ones *hsi* 谿. The site where each channel starts is clled a spring 泉 from which origin the principles flow through channels toward the needling points.

*The courses of the Twelve Channels**—(Chinese authorities apparently do not entirely agree on functions and courses of these channels.)

1. The hand great female lung vessel 手太陰肺經 goes from the middle burning space to the tip of the thumb.
2. The hand male proper large intestine vessel 手陽明大腸經 proceeds from the tip of the thumb and of the small finger to the large intestine.
3. The foot male proper stomach vessel 足陽明胃經 passes from the middle of the nose to the middle toe of the foot.

---

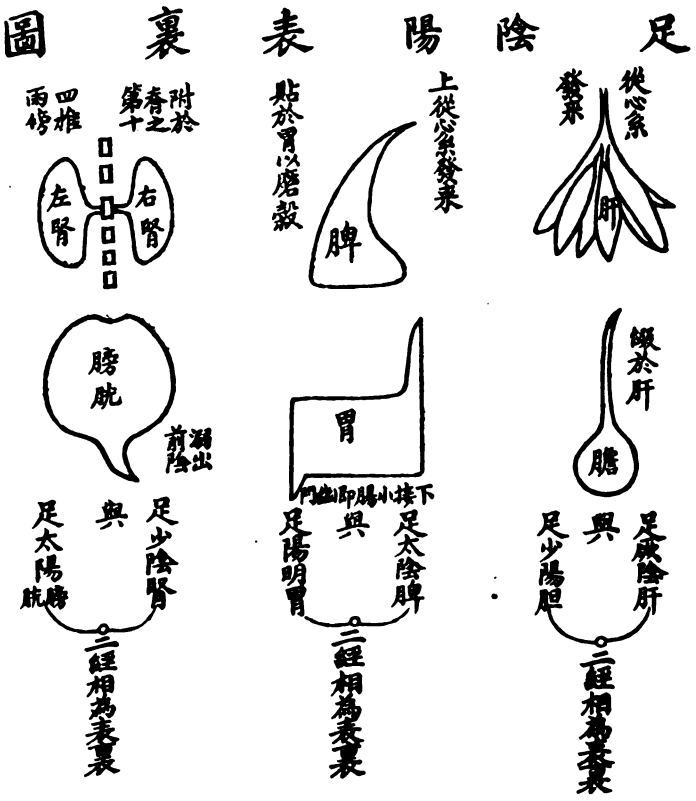
*See article by E. T. Hsieh on "Review of Chinese Anatomy" Anatomical Review, Volume XX, No 2, January 1921.

4. The foot great female spleen vessel 手太陰脾經 arises at the great toe and connects with the lower part of the tongue.
5. The hand young female heart vessel 手少陰心經 goes from the heart to the inside of the middle finger.
6. The hand great male small intestine vessel 手太陽小腸經 proceeds from the little finger to the small intestine.
7. The foot great male bladder vessel 足太陽膀胱經 connects the inner corner of the eye with the little toe of the foot.
8. The foot young female kidney vessel 足少陰腎經 originates from the little toe and extends to the root of the tongue.
9. The hand female proper pericardium vessels 手厥陰心包絡經 connects the middle of the stomach with the tip of the middle finger.
10. The hand young male three burning space vessel, 手少陽三焦經 arises from the tip of the little finger and goes to the three burning spaces.
11. The foot young male gall bladder vessel, 足少陽胆經 connects the outer angle of the eye with the little toes.
12. The foot female proper vessel 足厥陰經 arises from the hairy spots on the big toes and proceeds to the vertex of the head and connects with the central vessels.

Although separate in their courses there are six regular anastomoses occurring in extremities.

1. The foot great male with foot young female 足太陽接足少陰.
2. The foot young male with foot finished female 足少陽接足厥陰.
3. The foot male proper with foot great female 足陽明接足太陽.
4. The hand great male with hand young female 手太陽接手少陰.
5. The hand young male with the heart 手少陽接心.
6. The hand male proper with the hand great female 手陽明接手太陰.

Each vessel has definite places or sites or spots or pits in its course where the humours can be let out and vital air let in. Total number of these on all vessels varies but some three hundred and sixty-five are generally recognised. They are called needling points each having a special designation or name and a particular association with its special tissue, organ or viscus.



As shown in the above picture the liver is derived from the "heart vessel".

The gall bladder is connected to the liver.

The two channels "the foot finished female (Yin) liver" and "the foot small male (Yang) gall bladder" are mutually correlated, they are as "outside and inside," or as the coat is to it's lining. The spleen is derived from the "heart vessel" and attached to the stomach to "grind rice." (i. e. digest food).

The stomach from below is connected with the small intestines i. e., the pyloric orfice. The two channels, "the foot great female spleen" and "the foot bright male stomach" are mutually correlated as "inside is to outside", or as the coat is to its lining.

Left and right kidneys are in contact with the spine on both sides of the "fourteenth vertebra".

Urinary bladder—the urine comes out from the "*ch'ien Yin*" i. e. in front of the perineum. The two channels "the foot small female kidney" and "foot great male urinary bladder" are mutually correlated as "outside is to inside", or as the coat is to its lining."

THE TWELVE ORGANS, VISCERA AND CHANNELS AS RELATED TO THE HAND.

The description commences with the first figure at the upper right corner. The heart, 心 *hsin*, is connected above to the lungs, 肺 *fei*, and is connected (below) to the spleen, 脾 *p'i*, the liver, 肝 *kan*, and kidneys, 腎 *shen*, by each of the three channels shown.

The small intestines (the diagram just below the heart) are connected above to the lower opening of the stomach - the pyloric orifice,

(The Chinese characters below the diagram of the small intestines are translated as follows); "the hand small female heart" (channel) and the "hand great male small intestines" (channel) "are mutually, correlated as exterior and interior," or as the coat is to its lining.

The upper central diagram is the pericardium 心包絡 *hsin pao lo*.

Below that is the diagram of the three burning spaces *shang chiao* 上焦, *chung chiao* 中焦 and *hsia chiao* 下焦. The Chinese characters below the diagram are transloted as follows; "the hand finished female pericardium and the hand small intestines and the three burning spaces are mutually correlated as "exterior and interior", or as the coat is to its lining.

The trachea and lungs (diagram upper left corner); below are the great intestines, which connect "above with the small intestines at the caecum"; the anus is also called *pi men*, rectum.

Below these diagrams the Chinese characters are translated as follows: "the hand large female lung and the hand clear male great intestines" (channels), are mutually correlated as "exterior and interior", or as the coat is to the lining.

Description of Diagram on Opposite Page

The upper right hand diagram is a map of the "sites or pits" of the fourteen pulsating arteries.

The diagram immediatly below the right corner is a map of the back demonstrating the "sites or pits" where "responses or affirmations" of the five viscera are secured.

On the left are two diagrams of the hand; these illustrate the three positions on the pulse which are connected with the internal organs, viscera, etc. The upper figure is that of the right hand, 右手 *Yu shou*. From the ulnar side translating the Chinese characters reading from above downwards we have "upper, middle and lower burning spaces"; then "heaven, man, earth, divisions"; then (3rd. row) "outside and inside," (the two characters are repeated 3 times); the 4th. row (radial side), from above downwards reads, "lungs, mediastinum, stomach, spleen, kidney, middle abdomen, large intestines," these names of the organs and viscera are placed in juxtaposition to the particular part of the "pulse" which indicates the "response" from them; the column immediately to the right of the figure gives, above downwards, the three divisions of the pulse, *tsen*, *kwen*, *ch'ih*. The figure of the left hand, 左手 *tso shou*, is the one at the lower left hand corner. The translation is the same except for the organs and viscera connected with the different divisions of the pulse, (i. e. the row of charaters first written at inside left margin of the arm) are translated from above downwards: "heart, middle mediastinum, liver, diaphragm, kidney, middle abdomen, small intestines, and large intestines."

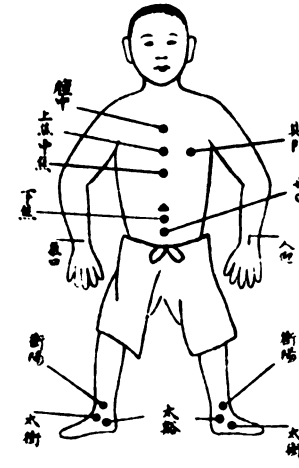
The following diagram, mainly marked out through the assistance of Dr. Anthony Yoh, illustrates in a graphic representation the intimate, intricate, inter-association of the different but possibly chemically or electrically attractive properties of the qualities of the *Yang and Yin* as the Chinese medical philosopher assumes their action and transimission.

內經三部診候圖

右手

左手

十四穴動脈圖



五臟之腧皆繫於背圖

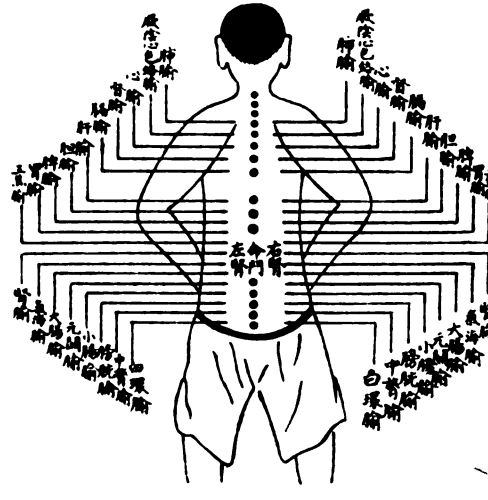
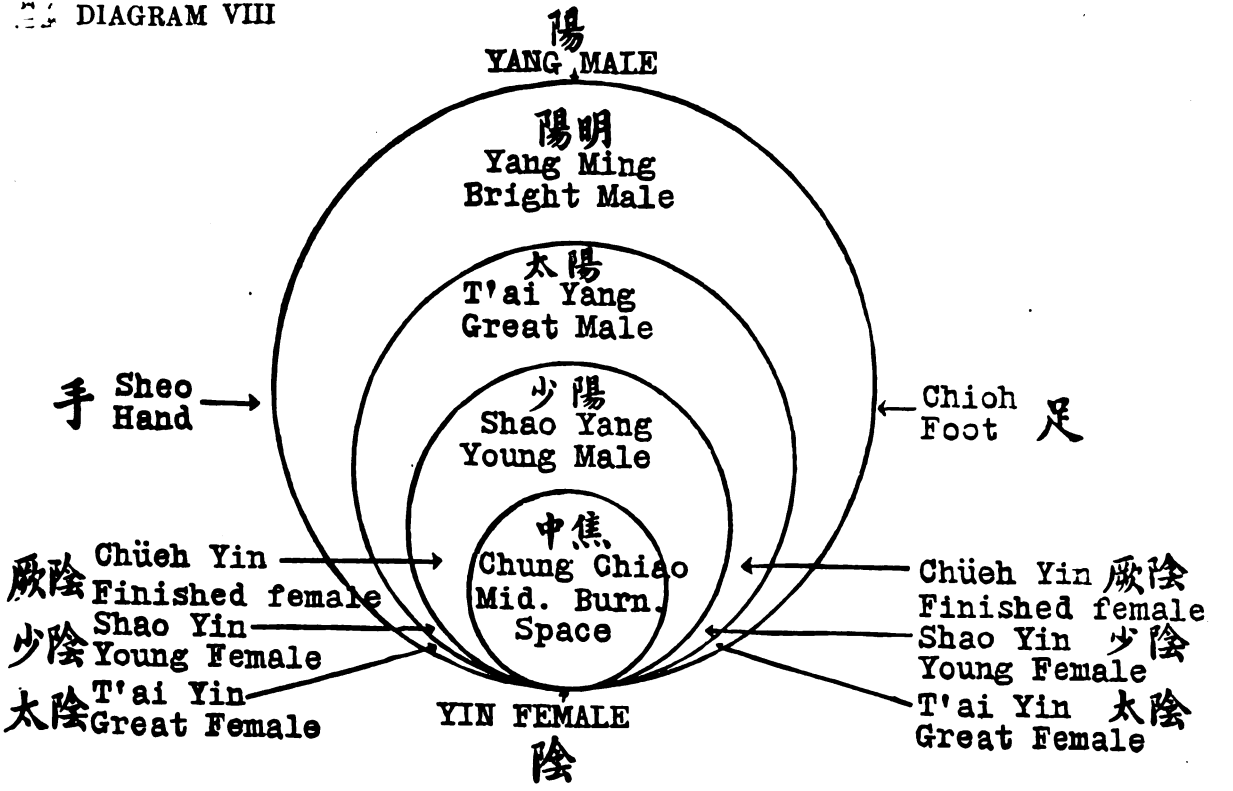


DIAGRAM VIII



It is necessary in the observer's act of seeing and fixing his mind on the matter, to conceive each of the circles of this diagram as being bisected in two planes, viz., a horizontal diameter and a vertical diameter. In the former the upper semicircle is *Yang* principle and the lower semicircle is *Yin* principle; in the latter the left semicircle is of the hand and the one to the right is the foot

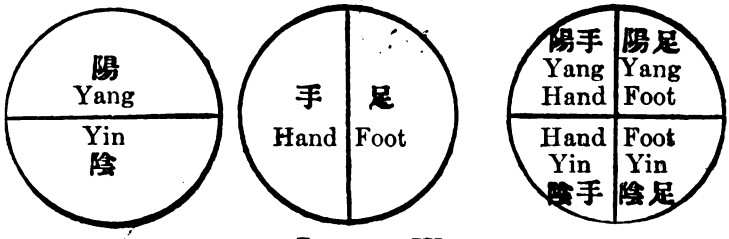


DIAGRAM IX

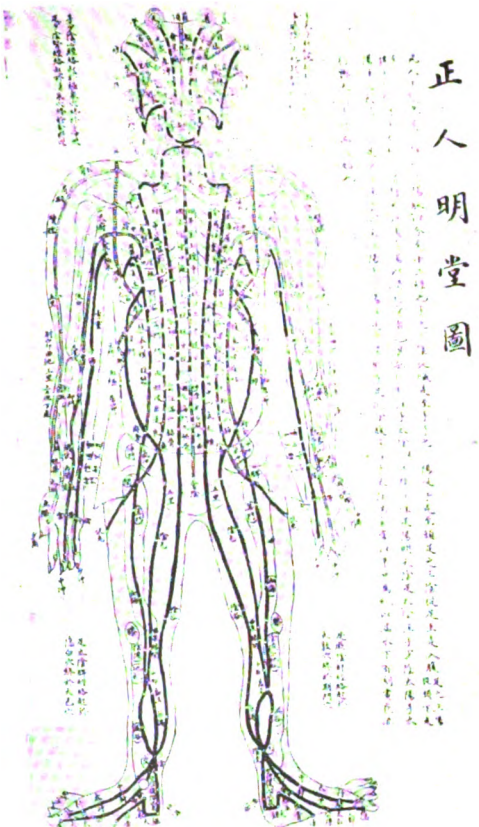
The principle is conceived as beginning in the middle burning space; from there it proceeds, clock-wise, to the hand great female 手太陰, thence into the hand bright male 手陽明, and entering the foot bright male 足陽明 proceeds to the foot great female 足太陰; it renews its progress to the hand young female 手少陰, thence to the hand great male 手太陰, enters the foot great male 足太陽 and thence to the foot young female 足少陰; it continues its advance to the hand finished female 手厥陰, thence into the hand young male 手少陽, entering the foot young male 足少陽 and thence to the foot finished female 足厥陰, and again arrives at the middle burning space 中焦 only to again begin its eternal circumnavigation.

