香港中文大學

心中究研會社

Non-professional Social Research in Communist China: 1968–1970

Chong-chor Lau

SOCIAL RESEARCH CENTRE

THE CHINESE UNIVERSITY OF HONG KONG

Suggested citation:

Lau, Chong-chor. 1974. *Non-professional Social Research in Communist China: 1968–1970*. Hong Kong: Occasional Paper No. 38, Social Research Centre, The Chinese University of Hong Kong.

Non-professional Social Research in Communist China: 1968-1970

Chong-chor Lau

April, 1974

Table of Contents

Abbreviations

SCMM : U. S. Consulate General, Hong Kong, Selections from China Mainland Magazines

SCMP : U. S. Consulate General, Hong Kong, Survey of China Mainland Press

JMJP : Jen-min Jih-pao (People's Daily), Peking

KMJP : Kuang Ming Jih Pao (Kuang Ming Daily), Peking

Chapter I Problem and Data

A. The Problem

The goal of this paper is to present the major characteristics of the non-professional social research in contemporary Chinese society and to assess its outcome both in terms of the social need which it satisfies and the degree of professional standard it meets. By non-professional social research we mean those organized research activities which are conducted by the masses of peasants and workers rather than by professional investigators. It is the laymen's social research. It belongs to what Genevieve Dean called the scientific and technological "Counter-establishment", as against professional institutions such as the Academy of Science, the State Statistical Bureau, and institutes of higher learning.[1] In Communist China, it is called "Investigation and Research" (Tiao-cha Yen-chiu). As we shall see shortly, almost all the "Investigation and Research" were conducted by the non-professionals, with special methods, techniques and procedures, and were presented in a way different from professional research.

This kind of research could be dated back to 1926 when Mao Tse-tung conducted his investigation on peasant movements in Hunan Province, South China.[2] Since then "Investigation and Research" has been used by Communist leaders as a means of understanding social conditions related to military, political or economic action. It has established a tradition of its own. Some ideological and methodological dimensions of this tradition will be discussed in the next chapter. Among the ideological elements, the emphasis upon treating social research as an undertaking of the masses causes much doubt about the existence of formal organizations for this kind of research. As will be shown in chapter III, formal organizations for non-professional research do exist and, judging from our data, the system is being institutionalized and differentiated, though without the accompanyment

of professionalization or division of labor. With regard to the formalization and standardization of scientific research, non-professional "Investigation and Research" may be put somewhere in the continuum between both extremes of formal and informal research. This points to the need for an evaluation of the "form" of the non-professional research in the light of Western professional standard. Chapter V will be devoted to such an evaluation. Nevertheless, the fundamental function of this type of research lies in its substance. One way of assessing the substantial results of non-professional research is to show its findings about some important subject matters and let the readers compare them with results from other types of studies. This is what we shall do in chapter IV. Thus our problem can be briefly stated as one concerning the ideological and structural dimensions of the system of non-professional social research in Communist China, and the assessment of the function and quality of what this system yielded in 1968-1970.

B. The Data

There were 256 "investigation eports" on People's Daily and Red Flag Magazine in 1968-70. About 30 percent of them had been collected and published in book form.[3] Some were translated into English in several sources.[4] We collect all of them from the aforementioned media where they made their original appearance. This becomes the data of our study.

There are reasons for the selection. First, there is no knowledge on the actual number of social researches done in China each year, for only an unknown portion of the research done had appeared in the press. We do not know the total number of published social research each year, but judging from the following information, this figure could be very big. In the 1950s, each issue of the Hsin Hua (New China) Semi-monthly carried a classified bibliography of major articles on China's national and regional periodicals. Nearly all periodicals carried

"investigation reports". These include literature and philosophy journals.[5] On the eve of the Cultural Revolution, approximately 400 daily newspapers were published, as well as 1,200 non-daily newspapers and 2,000 specialized periodicals.[6] Most of them are not accessible to us. To concentrate on reports in the People's Daily and Red Flag Magazine is the best alternative available.

