AGRICULTURE: A KEY TO THE UNDERSTANDING OF CHINESE SOCIETY PAST AND PRESENT

Karl A. Wittfogel

The thirty-first George Ernest Morrison
lecture in ethnology 1970

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Economic conditions are not the only factor that shapes the development of society and culture. And the natural setting is not the only factor that shapes the economic conditions. Except for certain socio-historical constellations in which the ecological setting permits only one type of response, the relations between the ecological foundation and economic conditions, and between economic and non-economic conditions are characterised, not by necessity, but by varying degrees of compatibility. In the case of compatibility, several non-ecological factors will determine the development of the economic order; and several non-economic factors will determine the relations between the economic and non-economic institutions.

These considerations enable us to identify ecological and economic determinism as one of several types of socio-historical causality. One, no more. They enable us to recognise that under certain historical circumstances ecology may play a decisive role in determining what type of economy man will engage in–food-gathering, hunting, farming, herding etc. And they also enable us to recognise that even where natural conditions play a decisive role in giving a society its overall shape, peculiar ecological and non-ecological factors may determine the character of its economic, social, and political peculiarities.

Certain basic ecological conditions, which China shared with a number of other agrarian societies, led to the development of a particular institutional order that I call 'hydraulic'. Certain special conditions, that in part were ecological and in part not, gave this order in China a special quality. In a modified form, these peculiarities are asserting themselves again in the prob-

lems the Chinese Communists are encountering in their efforts to modernise the country's agriculture and to industrialise its entire economy.

When I speak of agriculture, I have in mind man's treatment of suitable plants and animals for the production of food and certain organic raw materials. Among the modes of agriculture we can distinguish two major types, one oriented toward labour-*intensive* farming, the other toward labour-*extensive* farming. The first type developed primarily in arid and semi-arid areas and in humid areas with cultivable aquatic plants (especially rice and wet taro). In these several areas, irrigation farming originated, not necessarily as the *only* agronomical system, but often as the *dominant* system—the one that separated the world of irrigation farming from that of rainfall farming.

Systems of irrigation farming have existed for thousands of years in many parts of the world. Their natural foundations included peculiarities of climate, soil, lay of the land, available water, suitable plants, and work animals. Irrigation farming was practised in Greece to compensate for deficiencies of water created by a semi-arid climate, and in Japan to further the cultivation of rice. In both cases the fact that irrigation farming was small-scale (*hydro*-agricultural, as I call it), had far-reaching socio-historical consequences. In both cases, small-scale irrigation favoured the development of a multicentred society, an institutional system that, on the basis of rainfall farming and with many variations, spread throughout feudal Europe.

The contrast between these sectors of the agricultural world, which required only small-scale irrigation or none at all, and the agro-*hydraulic* world, which required large-scale works of water control, is striking. In the latter world, the representatives of the government tended to dominate their country's economy. And by preventing effective social competition they were able to monopolise political and societal power. It is the combination of a hydraulic agriculture, a hydraulic government, and a single centred society that constitutes the essence of *hydraulic civilisation.*

The great water works of China impressed Western observers long before the theory of a special hydraulic (or 'Asiatic' or 'Oriental') society was formulated. And the applicability of this theory to China has not been seriously contested by independent social scientists. Even the Communists, who from

the 1930s to the early 1960s rejected the theory of an 'Asiatic' or hydraulic society, have in recent years receded from a totally negative position—except in Mao Tse-tung's China.

I shall not here discuss the crude way in which the Communist ideologists first combated and then accepted this theory and its applicability to China. Nor shall I here discuss in detail the question as to whether Chinese society *before* its unification into an administratively co-ordinated 'empire' (at the close of the third century B.C.) was feudal. I mention this issue only because it is relevant to the underlying socio-historical problem.

Advocates of a feudal interpretation of early China point out that in the last pre-imperial dynasty, Chou, the 'Son of Heaven' (the 'king' of Chou) invested the regional rulers with their respective territories, and that these rulers in turn assigned land to those who served them, especially those occupying higher ranks. This is indeed an established fact, and we accept it as such. But we are faced with a very different issue, when it is suggested that the land assignments of Chou must have been feudal, because land investiture is an exclusive characteristic of feudal society. This clearly is not the case.

Feudal investiture expresses the limitations of the power of the supreme ruler. It shows that he is only the first among equals and that his vassals constitute a genuine countervailing military and political force. Under feudalism the relation between ruler and vassal is a contractual one, and the services to be rendered by the vassal are limited in time as well as in scope (essentially they pertain to military aid).