KEY TO MING TANG TU* 明堂圖 OR T'U 銅人圖, ACUPUNCTURE CHARTS OF THE COPPER MAN.

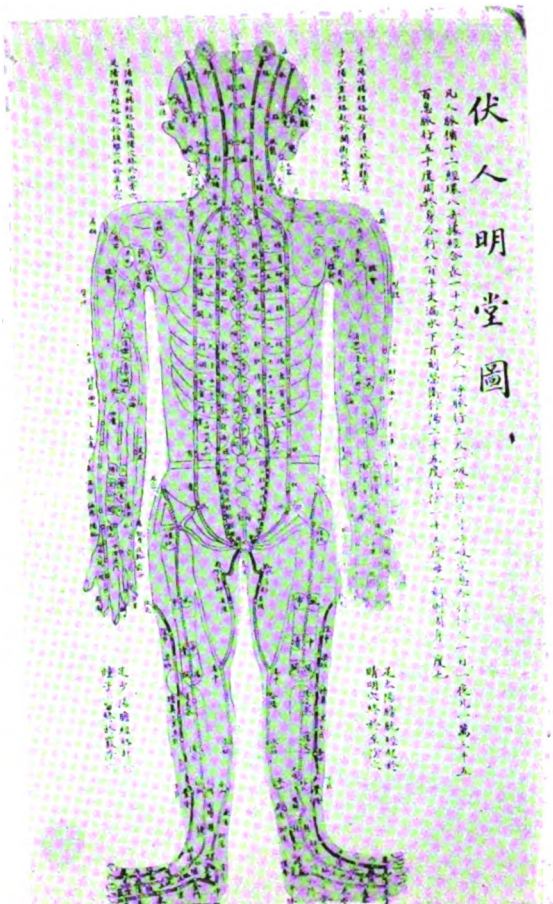
These charts are from *Yu Tsen I Tsung Chin Chien* 御纂醫宗金鑑, "An imperial rescript of medical procedures, The Golden Mirror." This encyclopedia of medicine consists of 74 volumes

* *Ming T'ang T'u* is the expression used for the designation of acupuncture charts of the *T'ung Jen* (Copper Man). *T'u* means chart, map or diagram. *Ming T'ang* is the place where, in ancient times, the emperor sat and gave audience It was there *Hwang Ti* 黃帝 gave audience to *Lui Kung*, 雷公 and discussed medical art and philosophy. From this historical setting the term *Ming T'ang T'u* is used to designate the four charts of the *T'ung Jen* (Copper Man) on which were accurately illustrated the many different correct sites for acupuncture. The original Copper Man image, a copy of which is now in Peiping, was made by *Wang Wei Ti* 王惟德 by order of the *Sung* 宋 dynasty emperor *Jen Chung* 仁宗.

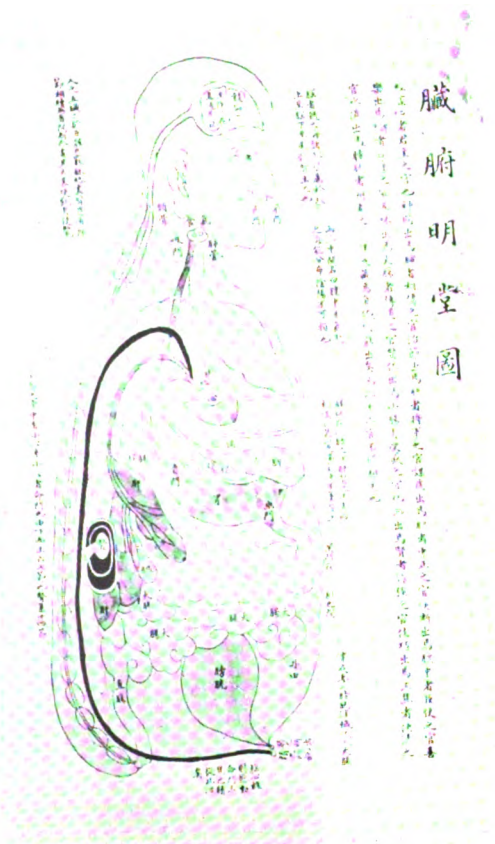
The romanisation of the Chinese terms follows in general the Wad system. The Chinese-English dictionary chiefly used in this study wa. that of H. A. Giles.



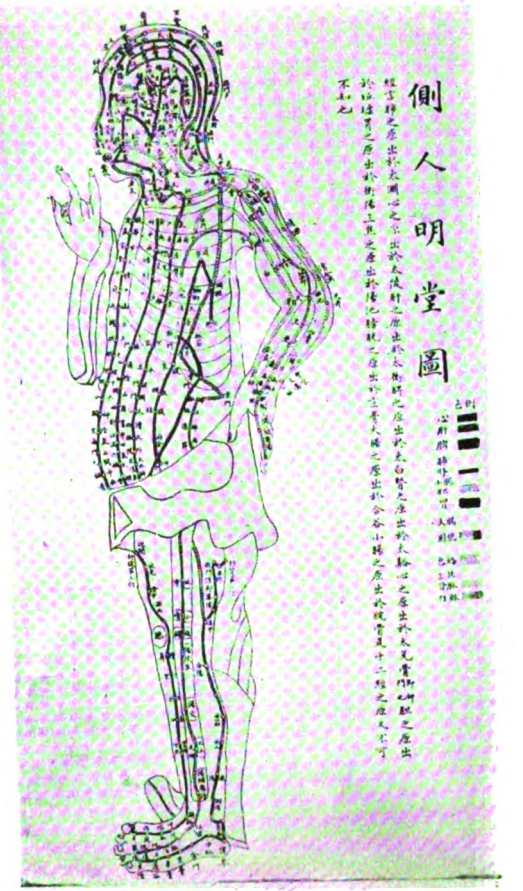
Chêng jên ming t'ang t'u, or "supine man chart."



Fu jén ming t'ang t'u, or "prone man chart."



Tsang fu ming t'ang t'u, or "organs and viscera chart."



Ts'ê jên ming t'ang t'u, or "side of man chart."

and is a symposium on medical subjects by 80 authors. It was written by imperial order and published in 1749 A. D. It includes 8 volumes on "Acupuncture and Moxa." It is a generally conceded standard or authority on Chinese medical procedures and is in universal use all over the country by modern day practitioners of the ancient craft of Chinese medicine.

These charts are four in number. The first, *Chen Jên* 正人 represents a human figure erect and facing forward or as lying down with face upward; the second, *Fu Jên* 伏人, represents a man erect with back to observer, or as an image lying on its face with back upward; the third, *Tseh Jên* 側人 represents the side view of the same figure and the fourth *Tsang Fu* 臟腑 represents a general illustration of the viscera and organs of the human body according to Chinese ideas of angiology and splanchnology. The original charts, in the interests of clarity, have been enlarged two and one half times by a Chinese artist and each channel has been marked with a different colour. These were photographed and are reproduced in the plates accompanying this article. The enlarged charts were given to Chinese workmen who carved the wooden blocks used in printing charts 1,2,3,4. During this process some errors were made. This is unfortunate but the general representation is correctly conveyed. The enlarged charts are easier to follow and understand, as the confusion of many Chinese characters on smaller charts is partly eliminated.

To secure greater lucidity, there were drawn fourteen figures representing each one of the separate channels as found in *I Shoh Chi Ch'en* 醫學集成. The original figures were enlarged and photographs of the enlargements were taken; these are reproduced in the plates accompanying this article. These fourteen figures represent the twelve double channels plus two other "single" channels, fourteen in all. The "single" channels have the same functions as the twelve double channels.

In this study the translation of the designation of the acupuncture "spots" follows that of the separate 14 figures. These pspots in number approximately correspond to those of the "Golden Mirror" charts, and one may easily follow the consecutive arrangement of spots on those or other charts. The theories and explanations of Chinese authors regarding these charts, the numbers of the sites and sizes of the spots are irreconcilable. Although such be the facts, yet it is hoped some degree of understanding will be arrived at through this study.

Chinese authors do not agree as to the number of acupuncture spots (pits, sites, holes), their accounts vary from approximately 300 to over 600, a common number is 365. Nearly all of those are named.

Corresponding to the 365 needling points are 365 small branches of vessels and 365 muscular junctions. These are in the muscle fibres and at the origins of muscles, and are routes for

nourishment and protection where the gases meet. There are also said to be 365 joints which receive air (gas, breath, energy, etc.). This is done through the 12 springs of the organs and viscera connecting by the channels with four passes at shoulders and hips, and from thence the energy is passed on to the joints, etc.

. *The "12 channels" are not single but are double, and one channel in* most of its course has four channels. There are a considerable number of branches called *Sen* 絡 connected with the channels.

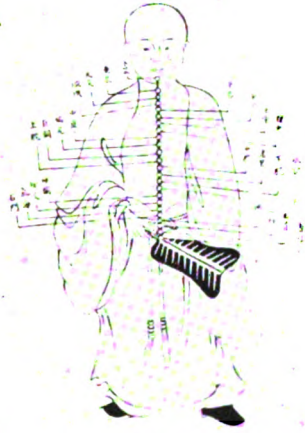
There are 15 sites where "pulsating" arteries are felt, i. e. where the pulse is found. These arteries are different from the channels, although an acupuncture spot or pit may coincide with a pulsating spot.

In following channels on the charts the translation begins at the pit where the channel has its origin and proceeds consecutively to its termination.

To follow a charts take for example Chart II, the back. On the trunk are 5 channels; of these, the central one (the *tu*) extends from the region of the coccyx up the mid-line of the back, thence to the mid-line of the neck and head, and thence to the face, and it ends at the mouth. Two channels are on each side of the this mid channel. These are really double channels on each side belonging to one of the main double channels. These four are from a common source near the perineum, and extend up the back in separate channels regularly spaced apart. Each pair of each side join near shoulders to form a single channel on each side of the mid-line, which proceeds upward over the neck to the head and thence to the face, and finally ends near inner canthus of either eye. The five channels of the back thus become three for the neck and back of the head. Not all of the acupuncture pits on the back are named. On the front of the body the channels are more intricate. There is the central single chanel or *J n* and each side of it are five channels (ten in all or five double channels) a total of eleven. This arrangement is seen clearly at the level of the lower border of the thorax. Of the eleven channels, but three extend to the face; the central one ends near the mouth, and the other two at sites on the parietal region of the skull; the other eight end on the thoracic wall or above.

The acupuncture pits or holes are also double wherever the channels are double. In the key to the charts the acupuncture pits are in some cases designated by three Chinese characters but are nearly always called by two characters. In the charts where there are double channels one character of this double name is on one channel on one side of the mid-line of the body, and the other is on its twin channel directly opposite and parallel, on the other side of the mid-line of the body. On the arms, hand, legs, feet and at some other situations, e. g. on the head and on the "single" vessels, the name of the acupuncture spot is affixed at its one site. The reader, therefore, will understand why in same cases one

任脉圖



督脉圖

Left: Jên mo t'u, or "responsible artery diagram".
Right: Tu mo t'u, or "superintendant artery diagram".

足太陽膀胱經

足太陰脾經

Left: Tsu t'ai yang p'ang kuang ching, or "foot great male bladder channel."
Right: Tsu t'ai yin p'i ching, or "foot great female spleen channel."

finds the double or triple characters on the chart and does not find them together on other sites.

Each pit has its own particular size, shape and length. A pit is the point where the vital essences or principles are stored and the different tissues of the body unite. These pits connect the viscera and organs with all body tissues. Each organ or viscus has its own special function, or unique secretion, or peculiar essence, and from it that essence is circulated through its own limited channel.

