THE NORTHERN MARCHES OF YUNNAN

C. P. FITZGERALD

Meeting of the Society, 7 June 1943

THE journey which is the subject of this paper was undertaken in the winter of 1937, consequently some of the observations made upon the progress of new motor roads may now be out of date. The starting point was Tali, a city which lies just off the Burma Road in western Yunnan. Following the main caravan route to Tibet northwards as far as Likiang, I then made a diversion into the loop of the Yangtze, traversing the great gorge between Yu Lung Shan and Ha Pa Shan, and rejoining the road to the north at Shihku. This section of the journey was described in detail in an article in the Journal for September 1941 under the title “The Tiger’s Leap.”

From Shihku I followed the main Tea road northwards to Weisi. The direct route between Tali and Weisi is a part of the road linking the tea-growing district of Puerh (Ningerh) in south Yunnan with Tibet, via Atuntze. As such it is, of course, an ancient trade route, still in active use although no part of it had at that time been adapted to wheeled traffic. The first section of this journey from Tali to Likiang, a distance of 100 miles, is for Yunnan travel relatively easy going. Likiang is five stages from Tali, and there are only two passes to cross. This is exceptional in Yunnan where, as the ranges run from north to south and most roads pass from east to west, a journey usually involves at least one pass in every stage. Because the valleys are often too precipitous to follow, the traveller, even when proceeding from south to north, has often to climb to the crest of the ridge and detour round the narrow gorges.

The first stages from Tali are along the fertile plain by the shore of the Erh Hai, and then up the valley of the Erh river. Tengchwan, the first stage point, is now connected to the Burma Road by an extension of the branch road from Siakwan to Tali. This short section of about 50 miles was only occasionally used for official traffic in 1937 and 1938, and then only in the winter, as there were no permanent bridges or culverts and the streams were only passable in the dry season. A few miles north of Tengchwan the Erh river emerges from a narrow gorge 5 miles or more in length. At this point
the old road climbed to the crest of the ridge, but the motor road was then being cut out of the side of the gorge.

Erhyüan, the next district city, does not stand upon the road to the north, but a few miles from it. This habit of building the through routes so that they avoid some of the smaller cities is frequently found in Yünnan. Such towns serve as market centres for the farmlands around them and are not engaged to any marked degree in the long distance trade of the caravan roads. Probably for this reason, and because the citizens do not wish to have too much contact with the muleteers and other travellers, the roads were made to pass them by at a convenient distance. Erhyüan, in a small isolated lake plateau, is therefore a quiet place, enjoying the advantage of a constant hot water supply as boiling springs rise within the town itself.

Niukai, the second stage from Tali, is also in this hot-spring region, and perhaps has a future as a Spa. At present there is a sort of public bathing-pool into which a cool spring is run in order to make the temperature of the water bearable. Men and women use this pool on alternate days. The earthworks of the motor road to Likiang were then already completed as far as Niukai, although there were no bridges. Beyond this point the road crosses the first pass Ch'ou Shui Kuan, “Stinking Water Pass” (so called from a sulphurous spring); and the difficult task of cutting the motor road out of the sides of this mountain had not at that time made great progress.

Ch'ou Shui Kuan is the divide between the Erh river, which flows from Erhyüan lake, and the Yangpi river, which rises north of Kienchwan and flows south to the Mekong. From this pass, above the Kienchwan lake plateau, one obtains the first full view of the Yu Lung Shan, still 50 miles away, but towering over all the intermediate ranges. Two stages along the valley of the Yangpi through the town of Kienchwan the road crosses the considerable pass which is here the Mekong–Yangzte divide, and henceforward the character of the country changes. The plain of Likiang itself is the last of the typical Yünnan lake plateaux, the most northerly of the chain which stretches southward through Kienchwan, Erhyüan, Tali, and Mitu to Paoshan. North and west of Likiang the country is split up into the deep parallel valleys of the Yangtze, Mekong, and Salween. These narrow valleys, almost gorges, are the only areas where any cultivation is possible, and consequently the only areas able to maintain any population. The dividing ranges, sparsely inhabited by Li Su tribesmen, remain covered with dense virgin forest.

Even greater difficulties would be encountered in the construction of the projected roads linking north Yünnan with north-east Burma or Assam than in the building of the Burma Road. The mountains are higher and steeper; the rivers wider and more numerous, and there is no large local population to provide labour. This last obstacle, and the difficulty of feeding a labour force if it were imported from elsewhere, is probably the main reason why no great progress had been made with these schemes before the Japanese invasion of Burma rendered them temporarily useless.