The land assignments made by a hydraulic ('Oriental') ruler fall into a very different category. They lack the contractual quality of the feudal arrangements. And no matter whether or not they have the form of investiture, they imply services that are not limited in time and that usually involve a variety of activities.

Two great European Sinologists have commented on land assignments under the Chou dynasty. Otto Franke was well aware that the supreme ruler of Chou China could not fully impose his will on the territorial princes who acknowledged his authority, and this the less so, the longer the Chou dynasty lasted. However Franke insisted that the ceremony in which the Son of Heaven invested these princes with their territories was 'a political command . . . not a contract of loyalty and service as in the Frankish Empire'. And Henri Maspero insisted that

the territorial princes of Chou China kept their serving men in a state of unconditional subordination, and that the land assigned them was 'a non-feudal domain', given 'to officials as salary'.

This political pattern indicates that long before the abandonment of what has often been called the feudal system of land assignment, the position of the Chinese rulers rested on a decidedly non-feudal power structure. China's ecological situation required such a power structure, because, due to insufficient rainfall, the Chinese farmers had to look for sources of moisture other than rainfall, and because the dimension of these sources (essentially rivers) required the co-ordination of manpower on a large scale for the building of irrigation works and the subordination of this manpower to an unconditionally ruling authority.

But China's ecological situation required more. The rivers that provided permanent 'water benefits *(shui-li)*' to the farmers were also a permanent threat to them. Heavy seasonal rains either on the spot or up-stream caused the rivers to overflow their banks regularly and at times excessively. Massive floodings presented a challenge to the settlers in the fertile river basins, who could hope to defend their fields and their very life only if they took measures to contain the unwanted waters. And when the rivers were large, as they were in China's major centres of agricultural production, such measures, too, required large-scale co-ordination and a superior directing authority.

The pioneer geographer of modern China, Ferdinand von Richthofen, concluded from the geological and hydrological evidence that the early Chinese were able to establish an agricultural way of life in the rich alluvial lowlands of North China only after they had built substantial embankments to contain the river water. The author of the classical study, *Land Utilization in China*, John Lossing Buck, underlined this problem when he noted that, speaking geologically, man had settled the great plains of North China 'thousands of years before they were ready for occupation'.

The Chou Chinese were fully alive to the efforts of their ancestors to overcome these deficiencies. They remembered that one of their culture heroes, the 'Great Yü', had untiringly supervised the irrigation ditches. But they lauded him particularly for his efforts to contain the floods. According to legend, Yü accomplished what his predecessors had failed to

accomplish. He tamed the great rivers of North China. Significantly, he is said to have been the founder of China's first dynasty: Hsia.

The agro-political history of China helps us to recognise the inadequacy of the early theory of hydraulic society. This early theory owes much to two classical English economists—Adam Smith, through his *Wealth of Nations* (1776) and Richard Jones, through his study, *On Rent* (1831); it was first cogently formulated by Marx (with Engels's assistance) in 1853. In arguments that clearly show the influence of Smith and Jones, Marx pointed to the relation between a water-deficient environment, large government-managed water works and a uniquely powerful ('Asiatic') state.

This early theory constituted a great advance in the history of ideas. But it had serious limitations. It was narrow in its recognition of the ecological and operational factors involved. (It envisaged the emergence of agrarian water work societies as occurring primarily in *desert* lands). And it dwelt essentially on the *productive* functions of the government-managed water works, irrigation.

The comparative approach to the history of China teaches us that desert-rooted water work societies, which favour a 'compact' hydraulic development, have been the exception rather than the rule. It also teaches us that large-scale ('hydraulic') works may serve *two* purposes: one, productive (irrigation) and one, protective (flood control).

A more differentiated theory of hydraulic society has evolved in the last decades. It underlines the fact that agro-managerial states developed in semi-arid areas more often than in fully arid areas, and it demonstrates that hydraulic societies may emerge in highly diversified settings. Indeed many of them comprise areas of rainfall farming, small-scale irrigation farming and large-scale irrigation farming, this last constituting the institutionally decisive core of what I have called a 'loose' hydraulic order.

The heuristic significance of the differentiated approach for the analysis of irrigation societies in general is obvious. Equally obvious is its significance for the recognition of the protective aspect of large-scale water works in certain compact hydraulic societies such as Egypt—and in many loose hydraulic societies, such as India and China. In China, huge protective water works were built and maintained, not only in the north, where millet and wheat are the main crops, but also in the south,

where the cultivation of rice requires extended productive and protective hydraulic operations.