The names of the pits have not always and necessarily significant meanings. The acupuncture sites as herein designated are from a comparison of the descriptions given in the *I Hsueh Chi Ch'en* 醫學集成 and the *Chung Kuo I Hsueh Ta Tzu Tien* 中國醫學大辭典 (a Commercial Press publication).

The Chinese classical medical works, (see the translation of the *Chen J n* picture, figure I.) state there are both blood and gas in "the twelve channels" and eight "single" channels. The "classics state" plainly that the circulation in the channels is controlled by the etherial principles *Yang and Yin*. The Chinese also seem to recognize the circulation of the "pulse," which is gas and blood in the blood vessels, as being separated from the channels system. They recognize pulsating vessels as different from channels. The blood vessels are anatomical entities, the channels are non-existent assumptions. Again there is prevalent the idea that the blood vessels sometimes contain blood only, sometimes gas only. For example, a leading Chinese doctor said to me he was convinced of this because he had a case with a very severe tearing of the tissues of the knee with a fractured patella, there was no bleeding at all at first then bleeding occurred later on. This case and others similar to it lead this physician to consider these cases were proofs of the fact that the blood vessels sometimes only contained blood and at other times only contained gas!

To explain the theory of the Yang and Yin the writer interprets the "chin or channels" as conveyors of the "Ch'i", gas or etherial principles, but not of blood. The principles contained in them apparently affect the proportion of the blood and gas in the anatomical blood vessels and influence all the tissues of the body in a manner similar to electrical, chemical or osmotic phenomena.

It will readily be seen that in some cases the same acupuncture pits occur on the three different charts of the figures of the *T'ung J n*. This is obvious, as the same channels must appear in more than one chart, e. g. those on the back extend in some cases to the face and they will show in at least three, i. e. in front, back and side views.

To follow the key one selects any one of the fourteen channels as illustrated by a single figure, (see plates) and then follows its course from origin to termination on one or more of the three charts. Considerable difficulty was experienced in locating even

the approximate anatomatical sites of the spots or pits on the back and everywhere else. The Chinese medical descriptions are extremely general and vague, and apparently do not coincide, except by chance and only occassionally, with anatomical landmarks as designated in modern anatomy.

The "depression below first vertebral bone" would be clear to a modern student in anatomy as being the first depression below the first cervical vertebra. After considerable discussion and reading of Chinese writing on the matter, it was decided that the real meaning was approximately, either the depression between the sixth cervical and seventh cervical or that between the seventh cervical and first dorsal vertebrae. Not all of the acupuncture spots are named along the vertebral spine.

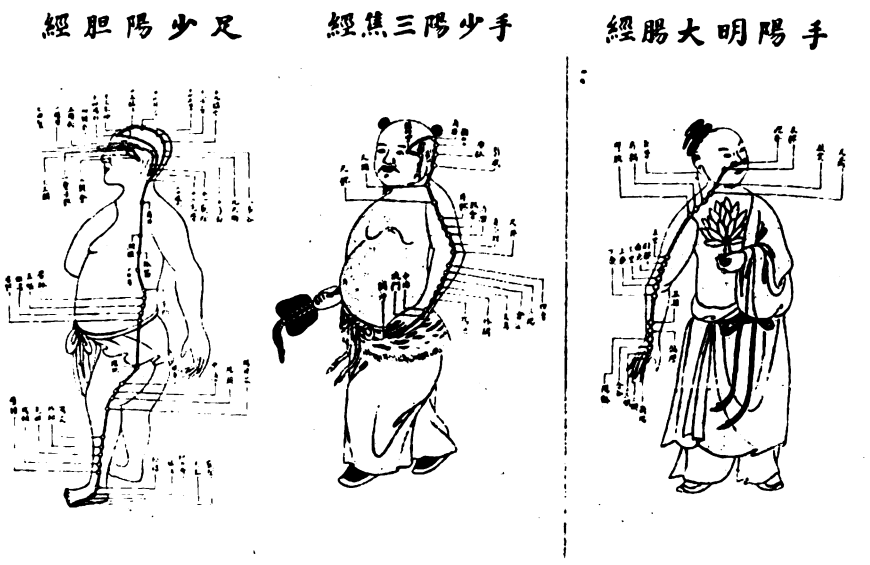
One of the greatest difficulties in this study has been an attempt to correctly interpret the meaning not only of terms but content of ideograms. The writer does not pose as being correct, he has used all the help he can get but is not satisfied. An example is the word (ideogram) *Ch'i* 氣; this may be translated breath, air, vapor, steam, pneuma, aura, energy, force, influence, vivifying principle, essence, spirit, ether, humour, cosmic force, vital fluid etc., according to one's ides of the supposed meaning of the character in special situations. A large element of personal equation looms up, and stating it increases rather than decreases the difficulty. It takes a very clever scholar to distinguish the meanings of the above words. In translation of the names of acupuncture sites, spots or pits it would seem there must be fine and coarse, pertinent and impertinent meanings. The writer poses as being but a tyro—a beginner in learning—but *never* a sinologue.

The translation of Chinese writing on the charts other than that of the acupuncture pits is in the following order 1. *chen* 正 2. *fu* 伏 3. *tseh* 側 4. *tsang fu* 臟腑 The translation of the different channels is in the following order.

1. *Jen* 仟 2. *tu* 督 3. *choh t'ai yang p'ang kwang chin* 足太陽膀胱經
4. *choh t'ai yin p'i chin* 足太陰脾經
5. *choh shao yang tan chin* 足少陽胆經
6. *shou yang ming ta ch'ang chin* 手陽明大腸經
7. *shou yang ming wei chin* 手陽明胃經
8. *shou t'ai yang shao ch'ang chin* 手太陽小腸經
9. *shou t'ai yin fei chin* 手太陰肺經
10. *shou chueh yin hsin pao chin* 手厥陰心包經
11. *choh shao yin shen chin* 足少陰腎經
12. *choh chueh yin kan chin* 足厥陰肝經
13. *shou shao yin hsin chin* 手少陰心經
14. *shou shao yang san chiao chin* 手少陽三焦經

Left: Shou t'ai yin fei ching, or "hand great female lung channel."
Right: Shou chüeh yin hsin pao lo ching, or "hand proper female pericardium channel."

***Left*: Tsu shao yin shên ching, or "foot small female kidney channel."**
***Centre*: Tsu chüeh yin kan ching, or "foot proper female liver channel."**
***Right*: Shou shao yin hsin ching, or "hand small female heart channel."**



Left: Tsu shao yang tan ching, or "foot small male gall-bladder channel."
Centre: Shou shao yang san chiao ching, or "hand small male three burning spaces channel."
Right: Shou yang ming ta ch'ang ching, or "hand clear male large intestine channel."

Left: Tsu yang ming wei ching, or "foot clear male stomach channel."
Right: Shou t'ai yang hsiao ch'ang ching, or "hand great male small intestine channel."

Conclusions

The Chinese theory of cosmology forms the basis upon which political, professional and social relationships are erected. Its origin dates from great antiquity and the principles upon which it is founded may not have been of distinctly Chinese inception.

The theory is fixed, unalterable and unassailable, and has apparently petrified any tendencies there may have been towards continued, creative, evolutionary progress. The applications of these principles has led to extrame scholasticism and unwarranted conclusions, developed from academic reactions in applying a broad general theory to *all* life and empirical knowledge. Metaphysical *finesse* is overdrawn in its strained application as far as the science and practice of medicine is concerned. This vitalistic theory is applicable to materialistic phenomena and is adaptable to modern philosophical concepts of material and psychic items of experience and reality.

The practice of acupuncture is based upon this theory. It orig nated in China more than 3000 years ago. For the last 1000 years the development of this procedure has not progressed but has remained *in status quo*.

The twelve "double," eight "single" channels, "gate of life" and three "burning spaces" are metaphysical assumptions or figments of imagination but are not anatomical entities.

The theory as applied to the channels *might* be interprected to mean electrical action or metabolic changes.

The study of acupuncture is of no inconsiderable academic and historical interest, but the anatomical and physiological knowledge is meagre and incorrect.

Therapeutically, if the procedure be appled with correct surgical technique, it is of value in certain forms of disease.

Acknowledgment.

The preparation for this parer has extended over a considerable number of years and during that time I have been indebted to a considerable number of Chinese scholars, too numerous to mention. Some years ago Dr. T. D. Fay assisted in translating.

In the immediate preparation of this paper I have been greatly assisted by Dr. Anthony Yoh. Dr. L. G. Kilborn, as editor of the Journal, has made certain minor atterations in the text.

To all of these are due my hearty acknowledgement and very sincere thanks.

Bibliography, Non-Chinese.

Chatley Herbert, Chinese Mystical Philosophy in Modern Terms; China Journal of Science and Arts, March, 1923.

Couling G., Encyclopoedia Sinica.

Du Boise, Dragon, Image and Demon.

De Groot, J.J.M., Religion of the Chinese.

Dore, Researches in Superstition.

Eitel, E. T., *Feng Shui.*

Forke, A., World Conceptions of the Chinese.

Giles, F. A., Chinese--English Dictionary.
Chinese Biographical Dictionary.

Hsieh, E. T., A Review of Chinese Anatomy, Anatomical Record, 1921, XX, No. 2.

Johnson, A Study in Chinese Alchemy.

Liao Chi Pin, Fourteen Stories of Chinese Anatomy; an essay presented to W. R. Morse by this distinguished scholar. Translated by W.R.M.

Legge, Chinese Classics.

Mayers, Chinese Readers Manual.

Morse, W. R., "Chinese Medicine" (in press) "Clio Medicine", Hoeber, New York

Morse, W. R., "Practices and Principles of Chinese Medicine" Journal of the West China Border Research Society, Vol. III, 1926—29, pp. 82-104.

Morse W. R., The Three Crosses in the Purple Mists, Chap. IV, Kwang Hsüeh Publishing House, Shanghai.

Müller, F. Max, The Sacred Books of the East.

Neuburger, History of Medicine.

Soothill, Religion in China.

Wong and Wu, History of Chinese Medicine.

Williams, C.A.S., Outlines of Chinese Symbolism.

Williams, Chinese-English Dictionary.

Wylie, A., Notes on Chinese Literature.

Bibliography Chinese*

內經 *Nei-ching*, Internal Classic,.Author 黃帝 *Huang-ti* (2697 B.C.)

素問 *Su-Wen*, Author 黃帝 *Huang-ti*. (2697 B. C.)

靈樞 *Ling-shu*, Author 黃帝 *Huang ti*. (2697 B. C.)

難經 *Nan-ching*, Difficult Classic, Author 秦越人 *Chin-yeüh-jen*. (1122 B. C.)

神農本草 *Shen-nung's Materia Medica*, Author 神農 *Shen-nung*. (1122 B. C.)

子午經 *Tsu-wu-ching*. The Importance of Needling. (250 B. C.)

黃帝鉄灸甲乙經 *Huang-ti-chen-chih-chia-yeh-ching*, Author 皇甫謐 *Huang Fu-su*. (420 A. D.)

外臺祕要 *Wai Tai Pi Yao*. Medical Secrets of an Officer by 王燾 Wang T'ao. (618 A. D.)

千金要方 *Ch'ien-chin-yao-fan*, Thousand Gold Prescriptions Author 孫思邈 *Sun-ssu-mo*. (620 A. D.)

銅人腧穴鉄灸經 *Tung-jen-yu-hsüeh-chen-chih-t'i*. Atlas of the copper point for Acupunture and Moxa, Author 孫思邈 *Sun-ssu-Mo*. (620 A. D.)

針方 *Chen fan*. Author 淳權 *Chun ch'uan*. (907 A. D.)

針經診法 *Chen-chiug-chen-fah*. Manual of Acupuncture. Author 郭玉 *Kwei yü*. (945 A. D.)

聖濟總錄 *Sheng-chi-tsung-lu*, Imperial Encyclopaedia of Medicine, by staff of Medicine College. (962-1111 A. D.)

針經 *Cheng ching*, The Classic of Acupuncture. Author 李宴嗣 *Li-ching-si*. (1111 A. D.)

針經指南 *Chen ching chih lan*, The Direction for Classic of Acupuncture. Author 竇漢卿 *Tou Han-chin*. (1111 A. D.)

銅人針灸經 *Tung-jen-chen-chih-ching*, Classic on Acupuncture and Moxa. Author 王惟德 *Wang Wei-teh*. (1027 A. D.)

---

*The romanisation in this bibliography is not always according to wade's system but is a copy of the printed romanisation authors used.

世醫得效方 *Shi-e-tih-shao-fan*, Collection of Prescription. Author **危亦林** *Wei Yih-lin*. (1328-1337 A. D.)

明堂灸經 *Ming-t'ang-chih-ching*, Author **西方子** *Se-Fang-tze* Western cholar (uncertain date)

鍼灸大成 *Chen-chih-ta-ch'eng*. Complete work on Acupuncture and Moxa. Author **楊繼洲** *Yang-chi-chow*. (1368 A. D.)

針灸大全 *Chen-chih-ta-ch'uan*. A complete work on Acupuncture and Moxa. Author **徐鳳** *Hsü-feng*. (1668 A. D.)

針灸則 *Chen-chih-tse*. Directions about Acupuncture and Moxa. Author Japanes, *K'uan-ch'ang-chao-chih*.

針灸要覽 *Chen-chih-yao-lan*. The Importance of Acupuncture and Moxa. Author **過龍** *Kuo-lung*. (1368 A. D.)

針灸要樞 *Chen-chih-yao-shu*, The Essential of Acupuncture and Moxa Author **吳嘉言** *Wu-chia-yen*. (1368 A.D.)