Likiang, the most northerly Chinese city of any size in Yünnan, is a close-packed planless town of narrow alleys reminiscent more of a south Chinese city than the usual “northern” design found in Yünnan. Most Yünnan towns
are built four square, four streets from the four gates meeting at a central point, like the arrangement of a Roman camp. This design, found all over north China in cities of great antiquity, was probably introduced into Yünnan by the Ming dynasty conquerors, if not by the Mongols who preceded them. Likiang, which was the capital of the old Na Khi state before the Chinese conquest, has never been so thoroughly assimilated as the cities of the central Yünnan plateaux, and still retains a foreign air.

The townspeople themselves, though probably calling themselves Chinese and speaking the language, are well mixed with Na Khi and Tibetan stock. The surrounding villages are Na Khi to the north and west and Min Chia to the south; and there are Li Su settlements in the neighbouring mountains. The city is, moreover, an important centre for trade with Tibet. Tibetan merchants and nomads from the grasslands throng its narrow streets and crowded market. The place has a frontier atmosphere, it is a sort of Yünnanese Peshawar, a character emphasized by the fact that it is the headquarters of the Chinese command in North Yünnan.

The main route to the north from Likiang strikes north-westward to the southern tip of the great Yangtze bend at Shihku, skirting the south-western end of the Yu Lung Shan range. This range, with the Ha Pa Shan on the other bank of the Yangtze, form the two walls for the great gorge known as the Tiger's Leap (Hu T'iao Chiang).

Shihku, a small market town perched above the deep valley of the Yangtze, is the most northerly settlement of the Min Chia people. The topography of this district is unusual. The valley of the Yangtze, which has followed a course almost due north and south, turns sharply at Shihku and runs north between the great snow ranges through the Hu T'iao Chiang. But a wide and fertile valley, continuing the direct line of the upper Yangtze valley, runs southward from Shihku to Kienchwan. This valley is raised some 200 or 300 feet above the level of the Yangtze so that the river, where it turns at the bend, cuts across the Shihku valley at a lower level. No river of sufficient size to have eroded the Shihku valley now flows down it. After a few miles the streams from either slope unite to form the headwaters of the Yangpi, which even at Yangpi town, 100 miles farther south, has not yet become more than a fair-sized stream. The Yangpi river, and thus the whole of the Shihku valley, is in the Mekong basin.

From Shihku the road to Tibet follows the west bank of the Yangtze for four stages to the little town of Kütien. The valley is narrow and the margin of cultivated land rarely more than a few hundred yards in width and often only a few feet. The mountains on either bank rise to 12,000 or 13,000 feet, increasing in height towards the north. Such villages or collections of houses as are to be found are extremely poor and even short of food. During the winter months this region is barely able to feed itself. It was impossible to obtain any other food than turnips; even eggs, which in China are universally available, could not be had. Rice, unless the traveller carried his own supply, was unprocurable. During these four stages my cook was forced to serve meals consisting only of rice and turnips; yet such is the versatility of the Szechwanese that not one of the eight meals made up of these rather un-promising ingredients either looked or tasted the same.
Motor road at Niukai

Erhyüan city

Tengchwan city
Small lake near Shihku

Shihku plain
After Shihku there are no more inns. Dirty and often dilapidated though they are, the Yunnan inn does afford an assured resting place to the traveller, who, if he brings his own bedding, need not be inconvenienced by the unswept dustiness of the tumbledown rooms. There is always a kitchen, and always rice already cooked; stabling for the mules, and a willing host who is anxious to accommodate guests. But in the High Yangtze valley there were no inns. Every stage ended in a wearisome search for some hovel large enough, and, still rarer, clean enough, to take the party and stable the mules. The inhabitants, having no food to sell, were indifferent or unwelcoming.

The traffic of the northern road beyond Shihku is slight, such as there is is largely run by Tibetans or half Tibetans from Weisi. These people never frequent inns, even in those parts of the province where they exist. Whether the innkeepers object to the total absence of personal cleanliness which characterizes the Tibetan nomad, or whether the latter prefer to camp in the fashion of their own country, which in any case they must do on long stretches of their journey, the Tibetan traders who come south to the Tali fair never enter an inn in the city, but camp on the mountain slopes beyond the walls. Presumably for these reasons there is no profit in keeping an inn on the road to Weisi.

It would obviously in a dry climate be much more convenient to follow the example of the Tibetans and camp out. But the Chinese, at least those of the south-west, have a horror of sleeping in the open. Any hovel, however grimy, smoke-blackened, and crowded, seems to them preferable to a night in the woods or fields. This attitude is probably due in part to social prejudice. The Chinese of Yunnan and Szechwan hold themselves to be a race far superior to the Tibetans, whom they regard with a tolerant contempt as semi-savages. To camp out is therefore to “go native” and is unthinkable.