A third form of the agro-hydraulic effort is the digging of communication canals. In China's agrarian society, experience in productive and protective hydraulic enterprises enabled its rulers to develop and maintain for millennia the largest communication canal ever created by man.

What I have been saying about traditional China is not valid for multicentred societies. In private-property-based industrial societies big hydraulic works frequently fulfil different functions, among them and especially the generation of electric power. But even when they also fulfil tasks of flood control (as does the Tennessee Valley Authority in the USA) or of irrigation (as does the Snowy Mountain Scheme in Australia), they are not members of a *ruling* bureaucracy, but of a *controlled* bureaucracy. And this latter type of bureaucracy is again different from, and politically stronger than, a *serving* bureaucracy of lowly scribes, such as existed in the city states of classical antiquity. Since the days of post-feudal absolutism, powerful governmental bureaucracies have constituted a serious problem in many multicentred societies: and they certainly do so today when their governments perform many managerial functions. But in these societies the government bureaucracies are held in check by countervailing non-governmental forces. Up until now no controlled bureaucracy of a multicentred society has developed into a ruling bureaucracy of the kind that existed in the agro-managerial societies of the past and that, with much greater managerial power, has emerged in Communist Russia and China.

What I have been saying about traditional China is also not valid for those agrarian regions with large productive or protective water works that are adjacent to non-hydraulic societies strong enough to impose their institutions on them (witness the Po Plain in classical antiquity and Holland in the European Middle Ages).

But what I have been saying about traditional China does apply to agrarian societies that have no great water works and that have been institutionally colonised by hydraulic states. In this connection the history of Russia is of especial interest. Based on the type of agro-managerial power imposed on the Russian people under the Mongol Yoke, the masters of post-Mongol Russia continued to employ the key organisational and acquisitive methods of hydraulic states without developing

the hydraulic economy that originally inspired them. As Marx and Engels pointed out, the politically determined perpetuation of the dispersed village communities in Tsarist Russia permitted the perpetuation of an agro-despotic state.

Basically the ruling officialdom of Imperial China resembled the ruling bureaucracies in other hydraulic societies. But, due to a number of geo-historical circumstances that cannot be discussed here, it went beyond them in several respects. The ranking members of this group—the officers' corps of China's ruling class—probably constituted the best educated bureaucracy in the whole pre-industrial world. They created a singularly rich literature and an institutional history that in documentation and detail remains unmatched to this day.

It scarcely needs saying that the ruling officials of China, who were great organisers, were also great builders. And, like their bureaucratic counterparts elsewhere, they were great builders not only in the hydraulic sphere but also in the sphere of non-hydraulic construction. They erected great temples, palaces and tombs (in this respect they resembled many others of their kind). They constructed impressive state highways (in this respect they were matched by several other societies: the ancient Near East, Imperial Rome, India and Inca Peru). In the area of defence construction they share honours with only two other societies: Imperial Rome and Byzantium. To ward off the increasing threat from the mounted nomads of the northern steppes, they connected up earlier separate constructions to form their Great Wall. Like their state highways and Imperial Canal, the Great Wall manifests the organisational capacity created by the country's political unification.

These great hydraulic and non-hydraulic works were the glory of Imperial China. But their effectiveness was very seriously reduced when, under the impact of foreign aggressions, China's agro-managerial order was seriously weakened, first militarily, and soon also administratively and hydraulically. From 1850 to 1905, the percentage of government funds allocated for the maintenance of water works is said to have dropped from 12 per cent to less than 1.5 per cent. And after the collapse of the monarchy in 1911, the regional military-bureaucratic leaders (misleadingly called 'warlords') were too busy politically and too weak institutionally to revitalise the country's hydraulic potential. Dr Sun Yat-sen who, with arguments and terms of his own, sought to wipe

out the old despotic system, inspired his followers, the Nationalists, to initiate a reconstruction of China aimed at the establishment of a modern and multicentred (democratic) society. During the decades prior to the victory of the Communists, and excepting for the war years, railways and other large-scale works were built with wage-labour and frequently by private firms.