針灸問對 *Chen-chih-wen-tui*, The Questions and Answers of Acupuncture and Moxa. Author **汪機** *Wang Chi*. (1368 A. D.)

針灸資生經 *Chen-chih-tzu-sun-ching*, Author **王叔全** *Wang Shu-ch'uan* (1368 A. D.)

針灸圖經 *Chen-chih-t'u-ching*, Author **姚武** *Yao Liang*, (1368 A.D.)

針灸聚英 *Chen-chih-chu-yin*, Author **高武** *Kao Wu*. (1368 A.D.)

針灸節要 *Chen-chih-chieh-yao*, Author **高武** *Kao Wu*. (1368 A.D.)

針灸擇日編 *Chen-chih-tseh-zih-pian'*, Author **金循義** *Chin Shuin-li* and *Chin Li-sun*. (1368 A. D.) **金義孫**

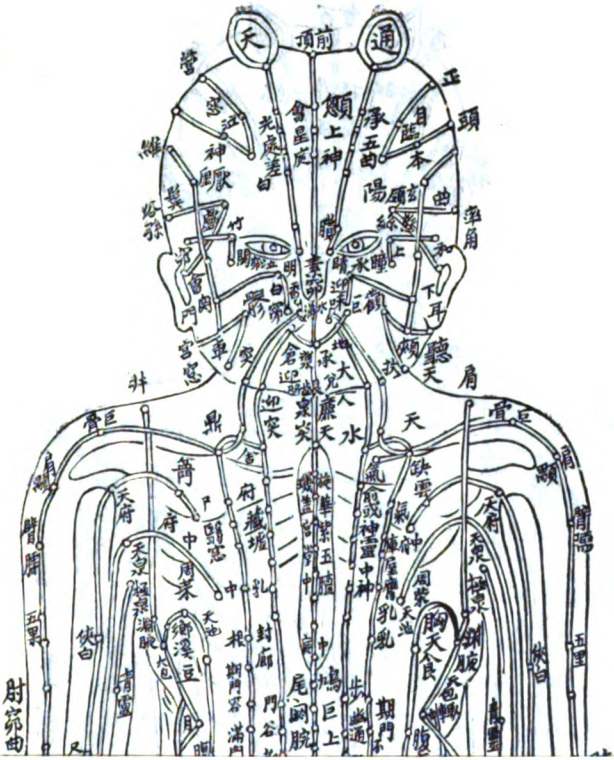
針靈諸賦 *Chen-chih-chu-fu*, One vol. of **類經附翼** *Lei-ching-fu-ek*. Author **張介賓** *Chang keae-pin*. (1624 A. D.)

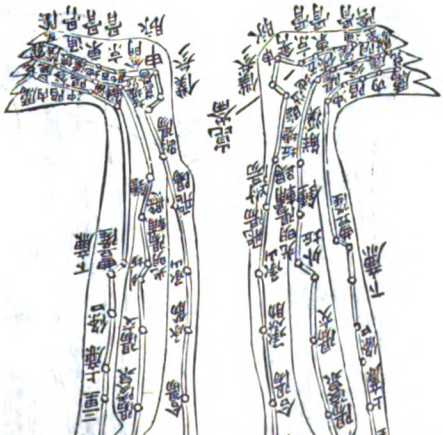
醫宗金鑑 *I-tsung-chin-chien*, Golden Mirror, Acupuncture and Moxa 8 vol. Author **乾隆** *Chien-lung*. (1739 A. D.)

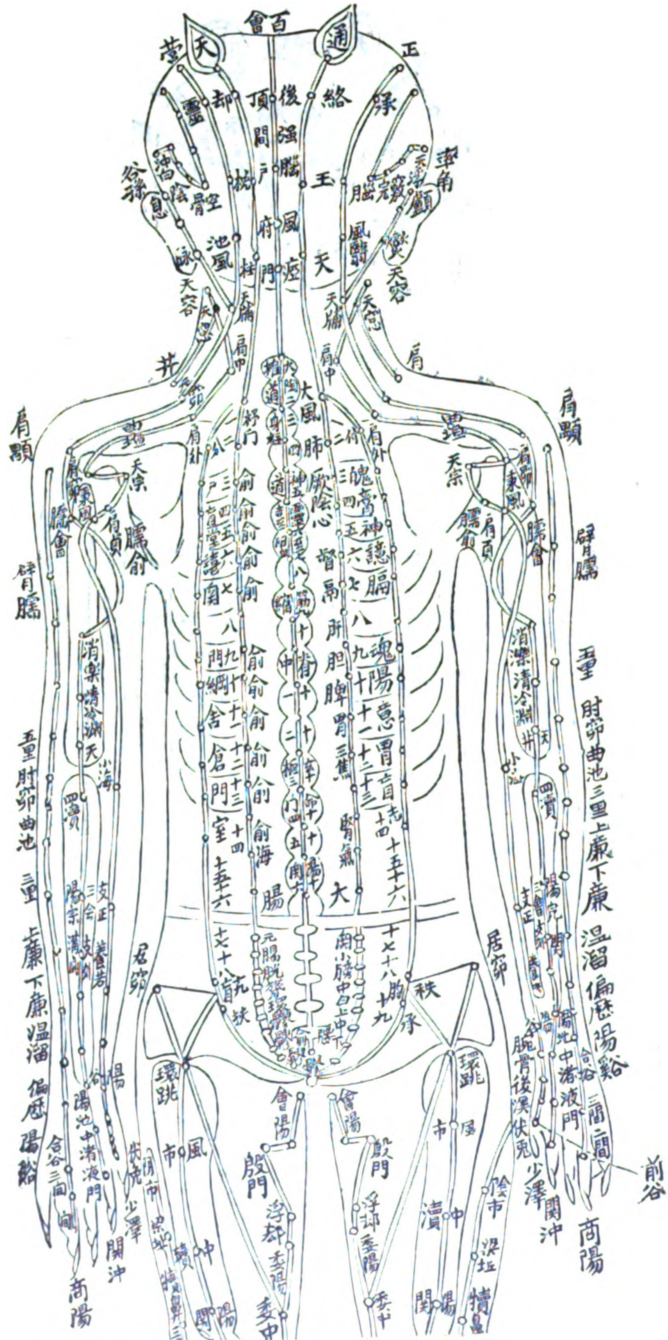
中國醫學大辭典 Chinese Medical Dictionary By **謝觀** *Shi-Kuan* Commercial Press. (1911 A. D.)

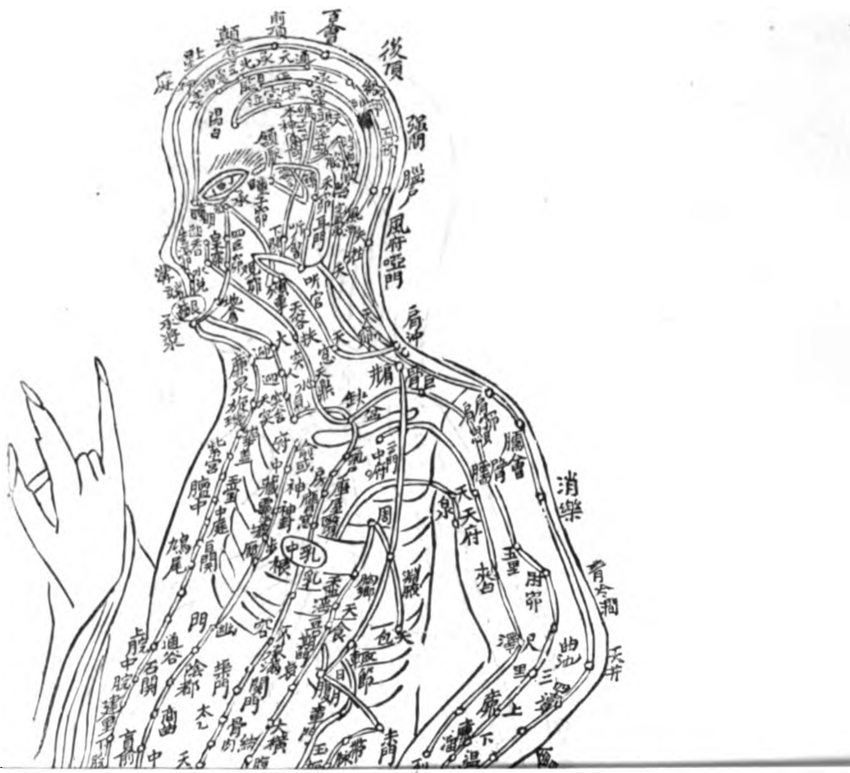
康熙字典 *K'ang Shi* Dictionary.

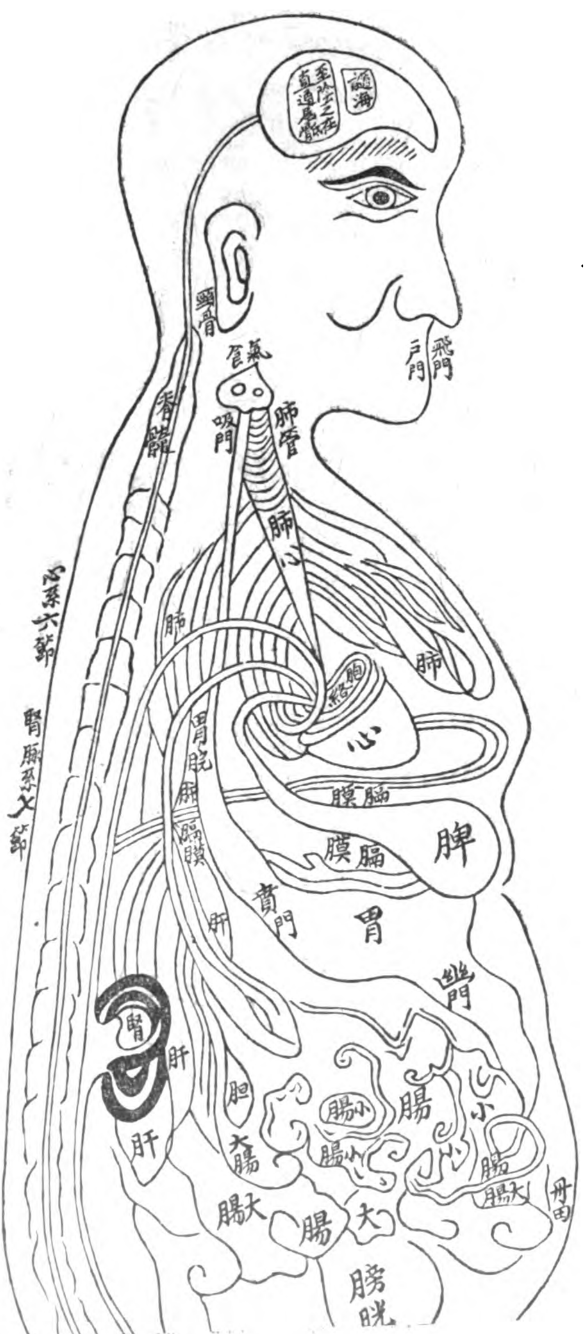
針灸大成 *Chen-chih-ta-ch'eng*, Complete work on Needling, Author *Chin-hsien*. (*Chin* Dynasty).






百會
天
通
商陽
前谷
居窌
環跳
委中




髓海
頸骨
氣管
咽門
肺管
脊髓
飛門
戶門
肺
胞絡
心
肺
心系六節
胃脘
膈膜
膈膜
脾
賁門
胃
肝
幽門
腎
肝
胆
小腸
腸
小
肝
大腸
小腸
腸
大腸
丹田
大
腸
大腸
膀胱

ACUPUNCTURE CHART I

Cheng Jen Ming T'ang T'u 正人明堂圖 Anterior Aspect.

In every man each foot and hand has three *Yin* and three *Yang* vessels, a total of twelve vessels. The three *Yin* of the hand pass from the viscera to the hand. The three *Yang* of the hand go from the hand to the head. The three *Yang* of the foot proceed from the head downward to the foot. The three *Yin* of the foot proceed from the foot upward to enter the abdomen. These vessels spread out widely and flow in all directions without ceasing, and so they keep the blood and vital essence in motion and circulate the *Yin* and *Yang* to nourish the whole body.

From the three burning spaces originate the great *Yin* and the clear *Yang* of the hand.

The hand clear *Yang* flows to the foot clear *Yang* and the foot great *Yin*.

The foot great *Yin* flows to the hand lesser *Yin* and the hand great *Yang*.

The hand great *Yang* flows to the foot great *Yang* and the foot lesser *Yin*.

The foot lesser *Yin* flows to the hand *chüeh Yin* and the lesser *Yang*.

The hand lesser *Yang* flows to the foot lesser *Yang* and the foot *chüeh Yin*.

The foot *chüeh Yin* finally returns and flows to the hand great *Yin*,

The vital essences commence afresh each dawn and continue until the water clock has recorded a hundred intervals. Day and night they continue to circulate, even as the heavens. They come to an end and then begin again.

The hand-lesser-*Yin*-heart-channel begins at the *chi-ch'uan** pit or sinus and ends at the *shao-ch'ung* pit.

The foot-lesser-*Yin*-kidney-channel begins at the *Yang-ch'uan* pit and ends at the *yü-fu* pit.

The hand-great-*Yin*-lung-channel begins at the *t'ien-ch'ih* pit and ends at the *chung ch'ung* pit.

The foot-great-*Yin*-spleen-channel begins at the *Yang-pai* pit and ends at the *ta-pao* pit

The foot-*chüeh*-*Yin*-liver-channel begins at the *ta-tun* pit and ends at the *ch'i-men* pit.