At Küiten the road to Weisi and Tibet leaves the Yangtze valley for the long climb over the Mekong–Yangtze divide. The village itself, inhabited by a mixed race in which Tibetan blood and custom is conspicuous, is the point at which the Communist army under Ho Lung, one division of the forces which made the celebrated Long March, crossed the Yangtze and struck up into eastern Tibet. This event, which had happened two years before, was still the main topic of conversation in Küiten, which had perhaps never before seen the passage of a large army. The fact that the Communists did not commandeer either mules or porters, and paid fair wages for such transport as chose to offer its services, has made a deep impression on the people of this little town, and has no doubt disposed them to welcome any Communist force which might come their way in the future.

Küiten to Weisi is two stages; entirely taken up by the ascent and crossing of the Litiping, the first really considerable pass on the road to Tibet. The summit of the pass is between 12,000 and 13,000 feet, and in winter is liable to heavy snowfalls which close it for several days on end. From Küiten the first day’s stage is an ascent through dense forest of ilex, pine, and rhododendron—the same vegetation which is found on the Ts’ang Shan at Tali between 12,000 and 14,000 feet. Here the forest is found much lower, from 8000 to 10,000 feet. This is only one of the numerous evidences of a changed climate north of Likiang. North of the Ch’ou Shui Kuan no winter crops
can be grown. While the plain of Erhüan is green with ripening beans and wheat, the plains of Kienchwan and Likiang are bare and frost-bound in the early morning. Therefore the changing vegetation on the slopes of these mountains is not a true indication of the altitude unless allowance is made for this change of climate. The Tali region, and the central plateaux of Yünan in general have a Mediterranean type of climate and vegetation; often one might imagine oneself to be in Provence; but North Yünan has a climate more resembling that of the lower valleys of Switzerland. A small village inhabited mainly by Li Su, and built in the characteristic log cabin style which is typical of this district, is the last halt below the Litiping itself. In spite of the fact that all travellers passing in either direction must of necessity sleep here, before or after crossing the pass, there are no inns, and the inhabitants showed no desire to find room. The prospect of earning a little money to eke out the scanty produce of their limited fields did not seem to make any appeal. The Chinese grimly attributed this indifference to the probability that these same villagers, acting as intelligence agents for the Li Su bandits of the forest, did better out of the robbery of travellers than by catering for their needs.

The last stage to Weisi, the crossing of the Litiping pass, is a stern pull up the very steep and densely forested mountain side until the summit is reached. Surprisingly the crest of the pass is a flat plateau, with patches of forest and wide grassy spaces, astonishingly English in appearance. If it were not for the magnificent panorama of ranges to the east, beyond the Yangtze to Yu Lung Shan, and westward to the high peaks of the Mekong—Salween divide, one would certainly imagine oneself to be on a Surrey common. The air was crisp, although the sun shone. Small streams among the grassy glades were edged with ice, and snow lay banked in shady places. While eating a mid-day snack in this peaceful English scene a party of Chinese merchants, bound for Atuntze and the forest country of north-eastern Burma where strange "medicines" can be bought, came over to us and politely intimated that they were now moving on. We did not appreciate the significance of this until they added that they would not advise a small party of people to remain behind, as the seemingly peaceful woods held Li Su robbers who were no doubt even then observing us. The scene seemed less English as we accompanied our Good Samaritans down the long descent to Weisi.

Weisi, the last Chinese settlement in Yünan, for all points farther north or west are inhabited by Tibetans or Li Su, was founded as a garrison town, and still retains this character. The walls, though no doubt adequate in their day against Li Su tribesmen or Tibetan raiders, are now more symbolic than practical. But the situation of the town, upon a steep hill overlooking the valley of the Weisi river which flows within a few miles into the Mekong, is strong. It cannot be called an interesting town. There are few temples, except one to Kuan Ti the soldier's patron, which are worth a visit. The shops sell mostly articles of utility and there is no local industry. Weisi remains what it has always been, an isolated military post on the very fringe of the Chinese world. The Lamasery, a mile or two from the city, although not a large or famous foundation, attracts a considerable pilgrimage, perhaps
View from Litiping pass

On the Litiping pass
Suspension bridge, Kutien

Walls of Weisi
because it is the most southerly outpost of Tibetan Lamaism in a country whose racial composition is slowly changing.