Manifestly, when the Chinese Communists from the late 1940s and on a large scale began to rely on commandeered labour in the building of hydraulic and non-hydraulic works, they were making a long step in the direction of what Lenin in 1906-7, and speaking with a Russian context, had called a 'restoration of the old Asiatic order'. And when, in 1953, the Chinese Communists began to replace private peasant ownership of land by state ownership, they were reinstituting a form of land tenure that China had abolished more than two thousand years before. But they did more. They also began to break up the traditional system of agricultural operation—small-scale peasant farming which, with many modifications, had prevailed in China and, in fact, in all hydraulic societies since their beginning.

Throughout the hydraulic world and whatever the procedures on the 'public' land may have been, the peasants were permitted to grow their crops on fields they *possessed* or *owned*. Possession, under which a peasant was the temporary or hereditary occupier of his land, prevailed in most hydraulic societies. Ownership prevailed in only a few, China being outstanding among them. Under the system of ownership, land could be bought and sold, some peasants acquiring more land than others (some landlords much more), and some peasants, if misfortune befell them, being compelled to sell part or all of their land to become either part owners (part tenants) or full tenants. According to Dr Buck's comprehensive study, under China's Nationalist government about 46 per cent of the peasant cultivators were full owners, 25 per cent part owners, and 29 per cent tenant farmers.

These figures are only approximations, and Dr Buck himself makes this point. But two things are certain. The Chinese tenant tilled his fields as diligently as did the peasant owner. And whatever the form of land tenure, large-scale cultivation was the exception and small-scale peasant agriculture the rule in virtually all hydraulic societies. In this connection it is worth remembering that even in the pre-industrial world of labour-

extensive non-irrigation agriculture, in which large-scale farming played a certain role (especially on the olive-, wine- and meat-growing latifundia of Imperial Rome and on the manorial estates in feudal Europe), the bulk of the population lived on food produced on small peasant farms.

These facts are indicative of a trend that has prevailed in areas of non-irrigation agriculture *and* in areas of irrigation agriculture. This trend has been particularly strong in the latter areas, with traditional China an outstanding example—and this because the introduction of private property in land (over two thousand years ago) provided a most powerful incentive for developing improved methods of intensive cultivation and for employing them with great care and ingenuity.

We need not press Arthur Young's notion that, in agriculture, private property changes sand into gold. But there can be no doubt that non-Communist agriculture in general and China's non-Communist agriculture in particular have demonstrated its validity. And there can also be no doubt that the replacement of private peasant farming by collectivised farming created great difficulties in all Communist countries and that these difficulties assumed a qualitatively new dimension in Communist China. Rephrasing Young's statement, we may say that, through his collectivisation of agriculture, Mao Tse-tung changed gold into sand.

We need not press this second statement either. But this much may be said with certainty: by collectivising the most intensive agriculture in history—an agriculture that, in the nineteenth century and according to Justus von Liebig, was to German agriculture as a mature man was to a child—Mao has most seriously hamstrung his own effort to industrialise China's national economy.

China's 'Asiatic restoration', to reinvoke the formulation Lenin used for Russia, provided the Chinese Communist government with extraordinary means for organising the masses for large-scale tasks. In this respect the country's agro-managerial past is definitely reasserting itself to the *advantage* of Mao's regime. But the intensive methods employed in China's agriculture make this agriculture extremely vulnerable to passive peasant resistance, and, in this respect, China's agricultural peculiarity is definitely reasserting itself to the *disadvantage* of Mao's regime.

Technological advances may remove existing road blocks.

The use of solar and thermonuclear energies may overcome basic production difficulties that harass industrial society. But so far the effective use of these energies is still in the future; and man must still operate within today's technological and economic frame. The same is true of labour conditions in large-scale agriculture. These conditions have made, and are still making, collectivised farming the Achilles heel of the Communist economy in the USSR and, even more massively, in Communist China.

Promoters of modern industry found it relatively easy to co-ordinate great numbers of workers for large-scale production. Similar attempts in *agriculture* have not been equally successful. In the West this has been well understood. In the USA, Canada and Australia, the modernisation of agriculture (including cattle-breeding) has been accomplished, not by the employment of *many* workers and *many* machines (Pattern 1), but by the employment of *few* workers and *many* machines (Pattern 2). The Communists initiated their efforts at modernisation with *many* workers and *few* machines (Pattern 3); and they climaxed them by employing *many* workers and *many* machines (Pattern 1). From 1938 to 1963 the number of collective farms in the Soviet Union fell sharply but the number of households per individual unit rose sharply (from about 78 in 1938 to about 400 in 1963), and this while the enlarged farms were being impressively mechanised.