---

*The translations of these pits and their sites are given under each channel.

ACUPUNCTURE CHART II

Fu Jen Ming T'ang T'u 伏人明堂圖 Posterior Aspect

In all men the pulse proceeds in order through the twelve double channels and eight single vessels. There is evidence that the total length of the channels is 16 chang and 2 feet (=162 feet).

At each expiration the pulse moves three inches, at each inspiration the pulse moves three inches; during a complete respiratory cycle the pulse moves 6 inches.

During a day and night a man breathes 13,500 times and the pulse circulates fifty times throughout the body. The pulse courses a distance of 810 chang (8100 feet) during 100 intervals as reckoned by the clepsydra (water clock). The blood and vital aura circulate in the male and female 25 times. During every two intervals (by water clock) the pulse circulates once throughout the body.

The hand-positive-clear-great-intestines-vessel begins at the *shang Yang* pit or hole (at the side of the second finger and ends at the *yin hsiong* pit (0.05 inch from the nostril.)

The foot-male-clear-stomach-channel begins at the *t'eo mei* pit (4.5 inches from *sh'n t'ien*) and ends at the *ni tui* pit (between the first and second toes.)

The hand-great-male and small-intestines-channel arises or begins at the *shao ts'* pit (near the extremity of the fifth finger) and ends at *t'ing kung* (near the lower border of the ear lobule).

The hand-small or lesser-male and three-burning-spaces-channel begins at *kuan ch'ing* (near the end of the fourth finger) and ends at *érh m`n* (near the antitragus of the ear).

The foot-young or lesser-male-gallbladder-channel begins at the *t'ing tsu chiao* (0.05 inches below the external canthus of the eye) and ends at the *ch'iao Yin* pit (at the interval between the third and fourth toes).

The great-male bladder-channel begins at the *ch'in ming* pit (0.6 inch mesial to the internal canthus of the eye) and ends at the *chih Yin* pit.

ACUPUNCTURE CHART III.

Tseh J'n Ming T'ang T'u 側人明堂圖 Lateral Aspect

The classics state that the source or origin of the lungs is from **t'ai yuan* 太淵 "the great gulf or abyss"; of the pericardium is from *t'ai ling* 太陵 "the great tomb"; of the liver is from *t'ai ch'ung* 太衝 "the great thoroughfare"; of the spleen is from *t'ai pai* 太白 "exceeding purity"; of the kidneys is from *t'ai ch'i* 太谿 "the great ravine"; of the heart is from *tui ku* 兌骨 "exchange bone,"; of the gall bladder is from *ch'iu hai* 丘墟 "the mound of waster"; of the stomach, is from *ch'ung yang* 衝陽 "the thoroughfare of the positive principles"; of the three burning spaces is from *yang ch'ih* 陽池 "the pool of the positive principles"; of the urinary bladder is from *ching ku* 京骨 "the capital bone"; of the large intestins is from *ho ku* 合骨 "join the valley"; of small intestines is from *wan ku* 腕骨 "the wrist joint bones".

The origin of the twelve channels must be known.

ACUPUNCTURE CHART IV

T'sang Fu Ming T'ang T'u 臟腑明堂圖 Organs and Viscera.

The classics state that the heart is king (of the organs), and from it arise mind and intellect

The lungs represent the prime minister. They manage affairs.

The liver is the general. It plans and schemes.

The gall bladder is the judge. It gives judgment.

The middle of the thorax is the ambassador. From it pleasure comes.

The spleen and stomach are the officials of the granary. From them come the five tastes.

The large intestines are the transportation officials of the organs. There the (food) is changed and dissolved.

The small intestines are the officials of storage, (or abundant receivers), and in them chemical action occurs.

---

*The sites of these springs or pits will be found under the lists of terms collected and enumerated for each channel. Each viscus and organ has a special so called vital site, spring or pit of origin.

"Origin" at a certain pit means, the unique secretion or vital essence of a viscus or organ spreads from, arises or originates at that paticular site.

The kidneys are the officials of administration from whom ability and skill are derived.

The there burning spaces are the organs or officials which unlock obstruction and establish the water pass or road,

The bladder is the official of the organs which collects and stores the fluids and dissolves out the spirits or essences.

If one does not correlate the twelve organs or officials there is neglect and failure.

Man's five viscera and six organs, (the whole internal economy of the body), the various bones of the body, the nine openings or apertures (ears, nostrils, mouth, eyes, anus, urethra), have blood vessels, and these pass through every section and are mutually continuous without interruption.

This picture is drawn for convenience in examination.

The sea of the brain marrow, all the brain substance extends from the brain above down to the coccyx and sacrum. It is controlled by the kidneys.

Within the section of the two breasts is the middle portion of the thorax (called the *t'an chung.*) It is the sea which stores the vital essences, which divides the *Yin* and *Yang*, and must not be injured.

The diaphragm is below the heart and lungs and above the liver and kidneys. It serves as a sieve or curtain to prevent the impure essences from proceeding or permeating upwards.

The *lan m'n* or caecum is the opening into the large intestine; it is between the large and small intestines.

The saliva exudes into the urinary bladder while the sediment or dregs flow into the large intestines. The place where urine and semen come forth.

Agitation of the heart makes manifest and influences the gate of life and the three burning places and semen flows out.

The duct or connecting link of the heart is at the sixth at the section (vertebra?).

The duct or connecting link of the kidney pulse is seventh section (vertebra?)

At the side of the seventh section is the small heart duct. The small heart duct is the gate of life. From below upwards six or seven sections the renal duct is at the fourteenth section.

任脈圖 JEN MO T'U

RESPONSIBLE ARTERY MAP, CHANNEL NO. 1.

會陰 *Hui yin*—"meeting plac of negative"; it is between the rectum and penis is the perineum.

曲骨 *Ch'ü ku*—"crooked or bent bone"; it is the symphysis pubis; and the pit is at the margin of the pubic hair above the pubic bone and one inch below 中極 *chung chi*.

中極 *Chung chi*—"the middle pole"; just above the symphysis pubis; it is 4 inches below the navel or umbilicus.

關元 *Kuan yuan*—"original or first pass"; it is 3 inches below, the navel.

石門 *Shih men*—"stone door." it is 2 inches below the navel.

氣海 *Ch'i hai*—"sea of breath or spirits, sea of the vivifying principles"; it is one inch and half inches below the navel.

陰交 *Yin chiao*—"blending of the 陰 *yin* (negative) or union (sexual) of 陰 *yin* negative principles"; its site is one inch below the navel.

神闕 *Shen ch'ueh*—"tower (look out) of 陽 *yang* or positive spirit"; it is at the centre of the navel.

水分 *Shui fen*—"water is divided"; it is one inch above the navel.

下脘 *Shia wan*—"lower duct"; it is 2 inches above the navel.

建里 *Chien li*—"to establish residence"; it is 3 inches above the navel.

中脘 *Chung wan*—"the middle duct"; it is 4 inches above the navel

上脘 *Shang wan*—"upper duct"; it is 5 inches above the navel.

巨闕 *Chu ch'eh*—"great deficiency, great look out tower"; it is 6 inches above the navel.

鳩尾 *Chiu wei*—"dove's tail" it is 7 inches above the navel (at tip of ensiform cartilage). Cautery is in prohibition.

中庭 *Chung t'ing*—"middle audience chamber or room"; it is 1.6 inches below 膻中 *T'an chung*, and approximately at the lower end of the sternum.

膻中 *T'an chung*—"the middle section of the thorax"; it is between the nipples in the mid line of the chest. The distance between the nipples is 8 inches and is the standard for measurements on the chest wall.

玉堂 *Yu t'ang*—"jade hall, precious hall"; it 1.6 inches above **膻中** *t'an chung.*

紫宮 *Tzŭ kung*—"purple palace"; it is 1.6 inches above **玉堂** *yu t'ang*

華蓋 *Hua kai*—"cover of flowers. seal of flowers"; it is 1.6 inches above **紫宮** *tzŭ kung.*

璇璣 *Hsüan chi*—"jade mirror"; it is 1.6 inches above **華蓋** *hua kai*

天突 *T'ien t'u*—"rising to heaven, heaven's rushing out, pure spirits or principle rushes out"; it is sinches below the larynx and approximately at the supra-sternal notch.

廉泉 *Lien ch'uan*—"pure spring, pure fountain"; it is "above throat" i.e. approximately mid way between lower border of the lower jaw and thyroid cartilage.

承漿 *Ch'eng chiang*—"receive thick fluid"; it is at the middle of the lower lip, the depression half-way between the vermillion borded and inferior border of the lower jaw.

督脈圖 Tu Mo T'u

SUPERINTENDING ARTERY MAP, CHANNEL, No. 2.

長強 *Ch'ang ch'iang*—"long strong"; it is at the end of the sacrum.

腰俞 *Yao yü*—"the pit of loins"; it is below" the 21st joint of the spine".

陽關 *Yang kuan*—"the pass of the positive principles"; it is below "the 16th. vertebral bone."

命門 *Ming men*—"gate of life or destiny"; it is below the "14th. vertebral bone".

懸樞 *Hsuan shu*—"deep pivot, mysterious pivot"; it is below the 13th. vertebral bone".

脊中 *Chi chung*—"middle of spine or vertebral column"; it is below the "11th. vertebral bone".

中樞 *Chung shu*—"middle pivot (axis)"; it is below the "10th. vertebral bone".

筋縮 *Chin so*—"the contraction of the tendons and or muscles and nerves." It is below the "9th. vertebral bone".

至陽 *Chih yang*—"to arrive at the positive (yang) principle"; it is below the "7th. vertebral bone".

靈臺 *Ling t'ai*—"soul's watch towers, spiritual platform"; it is below the "6th. vertebral bone".

神道 *Shen tao*—"road of positive spirit, spiritual way"; it is below the "5th. vertebral. bone".

身柱 *Shen chu*—"pillar of body"; it is below the 3rd. vertebral bone".

陶道 *T'ao tao*—"a kiln path or road" it is below "the first vertebral bone."

大椎 *Ta ch'ui*—"Great shuttle"; it is in the depression above the "first vertebral bone."

瘂門 *Ya men*--"dumb door"; it is 0.5 in. from hair margin at back of neck. Cautery is in prohibition.

風府 *Feng fu*—"wind room, wind storehouse"; it is one inch above the hair margin. Cautery is in prohibition.

腦戶 *Nao hu*--"brain door"; it is approximately at lambda, just above occipital bone, 1.5 inches behind 强間 *ch'iang kien* or 2 inches above hair margin. Cautery is in prohibition.

强間 *Ch'iang chien*—"space or interval of strength"; The pit is 1.5 inches behind 後頂 *hou ting*.

後頂 *Hou ting*—"behind top or crown of the head," the pit is 1.5 inches behind *pai hui* 百會

百會 *Pai hui*--"assembly of all principles, it is at the centre of the top of the head, "in it a bean could be placed," it it 1.5 inches behind 前頂 *ch'ien ting* and directly in line with the tips of ears.

前頂 *Ch'ien ting*—"front or crown of the head"; it is 1.5 inches behind *hsing hui* 顖會.

顖會 *Hsing hui*—"the meeting place at the top of the skull or head it is one inch behind 上星 *shang hsing*.

上星 *Shang hsing*—"the supreme star or point of light"; it it one inch from the hair margin.

神庭 *Shen t'ing*—"the courtyard of the positive spirits"; it is 0.5 inch from the hair margin.

素髎 *Su chiao*—"the empty pit"; it is at the tip of nose. Cautery is prohibited.

水溝 *Shui kou*—" water course, water trench or channel"; it is the canal at the centre of the upper lip.

兌端 *Tui tuan*—"exchange doctrines"; it is at the centre of the upper lip, at margin of skin and mucous membrane.

齦交 *Ken chiao*—"junction of the teeth"; it is inside the lip at junction of gums at the point between the two central incisors.

足太陽膀 經 Choh Tai Yang Pang Kwang Chin

The Foot Great Male of the Bladder Tract. Channel No3.

睛明 *Ch'ing ming*—"clear pupil," it o.1 in. from inner angle or canthus, of the eye.

攢竹 *Tsan chu*—"dirty bamboo (harelip)"; it is at the depression near medial border of eyebrows-5 inches from hair margin.

眉冲 *Mei ch'ung*—"to soar to eyebrows"; it is between the **神庭** *shen t'ing* and **曲差** *ch'u cha;* directly above **曲差** *ch'u ch'a* on the forehead between **神庭** *shen t'ing* and **曲差** *ch' uch'a* according to some written authorities, but below and between those pits when viewed from the side on the chart.

曲差 *Ch'u ch'a*—"crooked mistakes or errors"; its site is 1.5 inches from **神庭** *shen t'in*

五處 *Wu ch'u*—"the dwelling place of the five (elements)"; it is 0.5 inch behing **曲差** *ch'ü ch'a*, 1.5 inches beside **上星** *shang hsing.*

承光 *Cheng kwang*—"to receive the light, or glory"; it is 1.5 inches behind **五處** *wu ch'u*

通天 *T'ung t'ien*—"to be in communication or, open to heaven"; it is 1.5 inches behind **承光** *ch'eng kwang.*

絡郤 *Lo ch'i*—"intimacy of blood vessels"; it is 1.5 inches behind *t'ung t'ien.* **通天**

玉枕 *Yi chen*—"jade pillow," corresponds to place one's head lies on a pillow"; it is 1.5 inches behind **絡郤** *lo ch'oh.*

天柱 *T'ien chu*—"heaven's pillar" it is back of neck, outer border of large ligament, at the depression near the hair border. Cautery is in prohibition.