Many surviving evidences, as well as historical records, show that the Tibetans are being pushed back in north Yünnan. Places such as Shihku and Likiang still have Tibetan names, which are probably the older names, existing before the Chinese re-named these cities. The names of other places in Yünnan suggest that they may be corrupt Tibetan, and the elaborate defences of passes leading north survive to prove the former danger of deep Tibetan raids into the southern valleys.

It does not appear that apart from the building of fortified cities such as Weisi, the Chinese have actively taken steps to evict the Tibetan population. The advance of the Chinese, or of native Yünnan stocks such as the Min Chia who have acquired the main features of the Chinese culture, is rather by colonization than conquest. The Chinese arrive and cultivate, the nomads withdraw to the untouched pastures.

DISCUSSION

Before the paper the President (The Rt. Hon. Sir George Clerk) said: Mr. Patrick FitzGerald needs few words of introduction to this meeting, for he has twice in the last few years given us valuable papers, the fruit of his long sojourn in Western China before this war. Many of us remember with pleasure the account of the making of the Yünnan–Burma road which he gave us in January 1940; also his paper on the most interesting Tali district of Western Yünnan two years later. This evening he is to take us farther into Yünnan and to describe its northern borders.

Mr. FitzGerald then read the paper printed above, and a discussion followed.

ThePresident: We were honoured by the presence of Dr. George Yeh, Counsellor to the Chinese Embassy. I had hoped to induce him to say a few words in regard to Yünnan but he has, unfortunately, been called away.

Admiral Sir William Goodenough: We saw an interesting photograph of various fields in the bed of the Yangtze. Are those fields owned separately by individuals or does some individual own them all and let them out? And are they all ricefields or is some other form of agriculture carried on there?

Mr. FitzGerald: Rice is grown in summer; beans and wheat in the winter. In the Tali district most of the fields, some of them not larger than the floor of this Hall, would have been individually owned; in the other parts of the region a person might have owned as much as 40 acres, which is about the largest holding in the whole of the Tali district.

Dr. Hugh Scott: The charming old suspension bridges we saw had a little roof-building at each end. Is there a special custom of loading and unloading?

Mr. FitzGerald: The little structures at each end of the bridges may protect the places where the chains of the bridge are anchored into the rock. They are also temples. Some contain a little altar to some protecting deity. Occasionally one sees people stop to light a stick of incense as they go on their way. I think the idea of having those little gateways is largely artistic.

ThePresident: I was much interested in those timber houses which Mr. FitzGerald said one might expect to see in Canada or Western America. They can also be seen any day in Slovakia or in the Carpathians. People who work in wood find out and evolve the same type of architecture, wherever they may be. The photograph of the timber house was exactly like one I used in Slovakia,
which had a kitchen with plank beds all round it and another room in which I had a bed made of the local pine wood, with little pine branches strewn as a mattress. That was the type of hut the Slovak peasants put up for me when I was shooting stags.

Another interesting point was the change from what our lecturer described as the Mediterranean to the Northern European climate. His photographs brought out that change very well indeed. The scenery in the heart of Central Asia might quite easily have been seen anywhere in Northern Europe. It now remains only to thank Mr. FitzGerald for his most interesting and beautifully illustrated lecture.

*Not all the place-names in Mr. FitzGerald's paper can be found in the Chinese List of Post Offices. Where possible names follow the List, elsewhere the Wade-Giles romanization.*

**THE CAPACITY OF THE UNITED STATES TO SUPPORT POPULATION**

**WILLIAM J. BERRY, Western Michigan College**

There has long been considerable interest in the maximum number of people that may live in America. In recent times it has been rather widely accepted that this maximum number has been attained, or very nearly so, and that any considerable increase in population must be accompanied by lowered standards of living if not indeed in actual starvation of many people. Most geographers however are of the opinion that many more people might live in our land even without much change in our habits of living, and that our population would be multiplied two or more times if ways of living in vogue in some other lands were practised. In many instances the subject has been somewhat differently stated: What will the eventual population of America be?

Geographers, for the most part, have avoided the subject although they are best qualified to discuss it. Many factors influence population changes; the trends of the present are largely unpredictable, and many things may occur that cannot be foreseen. Nevertheless, there is enough interest in the subject to warrant some attention being directed to it.

One way of arriving at an approximate capacity is by comparing the various parts of the United States with other parts of the world, and assuming that as many people may live here, per unit of area, as live in the most densely populated part of the world with similar conditions of climate, surface, and mineral resources.

This investigation tries to determine the capacity of the United States by such comparisons. The country is divided into what may be called “population regions,” each having a similar physical complex throughout and therefore in all parts approximately the same population potential; and the areas of the regions are computed. Then we determine the region of the world