When the Communists set their sights on large-scale farming they disregarded certain basic differences that distinguish industrial from agricultural production. They disregarded the fact that industrial production is concentrated in space and continuous in time, and that the individual worker tends to perform few operations: at times, only one. In contrast to this, agricultural production is dispersed in space, discontinuous in time, and, in most cases, the worker performs a considerable variety of operations. For this reason agricultural production is, as a rule, far more difficult to supervise than industrial production. Persons engaging in it fulfil their tasks best when they have strong incentives to work carefully and with devotion. One such incentive is provided by small peasant land-holdings. And this incentive is particularly significant in irrigation farming in which intensive labour is crucial for effective production.

Why did Lenin disregard past experience and aim at the

establishment of large-scale 'socialist' farms from the start? Was it because Marx had assumed that on large farms under capitalism the dispersed workers *could* offer no resistance to those who employed them, and that under socialism they *would* offer no resistance, since they were working for themselves?

Marx's view of capitalist agriculture was probably influenced by the success of large-scale farming in England during the early and mid nineteenth century, when, due to special circumstances, it had been conspicuously rewarding. Marx, who usually looked at history in the large, failed to do so in this case, quite possibly because the urge for power induced him to believe what he wanted to believe.

Karl Kautsky, whose *Agrarian Question* became Lenin's bible in this matter, deceived himself similarly, and quite possibly for the same reason. Although Kautsky had much more negative evidence at hand than Marx, he, like Marx, held that 'societal development in agriculture is taking the same road as in industry'.

Lenin, who did not hesitate to disregard Marx's views when it suited his purpose, certainly did not, for purely doctrinal reasons, support Marx's large-farm thesis when current data indicated that large-scale agriculture under capitalism was beset with difficulties Marx had not foreseen and that on the 'socialist' farms of the Soviet Union, the agricultural producers often failed to display the expected work enthusiasm. Yet despite what he knew and despite the concessions he made in his 'New Economic Policy', Lenin continued to aim at the introduction of large-scale 'co-operative farming' in the foreseeable future, obviously because he felt this system would permit the Communist dictatorship to impose its will more effectively on the rural producers. The Communists, he insisted, would make large-scale agriculture a success if they had electricity and 100,000 tractors on the land.

Stalin, with still more negative evidence available, was even blunter than Lenin in his demand for the 'co-operativisation' of farming, which, he believed, would break the peasants' resistance to the delivery of a large part of the agricultural produce to the Communist government. The Chinese Communists, unaffected by the mounting negative evidence, initiated their collectivisation of agriculture in 1953 by citing the very arguments Stalin had advanced with

respect to the political and fiscal advantages of 'socialist' large-scale farming.

This, broadly speaking, was the policy of the two major Communist regimes with regard to large-scale farming. By pursuing this policy both did indeed augment their fiscal and political power. But they encountered passive peasant resistance of a magnitude that neither Stalin nor Mao seem to have envisaged. This passive resistance created serious economic difficulties in areas with a predominantly extensive agriculture (the USSR and its East European appendages with the exception of Poland and, of course, Yugoslavia). But it created far more serious difficulties in areas with a predominantly intensive agriculture (Communist China and North Vietnam).

The difference in the depths of the collectivisation crisis in these various areas is due in very large part to the difference in the roles of labour in extensive and intensive agriculture. In extensive agriculture, the crucial operations are few and relatively simple; in irrigation agriculture they are more numerous, more subtle and more time-consuming. In extensive agriculture there may be preparatory ploughings and harrowings; but once sowing is completed, little is done on the fields until the crop is harvested. Irrigation farming involves a variety of operations for bringing water to the crops; it also encourages operations not performed in rainfall farming. The irrigation farmer organises his fields in rows and furrows. This is necessary for regulating the flow of water; and it facilitates intertillage and weeding. Before planting he often ploughs and harrows his field several times; and, in China, human residue, etc. is systematically applied.