大杼 *Ta chu*—"great mallet"; it is below "the first vertebral bone", which is approximately between 6th. and 7th. cervical vertebrae. The sites are on each side and two inches from the mid line of the back.

風門 *Feng m n*—"spirit gate, or wind gate"; it is "below the 2nd vertebral bone" and two inches from the mid line on each side. The "2nd vertebral bone" is approximately between 7th. cervical and 1st. dorsal spines

肺俞 *Fei yü*—"answers to lungs"; it is "below the 3rd. vertebral bone" and is 2 inches from mid line pit one on each side.

厥陰俞 *Chueh yin y'i*—"one's negative principle"; it is below the "4th. vertebral bone" and is 2 inches from mid line pit one on each side.

心俞 *Hsin y'i*—"answer to heart"; it is below "5th. vertebral bone" and is 3 inches from mid line on each side.

督俞 *Tu y'i*—"direct the answer or affirmation"; it is below the "6th vertebral bone" and is 2 inches from the mid line on each side.

膈俞 *Ko y'i*—"answers to the diaphragm"; it is below the "7th. vertebral bone" and is 2 inches from the mid line on each side.

肝俞 *Kan y'i*—"answers to the liver"; it is below the "9th. vertebral bone" and is 2 inches from the mid line on each side.

膽俞 *Tan y'i*—"answers to the gall bladder"; it is below the "10th. vertebral bone" and is 2 inches from the mid line on each side.

脾俞 *P'i y'i*—"answers to the spleen"; it is below the "11th. vertebral bone" and is 2 inches from the mid line on each side.

胃俞 *Wei y'i*—"answers to the stomach"; it is below the "12th. vertebral bone" and is 2 inches from the mid line on each side.

三焦俞 *San chiao y'i*—"answer to the 3 burning spaces"; it is below the "13th. vertebral bone" and is a inches from the mid line on each side.

腎俞 *Shen y'i*—"answers to kidneys"; it is below the "14th. vertebral bone" and is 2 inches from the mid line on each side.

氣海俞 *Ch'i hai yü*—"answers to sea of cosmic spirit"; it is below the "15th. vertebral bone" and is 2 theches from the mid line on each side.

大腸 *Ta ch'ang*—"answers to great bowels"; it is below the "16th. vertebral bone" and is 2 inches from the mid line on each side.

關元 *Kuan yuan*—"the pass of the original principles"; it is below the "17th. vertebral bone and is 2 inches from the mid line on each side.

小腸俞 *Hsiao ch'ang yü*—"answers to the small intestine"; it is below the "18th. vertebral bone and is 2 inches from the mid line on each side.

膀胱俞 *P'ang kwang yü*—"answers to the bladder"; it is below the "19th. vertebral bone" and is 2 inches from the mid line on each side.

中膂 *Chung lu*—"middle of bone" (middle of sacrum in mid line of vertebral column); it is below the "20th. vertebral bone" and is 2 inches from the mid line on each side.

白環俞 *Pai huan yü*—"ring of purity"; it is below the "21st vertebral bone" and is 2 inches from the mid line.

上髎 *Shang chiao*—"upper pit"; it is at the depression below the first sacral spine.

次髎 *Tz'ŭ chiao*—"inferior or 2nd pit"; it is at the depression of the 2nd sacral spine.

中髎 *Chung chiao*—"middle pit"; it is at the depression of the 3rd sacral spine.

下髎 *Hsia chiao*—"lower pit"; it is at the depression of the 4th. sacral spine.

會陽 *Hui yang*—"assembly of the male or positive principles"; there are two points, each one of which is between the ischial tuberosity and the tip of the coccyx.

附分 *Fu fen*—"near to division"; it is below the "2nd. vertebral bone" and is 3.5 inches from the middle of the back opposite **風門** *feng mên*.

魄戶 *P'o hu*—"yin or earthly soul fate"; it is below the 3rd vertebral bone" and is 3.5 inches from the mid line line.

膏肓 *Kao huang*—"the fat of the vitals". This region of the body is supposed to be over that part between the hart and diaphragm and is not accessible to accupuncture. This region is designated as "the vitals". It is below the "4th. vertebral bone" and is 3.5 inches from the middle line.

神堂 *Shen t'ang*—"hall of positive spirit"; it is "below 5th vertebral bone" and 3.5 inches from the mid line of the back.

譩譆 *I hsi*—"cry of grief or pain, or an interjectional term which expresses joy"; it is at the interior border of scapula, "below 6th. vertebral bone," 3.5 inches from mid line of back.

膈關 *Ko kuan*—"the 'pass' of the diaphragm"; it is "below 7th. vertebral bone" and 3.5 inches from the mid line of the back.

魂門 *Hun men*—"the door of the yang or celestial soul"; it is "below the 9th. vertebral bone" and 3.5 inches from the mid line of the back.

陽綱 *Yang kang*—"regulating the positive principle"; it is below 10th. vertebral bone" and 3.5 inches from the mid line of the back.

意舍 *Ishê*—"dwelling place of the thoughts, sentiments or motives" it is "below the 11th. vertebral bone" and 3.5 inches from the mid line of the back.

胃倉 *Wei tsang*—"stomach granary"; its site is "below the 12th. vertebral bone" and 3.5 inches from the mid line of the back.

肓門 *Huang mˆn*—"gate of the vitals" i. e. the region between the heart and diaphragm. Its site is "below 13th. vertebral bone", and 3.5 inches from the mid line of the back.

志室 *Chih shih*—"the house of the will"; its site is "below the 14th. vertebral bone" and 3.5 inches from the mid line of the back.

胞肓 *Tao huang*—"region of womb, bladder and vitals"; its site is "below the 19th. vertebral bone" and 3.5 inches from the mid line of the back.

秩邊 *Chih pien*—"decorum's edge"; its site is "below the 20th. vertebral bone" and 3.5 inches from the mid line of the back.

承扶 *Ch'eng fu*—"to receive aid"; its site is below the fold of the buttocks. Cautery is prohibited.

殷門 *Ying mˆn*—"great gate" its site is inches below *ch'eng fu* **承扶** between two ligaments. Cautery is prohibited.

浮郄 *Fou ch'i*—"divergent floating"; its site is one inch above **委陽** *wei yang*. It will be found when the knee joint is flexed.

委陽 *Wei yang*—"throw away the positive principle"; its site is 6 inches below **承扶** *ch'eng fu* at fold of buttocks.

委中 *Wei chung*—"threw away the middle"; its site is in the fold at the centre of the popliteal space. Cautery is prohibited.

合陽 *Ho yang*—"the union of the positive principles"; its site is 2 inches below the fold **約文** *yoh wˆn*.

承筋 *Ch'êng chin*—" receive sinews"; its site is 7 inches above the ankle at the centre of **腨腸** *shui ch'ang* i. e. centre of the calf of leg.

承山 *Ch'êng shan*—"receive mountain"; its site is in the depression below **腸** *shui ch'ang* where the 2 bellies of the gastrocne mei meet.

飛揚 *Fei yang*—"flying of positive"; its site is in a depression 7 inches above ext. malleolus.

附陽 *Fu yang*—"ankle positive principle"; its site is 3 inches above ext. malleolus in front of great male and behind small male channels.

崑崙 *K'un lun*—"famous mountains in Tibet"; its site 0.5 inch behind external malleolus, in the depression adjoining tendo Achilles.

僕參 *Pu ts'an*—"joining of the 3 servants, consult with servant, or ones own comtemplation"; its site is at the depression below attachment of tendo Achilles.

申脈 *Shen mo*—"increase or notify the vessels (arteries and veins)", its site is in the depression, 0.5 inch below external malleolus. Cantery is prohibited.

金門 *Chin men*—"metal or gold gate"; its site is one inch below external malleolus in front of **申脈** *shen mo* and behing **墟邱** *ch'io shi*.

京骨 *Ching ku*—"metropolis bone"; its site is below and external to the "large bone of the fifth toe", at margin of skin of sole and foot.

束骨 *Shu ku*—"to bind bogether the bones"; about base of 5th. metatarsal bone. Its site is at the posterior depression of the joint external to the fifth toe.

通谷 *T'ung ku*—"pass through the valley"; about metartarsal bone of the little toe. Its site is at the anterior depression near joint on outer surface of the fifth toe.

至陰 *Chih yin*—"arrive at negative principle"; its site is at the side of the nail of the 5th toe on the outer or external border, 2 inches from the nail.

足太陰脾經 Choh T'ai Yin P'i Chin

Foot Great Negative Spleen Channel. Channel No. 4

隱白 *Yang pai*—"pure positive"; its site is at the inner side of the end of 1st or great toe about 0.5 cm from nail. Cautery is prohibited.

大都 *Ta tu*--"great city"; its site is behind the 1st. joint of the great toe on inner tibial side of fold of joint.

太白 *T'ai pai* - "exceeding purity"; its site is at base of great toe to inner side of bony eminence.

公孫 *Kung sun*—"public grandson"; its site is in the depression in front of and in line with the internal malleolus, one inch behind the joint of great toe.

商邱 *Shang ch'iu*—"trade mound"; its site is below and in front of the internal malleolus between **中封** *chung fêng* **照海** *chao hai*.

三陰交 *San yin chiao* —"union of 3 negatives principles"; its site is 3 inches above internal malleolus.

漏谷 *Lou ku*—"ouging valley"; its site is 6 inches above internal malleolus in depression below muscle of tibia.

地機 *Ti chi*—"moving power of earth, earth's opportunity"; its site is 5 inches below knee at the depression on the inner side below the muscle.

陰陵 *Yin lin*—"mound of the negative principle"; its site is below tibial tuberosity at inner side of knee. Cautery is prohibited.

箕門 *Chi men*—"the sieve door; winnowing"; its site is above **魚腹** *ü fu* between two ligaments on inner border of thigh, where pulse is felt.

衝門 *Ch'ung men*—"dash against the door,"; its site is one inch below **府舍** *fu shae*, 5 inches below **大橫** *ta huan* at each side of symphis pubis, and 4.5 in. from mid line.

府舍 *Fu she* —"lodge of the treasury or storehouse"; its site is 3 inches below **腹結** *fu chieh*, 4.5 inches from mid line.

腹結 *fu chieh* —"the belly tied in a knot (colic in small intestines)"; Its site is 1.3 inches below **大橫** *ta huan* and 4.5 inches from the mid line.

大橫 *Ta huan*—"great horizontal"; its site is 3.5 inches below **腹哀** *fu ai* and 4.5 inches from the mid line.

腹哀 *Fu ai* 'belly grief, abdominal distress"; it's site is 1.5 inches below **日月** *jih yueh* and 4.5 inches from the mid line.

食竇 *Sih tou*—"eating hole or drain"; its its site is 1.6 inches below **天谿** *tien ch'i*.

天谿 *T'ien ch'ih*—"stream of heaven"; its site is 1.6 inches below **胸鄉** *hsiung hsiang*.

胸鄉 *Hsiung hsiang*—"country of breast or intelligence or mind" its site is 1.6 inch below **周榮** *chou jung*.

周榮 *Chou jung*—"on all sides glory"; its site is 1.6 inches below **中府** *chung fu*.

大包 *Ta pao*—"large parcel, hold the great"; its site is 3 inch below **淵液** *yuen yeh* at the 9th. costal interspace.

足少陽胆經 Choh Shao Yang Tan Chin

Foot Small Male Gall Bladder Tract. Channel No.5

瞳子窌 *T'ung tz'i chiao*—"eye pupil hole;" its site is 0.5 inch from external canthus of eye.

聽會 *T'ing hui*—"unite hearing, listening society" its site is one inch below **上關** *shang kuan* at depression in front of ear.

上關 *Shang kuan*—"upper pass"; it is below eye on malar prominence; its site is in front of the ear in a depression one feels when the mouth is opened.

頷厭 *Han yen*—"take exception to the chin" to shade the chin; above the orbital ridges; its site is below *ch'ü chio* **曲角** at the border of the temporal bone.

懸釐 *Hs'üan li*—"mysterious, scanty"; "suspend happiness"; its site is below **曲角** *ch'ü chio* at the lower border of the temporal bone.

懸顱 *Hs'üan lu*—"the hanging vessel"; its site is below **曲角** *ch'ü chio* at the center of temporal bone.

曲鬢 *Ch'ü pin*—"crooked or bent hairs on the temple."; its site is above the ear, in the hair, in the depression of *Ch'ü ü* **曲隅**.

率谷 *Shuai ku*—"to follow the valley"; its site is at a depression 1.5 inches from the hair, margin.

天衝 *T'ien ch'ung*—"drifting or floating to heaven; floot to heaven"; its site is 2 inches from the hair margin behind the ear and 3 in. above it.

浮白 *Fou pai*—"mix the precious, pure, white" (principles); its site is one inch from the hair margin behind the ear.

竅陰 *Ch'iao yin*—"intelligent negative"; its site is above the **完骨** *wan ku* and below occipital bone where there is an "empty hole".

完骨 *Wan ku*—"the complete bone"; its site is 4 inches from the hair margin behind the ear.

本神 *P n shen*—"one's own personal spirit"; its site is 1.5 inches from the **曲差** *ch'ü ch'a* and 0.4 inch from the margin of hair and above it in a straight line.

陽白 *Yang pai*—"pure positive"; its site is one inch above the eyebrow and directly above the pupil.

臨泣 *Lin chu*—"near flowing tears"; its site is 0.5 inch from the hair margin above the eyes.

目窗 *Mu ch'uang*—"the window of the eyes"; its site is 1.5 inches behind *lin chu* **臨泣**.

正營 *Cheng ying*—"correct arrangement"; its site is 1.5 in behind **目窗** *mu ch'uang*.

承靈 *Ch'eng ling*—"hold the spirit"; its site is 1.5 inch behind **正營** *chen ying*.

腦空 *Nao k'ung*—"brain space", (part of cranium is empty); its site is 1.5 inch behind **承靈** *ch'eng lin*.

風池 *F ng ch'ih*—"spirit pool, wind pool"; its site is below **腦空** *nao k'ung* behind the ear, in a depression at hair margin behind the temporal bone.

肩井 *Chien ching*—"well of shoulder"; its site is at the depression above the clavicle 1.5 in. from the bone.

淵腋 *Yuan yeh*—"Abyss of armpit"; its site is 3 inches below the apex of the axilla when the arm is raised.

輒筋 *Che chin*—"abrupt vessel"; its site is 3 inches below axilla 1.3 inches from the anterior muscle margin at level of mammary gland.

日月 *Jih y eh*—"sun and moon, positive and negative"; its site if 0.5 inch below **京門** *ching m n*.

京門 *Ching m n*—"gate of capital"; its site is 0.5 inch above the navel and 9.5 inches from the mid line.

帶脈 *Tai mo*—"girdle vessel"; its site is 1.8 below *chi lch* **季肋** and 0.2 inch above the navel and ordinarilly 8.5 inches from the mid line but 8 inches in an emaciated man.

五樞 *Wu shu*—"5 axes (poles)"; its site is 3 inches below **帶脈** *tai mo* and 5.5 inches from **水道** *shui tao*.

維道 *Wei tao*—"to maintain the way, to keep the path"; its site is 5.3 inches below **章門** *chang m n* and 8.5 inches from **中極** *chung chieh*.

居髎 *Chu chiao*—"live in vault"; its site is 8.3 inches below *chang m n* **章門**.

環跳 *Huan t'iao* —"to jump the ring or circle" i. e. pelvic ring (at great trochanter); its site is at the hip joint when thigh is flexed on abdomen.

風市 *Fêng shih*—"wind market, spirit market"; its site is above the knee at the point where the end of mid finger reaches with the arm handing down along side of the thigh.

中瀆 *Chung tu*—"middle trouble"; its site is on the external surface of the thigh, 5 inches above knee joint.

陽關 *Yang kuan*—"pass of positive principles"; its site is immediately above the knee joint, 3 inches above **陽陵泉** *yang lin ch'uan* at the depression lateral to the patella.

陽陵泉 *Yang ling ch'uan*—"pure spring of positive principles"; its site is one inch below knee, at the depression at external border of the tibia between bone and ligaments which one feels when sitting dawn.

陽交 *Yang chiao*—"blending of positive principles, union of positive principles"; its site is 7 inches above the external malleolus.

外邱 *Wai ch'iu*—"outside the hill"; its site is 7 inches above the external malleolus at the level of *Yang chiao* **陽交**.

光明 *Kwang ming*—"bright intelligence"; its site is 5 inches above external malleolus.

陽輔 *Yang fu*—"props of positive principles"; its site is 4 inches above external malleolus in front of the fibula and 7 inches from **邱墟** *ch'iu hsü*.

懸鐘 *Hsüan chung*—"hanging goblet"; its site is 3 inches above external malleolus.

邱墟 *Ch'iu hsü*—"Waste mound"; its site is 3 inches from **臨泣** *lin ch'i* and 5.5. in from **夾溪** *chich ch'i*, at the depression below the external malleolus.

臨泣 *Lin ch'i*—"near weeping"; its site is 1.5 inches from **夾溪** *chieh ch'i* in a line with the joint of 4th and 5th finger.

地五會 *Ti wu hui*—"earth's five meeting"; its site is one inch from *chieh ch'i* behind and in line with joint of 4th. and 5th. fingers.

夾溪 *Chich ch'i*—"heroic river"; its site is at the depression between 4th and 5th toes.

陰竅 *Ch'iao yin*—"the negative principle opening"; its site is 0.5 cm. from nail of 4th toe.

手陽明大腸經 Sheo Yang Ming Ta Ch'ang Chin

The Hand Male Bright Great Gut Tract. Channel No. 6

商陽 *Shang yang*—"trade the positive principles"; its site is inside of the second finger.

二間 *Erh chien*—"Two sections or two crevices;" its site is in front and to inner side of base of index finger.

三間 *San chien*—"Third section or crevice;" its site is above *erh chien* **二間** about metacarpal-phalangeal joint of index finger.

合谷 *Ho ku*—"join the valley"; its site is between 1st. and 2nd. finger.

陽谿 *Yang ch'i*—"ravine of positive principle"; its site is above the wrist joint.

偏歷 *Pient li*--"partial calculation"; its site is 3 inches above wrist joint.

溫溜 *Wen liu*—"warm stream"; its site is 6 inches above wrist (man) 5 inches above wrist (child).

上廉 *Shang lien*—"upper corner"; its site is 4 inch below **三里** *san li.*

下廉 *Hsia lien*--"lower corner"; its is 4 inches below **曲池** *ch'u ch'ih*

三里 *San li*--"3 villages or miles"; its site is 2 inches below **曲池** *ch'u ch'ih.*

曲池 *Ch'u ch'ih*—"crooked pool"; its site is at the transverse line of elbow joint.

肘髎 *Chou chiao*—"elbow pit"; its site is at the "large bone of elbow" at the level of **天井** *ti'en ching* and 1.4 inches from it.

五里 *Wu li*—"five villages or miles"; its site is 3 inches above elbow joint.

臂臑 *Pei nao*—"shoulder or outer bone of upper arm"; its site is 7 in above elbow joint.

肩髃 *Chien yung*—"large head of shoulder"; its site is at the head of **膊肉** *po ru.*

巨骨 *Chu ku*—"Great or chief bone"; its site is at the end or tip of shoulder.

天鼎 *T'ien T'ing*—" heaven's cauldron"; its site is one inch behind **扶突** *fu t'u.*

扶突 *Fu t'u*—"aid the protrusion"; its site is at the neck just 1 in. below the lower jaw.

禾髎 *Ho chiao*—"glue of growing grain"; its site is below the nostril, 0.5 inch from the mid line. Prohibition of cautery.

迎香 *Ying hsiang*—"welcome fragrant" its site is one inch above **禾髎** *Ho chiao* and 0.5 inch from the nostril. Cautery is prohibited.

足明胃經 Chio Yang Ming Wei Chin

The Foot Male Bright Stomach Tract. Channel No. 7

頭維 *T'ou wei*—"to hold fast or, tie the head," its site is at outer angle of forehead 0.5 inch inside of hair margin, 4.5 inches from **神庭** *Shen t'ing*.

下關 *Hsia kuan*—"lower pass" its site is in front of ear at depression which is felt when mouth is closed and which disappears when mouth is opened.

頰車 *Chia ch'ê*—"chariot of the jaw or cheek"; its site is 0.8 in. below ear.

大迎 *Ta ying*—"great welcome"; its site is 1.3 inches anterior to angle of jaw.

地倉 *Ti tsang*—"the granary of the earth, earth's granary"; its site is 0.4 in from angle of mouth.

巨髎 *Chu chiao*—"chief or great hole"; its site is 0.8 inch from nasal aperture below and in straight line with pupil of eye.

四白 *Ssŭ pai*—"four purities (principles);"; its site is one inch below eye in line with the pupil of the eye.

承泣 *Ch'eng ch'i*—"to receive tears"; its site is directly below the pupil of the eye. Cautery is prohibited.

人迎 *Jên ying*—"welcome man, man received"; its site is 1.5 inches from **結喉** *chieh hou* (thyroid cartilage). Cautery is prohibited.

水突 *Shui t'u*—"rushing out of the waters"; its site is at the front of great ligament of neck below **人迎** *jên ying* and above **氣舍** *Chi she*.

氣舍 *Ch'i shê*—"the dwelling place of the cosmic spirit"; its site is in front of the great ligamet of the neck and below **人迎** *jên ying* and at the side of **天突** *Tien t'u*.

缺盆 *Ch'uch p'n*—"the basin of defects"; its site is above the shoulder, in the depression above the clavicle.

氣戶 *C'hi hu* —" door to the breath or air or vapours or cosmic spirit"; its site is below 巨月 *chu ru* and at the depression 4 inches from the mid line and 2 inches from 俞府 *yu fu*.

庫房 *K'u fang*—"room of treasury, store house"; its site is 1 inch below 氣戶 *ch'i hu* and 4 inches from the mid line.

屋翳 *Wu i*—"house screen"; its site is 1 inch below 庫房 *K'u fang* and 4 inches from the mid line.

膺窗 *Ying ch'uang*—"window of the breast"; its site is 1.6 inches below 屋翳 *wu i* and 4 inches from the mid line.

乳中 *Ju chung*—"middle of breasts"; its site is at mid nipple centre. Cautery is prohibited.

乳根 *Ju ken*—"base of thorax"; its site is 1.6 inch below 乳中 *ru chung*.

不容 *Pu jung*—"not admit"; its site is at the end of 4th. rib and 2 inches from the mid line. 1.5 in. from 幽門 *yu m'n* opposite 巨闕 *chu chueh*.

承滿 *Ch'eng man*—"completely filled, complete reception"; its site is 1 inch below 不容 *pu jung* and 2 inches from the mid line.

梁門 *Liang m'n*—"bridge gate"; its site is 1 inch below 承滿 *ch'eng man* and 2 inches from the mid line.

關門 *Ku'n men*—"gate of pass"; its site is 1 inch below 梁門 *liang m'n* and 2 inches from the mid line.

太乙 *T'ai i*—"great monad"; its site is 1 inch below 關門 *kuan m'n* and 2 inches from the mid line opposite 建里 *chien li*.

滑肉 *Hua jou*—"smooth or slippery meat"; its site is 1 inch below 太乙 *t'ai i* and 2 inches from the mid line. opposite 水分 *Chui f n*.

天樞 *T'ien shu*—"heaven's control, point or pivot"; its site is 2 inches from umbilicus 0.5 in. from 肓俞 *huang yu*.

外陵 *Wai ling*—"out sides tomb or mound"; its site is 1 inch below 天樞 *t'ien shu*. and 2 inches from the mid line, opposite 石門 *shih m'n*.

大巨 *Ta cuh*—"immense or great"; its site is 1 inch below 外陵 *wai ling* and 2 inches from the mid line.

水道 *Shui tao*—"water course"; its site is 3 inches below 大巨 *ta chu* and 2 inches from the mid line.

歸來 *Kuei lai*—"return, come"; its site is 2 inches below 水道 *shui tao* and 2 inches from the mid line, one inch above inguinal canal and on both sides near pubic hair border.

氣衝 *Ch'i ch'ung*—"mixing gases, mixing the vital essence"; its site is 1 inch below 歸來 *kuei lai* and 2 inches from the midline.

髀關 *P'i kuan*—"the pass to the hip joint"; its site is 12.0 inches above the knee joint behind 伏兎 *fu t'u*.

伏兎 *Fu t'u*—"the squatting rabbit"; its site is 6 inches above the knee joint. Cautery is prohibited.

陰市 *Yin shih*—"negative principles market"; its site is 3 inches above the knee joint in the depression below 伏兎 *fu t'u*.

梁邱 *Liang ch'iu*—"ridge of mound, bridge and hill"; its site is 2 inches above knee joint between two ligaments.

犢鼻 *T'u pi*—"nose of the calf"; its site is below the patella in a depression above the tibia.

三里 *San li*—"3 villages or miles"; its site is in a depression 3 inches below the "eye of the knee" inside the large ligament.

上廉 *Shang lien*—"upper border or purity"; its site is 3 inches below 三里 in the depression between two ligaments.

條口 *T'iao k'ou*—"branch opening"; its site is 5 inches below. 三里. Cautery is prohibited.

下廉 *Hsia lien*—"lower border"; its site is 3 inches below 上廉.

豐隆 *Feng lung*—"sacrificial vessel of glorious?"; its site is 8 inches above external malleolus.

解谿 *Chieh ch'i*—"loosen the stream"; its site is 1.5 inch behind 冲陽 *ch'ung yang* and above the ankle where one customarily applies the tape to bind clothes to ankle.

衝陽 *Ch'ung yang*—"infuse the positive principles"; its site is where pulse can be felt 5 inches above 足脙 *choh hsin* 2 inches from *han ku* 陷谷

陷谷 *Han ku*—"fall into the valley"; its site is at the depression behind joints of 1st and 2nd toe. 2 inches from 內庭 *nei t'ing*

內庭 *Nei t'ing*—"inside the audience hall"; its site is at the depression on outer side of fold between 1st and 2nd toe.

厲兌 *Li tui*—"Exchange dangerous"; its site is at the end of 1st and 2nd toe. 5 inches from the nails.

手太陽小腸經 Sheo T'ai Yang Hsiao Ch'ang Chin. Channel No. 8

The Hand Great Male Small Gut Tract

少澤 *Hsiao tse*—"wanting in moisture"; its site is at ulna; side of the 5th finger. 0.1 inch from the nail.

前谷 *Ch'ien ku*—"front valley"; its site is on the ulnar side of the 5th finger in the depression in front of the joint.

後谿 *Hou chi*—"posterior valley"; its site is on the ulnar side of the 5th finger behind the joint.

腕骨 *Wan ku*—"wrist joint bones"; its site is on the ulnar side of the hand in the depression below styloid process of the ulna.