In the USSR the collectivisation of agriculture interfered with relatively simple operations, and the labour deficiencies resulting from the loss of incentives could, to some extent, be compensated for by mechanical and chemical devices. Tractors, which became increasingly available in the USSR during the collectivisation period and in the decade following, greatly facilitated the first of the three basic operations of extensive farming: ploughing. And since intensive farming of the Chinese type was not usual in Russia, the increased use of chemical fertilisers constituted a sheer gain. In Communist China the collectivisation of agriculture interfered with a much more complex set of operations; and the resulting work slow-down was much less easily countered. Few tractors

were available during or after the collectivisation; and even those that on a few modernised farms were available were of lesser significance, since the operations they facilitated served a much smaller proportion of the agricultural work than they did in Russia. And the increase in artificial fertilisers, which in China prior to 1962 was slow, had to compensate for the manure crisis that resulted from the Chinese peasants' endeavour to withhold from the public fields as much as possible of the traditional natural fertilisers they had previously spread on their fields and were now concentrating on the small garden plots permitted them grudgingly and uncertainly by the Peking government.

It is therefore not too much to say that China's collectivisation crisis is, above all, a labour crisis. Since 1958 the Chinese Communists themselves have been saying just this. By speaking again and again of the 'labour shortage' in the countryside, they admit, in an oblique way, that not a few of the numerous operations required for a satisfactory agricultural productivity have been poorly carried out or omitted altogether.

In the USSR, the collectivisation of agriculture reduced production sharply—and the resulting crisis was profound. Stalin's famine of 1931-2 caused extreme hardship in many villages; and independent demographers and economists are convinced that hundreds of thousands, perhaps millions, died because of it. In Communist China, the collectivisation crisis was enormously aggravated by Mao's policy of the Great Leap Forward and the establishment of the Communes which were meant to solve the labour problem in the countryside by drawing tens of millions of women into collective agricultural work and by imposing a quasi-military discipline upon all Commune members. Evidence contained in confidential military communications that fell into non-Communist hands, suggests that Mao's famine (which lasted from 1959 to 1961 and which seriously affected the army) was probably even more devastating than the Soviet catastrophe of 1931-2.

Significantly, during and at the end of the Russian collectivisation crisis, Stalin made only limited concessions to the *kolkhozniki*. And while production on collective fields (not, of course, on the private garden plots) remained poor, he was able to continue his industrialisation policy which concentrated on heavy industry; and, in the 1930s, he still

could shift some twenty million peasants from the villages to the cities and industrial centres.

In Communist China, Mao's regime was forced to make much greater concessions to members of the collectives. But their ameliorative effect was much smaller than that achieved by Stalin's concessions. Among the steps taken by the Peking regime to raise the productivity of the collective farms there was one that was held to outrank all others. As might be expected, it was typically agro-hydraulic. During the battle for collectivisation—that is, during the middle and later 1950s—the government mobilised huge labour armies to construct large water works for irrigation farming. According to non-Communist analysts, this effort may have increased irrigated farm land by about 75 per cent; according to official Peking statements it increased irrigated farm land by some 300 per cent. In either case, what was occurring was nothing short of a regenerative hydraulic revolution.

The Chinese Communists expected an enormous upsurge in agricultural production on the hydraulically improved collective farms. But no such upsurge occurred. Contrary to official expectations, agricultural production fell sharply after this hydraulic effort which was interlocked with Mao's reckless experiments in large-scale farming. Considering the objective improvements made through the great extension of irrigation works, we can only conclude that the embittered peasants cut their performance even more than the production figures reveal.

The regressive development in the productivity of China's agricultural labour initiated a shift in Peking's population policy that, in terms of economic modernisation, is also regressive. The Communists drew seasonally on a number of groups of manpower to overcome the rural 'labour shortage': political cadres, soldiers, university students, high-school students, and industrial workers. And, as already noted, since the spring of 1958 they mobilised tens of millions of rural women to help the skilled cultivators— who knew much better than their newly assigned aides what was needed, but who were no longer interested in giving the fields the careful attention that had been given them customarily in pre-Communist China and that the peasants in Taiwan are still giving them today.

The Great Disaster of 1959-61 showed that neither the seasonal mobilisation of urban labour nor the permanent

inclusion of millions of rural women among the agricultural workers solved the basic crisis. Hence the Chinese Communists decided to reduce the urban-industrial population. From the early 1960s they sent about 20 million townspeople (over 15 per cent of their urban population) to the villages. And they abandoned, at least for the time being, the heavy-industry-oriented economic policy they had been promoting until the famine years. They now concentrated their industrial effort on the construction of factories for the production of agricultural equipment and chemical fertiliser—and on certain export goods aimed at improving their foreign exchange position. During these years, the imported items that served the needs of the consumers rose from about 4 per cent to almost 50 per cent. One among them is particularly significant: grain. According to such independent analysts as Robert L. Price and Audrey Donnithorne, the Chinese Communists, after the Great Disaster, imported something like five million tons of grain annually—that is, more than 10 per cent of their entire annual grain procurement quota. They purchased and are continuing to purchase this grain from non-Communist countries that, with a private-property-based (capitalist) agriculture, produce more food than their citizens can consume.

Such has been China's crisis-ridden situation during the past decade. Will it persist after Mao's disappearance from the political scene? Whatever form this event may take and whatever form the subsequent struggle for power may assume, Mao's disappearance will open the way to one of two major alternatives. Either the post-Mao leaders will in substance uphold the present Maoist policy—on the international level co-operating obliquely and uneasily with Moscow in Southeast Asia, the Near East, and Cuba, and, on the domestic level wrestling with their agrarian crisis as best they can. Or the post-Mao struggle may result in the victory of those who have been opposing him and who, to judge from the record, seem inclined to restore friendlier relations with Moscow. This second development would again make Peking the junior partner in a global Communist axis, a position the regime occupied until the later 1950s. It would enable the Chinese Communists to assert themselves more strongly on the international scene. And it would enhance their chance of getting new economic support from the USSR and Eastern Europe: credits, machinery, chemical fertilisers, and the help of badly

needed technical specialists. This latter development might considerably reduce China's internal difficulties. But without a technical and economic miracle or great Communist victories abroad, it is unlikely that the underlying agricultural problem will be resolved.

With these remarks, I come to the end of my survey of China's institutional history. According to the macro-analytic approach that I have been using and that owes much to the classical methods of comparative geo-institutional realism, the peculiarities of China's agriculture constitute a key (*a* key, not *the* key) to the understanding of the peculiarities of the country's *pre*-Communist society.

And not only its *pre*-Communist society. To be sure, Marxist-Leninist Communism is an institutional whole that differs qualitatively from all other societal orders. Any attempt to understand Chinese Communism must therefore go beyond the study of Chinese agriculture. But whoever makes such an attempt must keep in mind that in the modern totalitarian organisational revolution, the Chinese Communist revolution presents peculiar features and difficulties that are rooted in the country's peculiar geo-agricultural past. In this sense we may legitimately say that the study of Chinese agriculture is also *a* key to the understanding of Chinese Communism as we know it today.

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'Chinese Society: an historical survey', *The Journal of Asian Studies,* Vol.XVI, No.3, 1957.

'Agrarian Problems and the Moscow-Peking Axis', *Slavic Review,* Vol. XXI, 1962.

'Results and Problems of the Study of Oriental Despotism', *The Journal of Asian Studies,* Vol. XXXVIII, 1969.

'Communist and Non-Communist Agrarian Systems, with Special Reference to the USSR and Communist China. A Comparative Approach', in *Agrarian Policies and Problems in Communist and Non-Communist Countries,* Seattle, 1970.

The George Ernest Morrison Lecture in Ethnology

The George Ernest Morrison Lecture was founded by Chinese residents in Australia and others in honour of the late Dr G.E. Morrison, a native of Geelong, Victoria, Australia.

The objects of the foundation of the lectureship were to honour for all time the memory of a great Australian who rendered valuable services to China, and to improve cultural relations between China and Australia. The foundation of the lectureship had the official support of the Chinese Consulate-General, and was due in particular to the efforts of Mr William Liu, merchant, of Sydney; Mr William Ah Ket, barrister, of Melbourne; Mr F.J. Quinlan and Sir Colin MacKenzie, of Canberra. From the time of its inception until 1948 the lecture was associated with the Australian Institute of Anatomy, but in the latter year the responsibility for the management of the lectureship was taken over by the Australian National University, and the lectures delivered since that date have been given under the auspices of the University.

The following lectures have been delivered:

Inaugural: Dr W.P. Chen (Consul-General for China in Australia), *The Objects of the Foundation of the Lectureship, and a review of Dr Morrison's Life in China,* 10 May 1932.

Second: W. Ah Ket (Barrister at Law), *Eastern Thought, with More Particular Reference to Confucius,* 3 May 1933.

Third: J.S. MacDonald (Director, National Art Gallery, New South Wales), *The History and Development of Chinese Art,* 3 May 1934.

Fourth: Dr W.P. Chen (Consul-General for China in Australia), *The New Culture Movement in China,* 10 May 1935.

Fifth: Dr Wu Lien-tah (Director, National Quarantine Service, China), *Reminiscences of George E. Morrison; and Chinese Abroad,* 2 September 1936.