陽谷 *Yang ku*—"positive principles valley"; its site is on the ulnar side of the hand **腕中** *wan chung* in the depression in middle of wrist below **鋭月** *lin yüeh*.

養老 *Yang nao*—"nourish the old"; its site is in the depression 1 inch above the wrist.

支正 *Chih cheng*—"true or genuine branch"; its site is 5 inches above the wrist on the ulnar side of forearm.

小海 *Hsiao hai*—"small sea"; its site is ulnar side of the elbow 0.5 inch from the external condyle of humerus.

肩貞 *Chien chen*—"head of shoulder", "inquiry by divinition": its site is in the depression behind **肩顒** *chien yü* (acromion?)

臑俞 *Nao yu*—"shoulder answers"; its site is in the depression behind. **肩顒** *chien yü*.

天宗 *T'ien tsung*—"heavenly ancestors"; its site is behind **秉風** *ping feng* in the depression below the large bone.

秉風 *Ping feng*—"to grasp or hold the wind"; its site is in the depression on the outer side of **天髎** *t'ien chiao* on the shoulder when the arm is lifted up it is at the junction of the clavicle and scapula.

曲垣 *Ch'oh yüan*—"crooked wall"; it is above the spine of scapula, and pressure on this point causes pain: its site is an line with *ta su* **大杼** and 3 inches from **肩中俞** *chien chung yü* at the middle of the shoulder.

肩外俞 *Chien wai yü*—"outside shoulder"; its site is one inch above the spine of the scapula.

肩中俞 *Chien chung yü*—"middle of top of the shoulder"; its site is on the internal border of **肩胛** *chien chia* (scapula) in the depression 2 inches from mid line.

天窗 *T'ien chiao*—"window of heaven"; its site is below the ear, behind **曲頰** *ch'ü chiao* the depression on the neck between two ligaments; in front and above it is *ch'oh chia*. **曲差**

顴髎 *Chu chiao*—"great chief pit"; its site is be low the lower border of the malar bone.

聽宮 *T'ing kung*—"palace of hearing"; its site is near junction of lobule of ear with cheek.

手太陰肺經 Sheo T'ai Yin Fei Chin. Channel No. 9

The Hand Great Female Lung Tract.

中府 *Chung fu*—"middle store house"; its site is 1.6 inch below **雲門** *yun mên* 6 inches from *hwa kai* **華蓋** in the third intercostal space avove the nipple.

雲門 *Yün mên*—"gate of clouds"; its site is 2 inches from **氣戶** *ch'i hu* 6 inches from *shuen chi*. **璇璣**

天府 *T'ien fu*—"place of heaven"—"heaven's treasury"; its site is 3 inches below axillary border on upper arm. Cautery is prohibited.

俠白 *Chieh pai*—"heroic purity"; its site is below **天府** *t'ien fu* 5 inches above the elbow.

尺澤 *Ch'ih tsê*—"artery at middle of elbow"; its site is at the middle of the arm in the transverse crease of the elbow joint.

孔最 *K'ung tsui*—"assemble at the hole"; its site is in the depression 7 inches above the wrist on the radial side of forearm.

列缺 *Lieh ch'üeh*—"set in order, arrange the deficiency"; its site is on external surface of forearm and 1.5 inch above the wrist. Dove tailing the two thumbs and index fingers—the tips of index fingers rest on the depression.

經渠 *Ching ch'u*—"lengthwise drain"; "through the little stream"; its site is the depression at the side corresponding to **寸** (inch) when feeling the pulse.

太淵 *T'ai yüan*—"great gulf—or pool—or abyss"; its site is at the depression above the palm of the hand.

魚際 *Yü chi*—"fish margin"; its site is in the depression on thenar eminence.

少商 *Shiao shang*—"small or little trade"; its site is at the end of the ulnar side of thumb. .5 inch from nail. Cautery is prohibited.

手厥陰心包絡經 Sheo Chueh Yin Hsin Pao Lo Chin

The Hand Female Pericardium Tract. Channel No. 10

天池 *T'ien chih*—"heaven's pool"; its site is 3 inches below axilla, 1 inch behind nipple.

天泉 *T'ien ch'uan*—"spring of heaven"; its site is 2 inches below apex of axilla when arm in lifted.

曲澤 *Ch'u tsi*—"crooked moist"; flex elbow and crease is formed and its site is the depression at ulnar extremity of this crease.

郤門 *Chio m'n*—"door of rejection"; its site is above the palm 5 inches from wrist.

間使 *Chien shih*—"used space"; its site is 3 inches above the palm in the depression between 2 ligaments.

內關 *Nei kuan*—"inside pass"; its site is above the palm 2 inches from wrist between two ligament opposite to *wai kwan*. 外關.

大陵 *Ta ling*—"great tomb"; its site is above the palm in the transverse crease between two ligaments.

勞宮 *Lou kung*—"palace of toil"; its site is in the centre of the palm between 3rd and. 4th. fingers, when fingers are flexed on palm.

中冲 *Chung ch'ung*—"near end of middle finger"; "the middle rising?" its site is at the end of 3rd. finger. .5 inch from nail.

足少陰腎經 Choh Shiao Yin Shen Chin. Channel No. 11

The Foot Young Female Kidney Tract.

湧泉 *Yung ch'uan*—"rising spring"; it is in the depression formed on the sole of foot when it is flexed.

然谷 *Jan ku* –"right valley"; it is in the depression below and anterior to the internal malleolus.

照海 *Chao hai*–"Shining sea"; it is .4 inch below internal malleolus.

太谿 *T'ai ku*—"very great valley"; It is below and .5 inch behind internal malleolus, in the depression where the pulse can be palpated.

大鐘 *Ta chung*—"great bell"; It is at the posterior extremity of the heel above the large bone between two ligaments.

水泉 *Shui ch'uan*—"water spring"; It is below the internal malleolus 1 inch above *tai chi* 太谿.

復溜 *Fu liu*—"again detain"; It is 2 inches above internal malleolus posterior to tendo achilles.

交信 *Chiao hsin*—"union of directions"; "unite message"—It is 2 inches above internal malleolus between the ligament and bone, i. e. anterior to tendo achilles.

築賓 *Chu pin*—"beat down the bank"; "build the the bank" It is above the internal malleolus .5 inch below *shui* 腨 or calf of leg.

陰谷 *Yin ku*—"valley of negative"; With knee flexed it is in depression behind the knee between 2 ligaments.

橫骨 *Heng ku*—"horizontal bone"; It is 1 inch from the mid line and 1 inch below 大赫 navel and 5 inches below 肓俞 *huang yi*.

大赫 *Ta ho*—"great luminous"; It is 4 inches below *huang yu* 肓俞 1 inch from the mid line of abdomen.

氣穴 *Ch'i hsüeh*—"the cave of the cosmic principle"; It is 3 inches below 肓俞 *huang yu* and 1 inch from the mid line of abdomen.

四滿 *Si man*—"four full"; It is 2 inches below 肓俞 *huang yu* and 1 inch from the mid line of abdomen.

中注 *Chung chu*—"middle of the flowing water"; It is 1 inch below *huang yu* 肓俞 and 1 inch from the middle line of abdomen.

肓俞 *Huang yu*—"response of the vital"; It is beside the navel .5 inch from the middle line of abdomen.

商曲 *Shang ch'ü*—"deliberate crooked"; It is 1 inch below *huang yu* 肓俞 and 1.5 inch from the middle line of abdomen.

石關 *Shich kuan*—"stone pass"; It is 2 inches above *huang yu* 肓俞 1.5 inch from the middle of abdomen.

陰都 *Yin tu*—"metropolis of negative"; It is 3 inches above *huang yu* 肓俞 and 1.5 inches from the middle of abdomen.

足少陰腎經 Choh Shao Yin Shen Chin. Foot Small Female Kidney Tract. Channel No. 11

通谷 *Tung ku*—"through the valley"; its site is 4 inches above *chien yu* 肩俞 1.5 inches from the middle line of abdomen.

幽門 *Yu m'n*—"hidden door—secret door-pylorus"; its site is five inches above *huang yu* 肓俞 and 1.5 inches from the mid line of abdomen.

步廊 *Pu lao*—"walk in corridor"; its site is 1.6 inches below *shen feng* 神封 and 2 inches from the mid line of abdomen.

靈墟 *Ling hs'i*—"spirit market"; its site is 1.6 inches below *shen ts'ang* 神藏 and 2 inches from the midline of abdomen.

神封 *Sheng f'ng*—"seal up positive spirit;" "boundary of spirit"; its site is 1.6 inches below *ling hs'i* 靈墟 and 2 inches from the mid-line of abdomen.

神藏 *Sheng ts'ang* "spirit concealed"; its site 1.6 inches below *yu chung* 雍中 and 2 inches from the mid-line of the abdomen.

或中 *Hui chung*—"according to the middle-middle elegant"; its site is 1.6 inches below *yu fu* 俞府 and 2 inches from the mid-line of the abdomen.

俞府 *Yu fu*—"storehouse of affirmation"; its site is beside *hsuan chi* 璇璣 2 inches from the mid-line of the abdomen.

足厥陰肝經 Choh Chueh Yin Kan Chin The Foot Female Liver Tract. Channel No. 12

大敦 *Ta tun*—"great sincerity"; its site it at end of the 1st or of great toe on the external lateral surface.

行間 *Hang chien*—"Series of spaces"; its site is between the 1st and 2nd toes.

太冲 *T'ai ch'ung*—"great rising"; its site is 2 inches behind the joint of 1st toe.

中封 *Chung f'ng*—" middle closed"; its site is 1 inch in front of internal malleolus in the crease formed when foot is flexed on leg.

蠡溝 *Li keo*—"partition ditch"; its site is 5 inches above internal malleolus.

中都 *Chung tu*—"middle city"; its site is 7 inches above the internal malleolus.

膝關 *Hsi kuan*--"knee pass"; its site is 2 inches below *t'u pi* **墳鼻** in the depression on lateral surface of thigh.

曲泉 *Ch'ü ch'uan*—"crooked spring" its site, when knee is flexed, is at the internal side of knee above a large ligament and below a small ligament.

陰包 *Yin pao*—"wrap up the nagative"; its site is 5 inches above knee, on the the inner border of thigh.

五里 *Wu li*—"five villages or miles"; its site is 5 inches below *Ch'i Ch'ung* **気冲** where pulse can be felt.

陰廉 *Yin lien*--"pure negative"; its site is 2 inches below *ch'i ch'ung* **気冲**

***章門** *Chang m'n*—"section door"; its site is 2 inches above the navel and 6 inches from the mid-line, it is on a level with **大横** *ta huen* at the costal border.

期門 *Ch'i m'n*—"door of time"; its site is 1.5 inches from *pu jung*. **不容**

急脈 *Chi mo*—"urgent pulse"; its site is in the hair of pubis 2.5 inches from the similar pit opposite it.

手少陰心經 Sheo Shao Yin Hsin Chin.

The Hand Young Female Heart Tract. Channel No. 13

極泉 *Ch'i ch'uan*--"the spring at extreme limit" its site is inside the arm below the axilla between the ligaments, where the artery enters the chest.

青靈 *Ching lin*—"spirit of nature"; its site is 3 inches below the elbow.

少海 *Shao hai*—"little sea"; its site is .5 inch behind the joint of the elbow on the ulnar border and .5 inch from tip of olecranon process.

靈道 *Ling tao*—"spirit's road"; its site is 1.5 inches above palm on flexor surface of fore arm.

---

*On front of chest the standard used in measuring is the distance between the nipples which is 8 inches.

The Journal of the West China Border Research Society has been published since 1922 as a bi-annual publication. Beginning with Volume V, it becomes an annual journal. It prints articles on any phase of West China culture, in its broadest sense, both Chinese and non-Chinese. The results of any type of research dealing with specifically West China problems are welcomed. Authors are requested to use Wade's system of Romanization and to insert the Chinese characters in the manuscript. Place names should follow the Chinese Post Office Romanization. When small places on the border, not included in the Post Office Directory, are mentioned the Chinese characters should be given. Fifteen copies of reprints are given free to authors, and more may be obtained at cost, if requested at the time the manuscript is submitted.

Each member of the Society receives two copies of the Journal, except where man and wife take advantage of the reduced joint membership fee, when three copies of the journal are obtained by the family. Extra copies of Volumes IV and V may be obtained by members for $2.50 per copy. The price to non-members of Volumes IV and V is $3 00 each. Volumes I and III are still obtainable at $1.00 and $1.50 respectively, for both members and non-members.

All correspondence relating to the Journal should be addressed to the editor:

Dr. Leslie G. Kilborn,

West China Union University,

Chengtu, Szechwan, China.

SUPPLEMENT TO VOLUME V.

A supplement to Volume V, entitled "An English-Kiarung Vocabulary," by J. Huston Edgar, F.R.G.S., F.R.A.I., is now in the Press. On account of its technical nature it will be sent only to those members of the Society who order it at $3.00 Szechwan currency. The price to non-members is $5.00 Szechwan currency.

The publication of this vocabulary is made possible by a grant from the Harvard-Yenching Committee of the West China Union University. The supplement consists of an introduction on the Kiarung Language, followed by sentences showing the grammatical construction of Kiarung. The vocabulary of some 2400 words and phrases follows, the Romanization used being the Tibetan one.

Mr. Edgar is Honorary President of the West China Border Research Society, and has spent many years on the West China Border. The pages of this Journal testify to the richness of his work as an explorer and interpreter of the life of the border. The publication of this vocabulary brings to fruition a piece of work that has consumed years of careful labor, and gives to the world a knowledge of one of the many languages to be found in this region.