Sixth: Dr Chun-jien Pae (Consul-General for the Republic of China), *China Today: With Special Reference to Higher Education,* 4 May 1937.

Seventh: A.F. Barker (Professor of Textile Industries, Chiao-Tung University, Shanghai, China), *The Impact of Western Industrialism on China,* 17 May 1938.

Eighth: Professor S.H. Roberts (Vice-Chancellor of the University of Sydney), *The Gifts of the Old China to the New,* 5 June 1939.

Ninth: His Grace the Archbishop of Sydney, Howard Mowll, *West China as Seen Through the Eyes of the Westerner,* 29 May 1940.

Tenth: Dr W.G. Goddard (President of the China Society of Australia), *The Ming Shen. A Study in Chinese Democracy,* 5 June 1941.

Eleventh: Professor D.B. Copland (Vice-Chancellor, The Australian National University), *The Chinese Social Structure,* 27 September 1948.*

Twelfth: Professor J.K. Rideout (Department of Oriental Languages, University of Sydney), *Politics in Medieval China,* 28 October 1949.

Thirteenth: C.P. FitzGerald (Visiting Reader in Oriental Studies, The Australian National University), *The Revolutionary Tradition in China,* 19 March 1951.

Fourteenth: The Rt Hon. H.V. Evatt (Leader of the Opposition in the Commonwealth Parliament), *Some Aspects of Morrison's Life and Work,* 4 December 1952.

Fifteenth: Lord Lindsay of Birker (Department of International Affairs, The Australian National University), *China and the West,* 20 October 1953.

Sixteenth: M. Titiev (Professor of Anthropology, University of Michigan), *Chinese Elements in Japanese Culture,* 27 July 1954.

Seventeenth: H. Bielenstein (Professor of Oriental Studies, Canberra University College), *Emperor Kuang-Wu (A.D. 25-27) and the Northern Barbarians,* 2 November 1955.*

Eighteenth: Dr Leonard B. Cox (Honorary Curator of Oriental Art, National Gallery of Victoria), *The Buddhist Temples of Yün-Kang and Lung-Mên,* 17 October 1956.*

Nineteenth: Otto P.N. Berkelbach van der Sprenkel (Senior Lecturer in Oriental Civilization, Canberra University College), *The Chinese Civil Service,* 4 November 1957.

Twentieth: A.R. Davies (Professor of Oriental Studies, University of Sydney), *The Narrow Lane: Some Observations on the Recluse in Traditional Chinese Society,* 19 November 1958.

Twenty-first: C.N. Spinks (Counsellor of the Embassy of the United States of America), *The Khmèr Temple of Prâh Vihar,* 6 October 1959.*

Twenty-second: H.E. Dr Chen Chin-mai (Ambassador for China), *Chinese Landscape Painting: The Golden Age,* 5 October 1960.*

Twenty-third: L. Carrington Goodrich (Dean Lung Professor Emeritus of Chinese, Columbia University), *China's Contacts with Other Parts of Asia in Ancient Times,* 1 August 1961.*

Twenty-fourth: N.G.D. Malmqvist (Professor of Chinese and Dean of the Faculty of Oriental Studies, The Australian National University), *Problems and Methods in Chinese Linguistics,* 22 November 1962.*

Twenty-fifth: H.F. Simon (Professor of Oriental Studies, University of Melbourne), *Some Motivations of Chinese Foreign Policy,* 3 October 1963.

Twenty-sixth: Dr Wang Ling (Professorial Fellow in Far Eastern History, Research School of Pacific Studies, The Australian National University), *Calendar, Cannon and Clock in the Cultural Relations between Europe and China,* 18 November 1964.

Twenty-seventh: Dr A.M. Halpern (Research Associate in the Center for International Affairs, Harvard University), *Chinese Foreign Policy–Success or Failure?,* 9 August 1966.*

Twenty-eighth: J.W. de Jong (Professor of South Asian and Buddhist Studies, and Dean of the Faculty of Oriental Studies, Australian National University), *Buddha's Word in China,* 18 October 1967.*

Twenty-ninth: J.D. Frodsham (Reader in Chinese, Australian National University), *New Perspectives in Chinese Literature,* 23 July 1968.*

Thirtieth: E.A. Huck (Reader in Political Science, University of Melbourne), *The Assimilation of the Chinese in Australia,* 6 November 1969.*

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