Secondly, these two sources represent the most authoritative and the most influential national media in Communist China. "Articles first published in these periodicals were picked up and reprinted widely in provincial and municipal newspapers. People's Daily, Liberation Army Daily, Red Flag, and the news releases of the New China News Agency constituted the authoritative public information sources of the People's Republic of China."[7]

Thirdly, investigation reports in these two organs are far more important in terms of reflection of national policies than those which appear elsewhere. "Since the mid-1960s, certain techniques are used ... to reinforce the authoritative character of certain policy statements .... This is also true for articles that are called 'investigation reports'. Such a report of a particular situation in a specific place, purportedly by an on-the-spot observer, provides indications of the manner in which the leadership wants a particular subject or situation handled. Occasionally--as, for example, during the public debate of the late 1960s and early 1970s concerning the proper way to reform the educational system--the press printed several 'investigation reports' of varying viewpoints, signaling the fact that the subject was still open for debate while, at the same time, delimiting the boundaries within which debate is permissible."[8]

Finally, these reports not only reflect more of the central authority's aspiration, but also indicate more on implementation and real changes than other sources. A considerable number of reports were published in 1968-70 during the period of political experimentation. Publication of these experiences (in policy implementation) serves as a de facto manifestation of policy support as well as an indicator of "correctness of the Party's line". It also shows the feasibility of stated policies and argues for follow-up action by other members of society.[9]

Chapter II The Ideological Dimension of Non-professional Research

Since the mid-1960s, all theories deviating from Mao Tse-tung were severely criticized.[10] The ideology of research, as in the other fields, has been unified under the Thought of Mao Tse-tung. In 1961, the Chinese People's University in Peking collected Mao's ideas on research and published in a book called "Mao Tse-tung on Investigation and Research".[11] Questions concerning the significance, goal, methods and procedures of social investigation were answered by fragmentary quotations. Despite numerous calls for "Investigation and Research" by the leadership[12] and the fact that actual organized research has grown extensively,[13] neither systematic works on theory and methodology nor practical guides have been published. Perhaps there is great political danger in such systematization or operationalization of Mao's Thought, while the Maoist idea of "learning by-doing" may also be responsible.

In our opinion, the Chinese way of "learning-by-doing" is to a large extent characterized by "learning from exemplars". This point was substantiated by a recent editorial note in the People's Daily calling for "good but short" research reports and articles.[14] Instead of pointing the way to carry out "good but short" reports, the editors pointed to two "investigation reports" which were published on the same day and asked researchers to learn from them. This example illustrates the Chinese Government's extremely practical attitude towards non-professional research.

A. Critical Points of Epistemological Contention

Laymen's social investigation follows Mao's guideline of "learning-by-doing". This concept of "learning-by-doing" is based on an elaborate Maoist theory on the relation of knowledge to practice. In his essay "Where do correct ideas come from" dated May, 1963, Mao summarized his epistemological position in simple language.[15] His idea has not changed since 1937 when he published his early philosophical essays.[16] Correct knowledge comes from

social practice, and from it alone; it comes from three kinds of social practice, the struggle for production, the class struggle and scientific experiment. It is man's social being that determines his thinking.[17]

Stuart Schram commented on these two early essays, "On practice" and "On contradiction". He said, these two pieces "are of interest as reflecting a mind which sees the world in ceaseless and perpetual flux, with no final and definitive harmony attainable even under Communism- a view which has found more striking expression subsequently in the theory of the permanent revolution. But as philosophic writings in the strict sense they are the work of a beginner." He also remarked, "In any event, it is not here that his greatness lies."[18] Judging from the 1963 essay, we think Schram was quite fair when he concluded that Mao had not contributed substantially to Marxist theory. However, Mao's real greatness, such as the "sinification" of Marxism and that he gave the Chinese Communist Party its own strategy and tactics, as Schram attributed it,[19] was not without challenge within the Party. In this section, we shall discuss several epistemological controversies between Mao and the Opposition[20] which characterize the long struggle between the "two roads"[21].

During the "hardship years" in 1960-63, there was an implicit political movement within the Party to re-evaluate the "Great Leap" and "People's Commune" policies.[22] This re-evaluation movement found its expression in the realm of the "superstructure": symbolic drama describing Mao as an emperor of Ming Dynasty who showed his madness in ordering many large-scale public works;[23] economists debating the neccessity for concepts such as market, value, and price in a planned economy, implicitly attributing the failure of the "Great Leap" economic policies to the lack of these mechanisms;[24] historians challenging Mao's theory of modern economic history[25] as well as re-evaluating the place of peasant revolution in Chinese history.[26] The most explicit and significant challenges were those of the Marxist-Leninist theorists.[27] Four epistemological issues were of great theoretical and practical importance.

The first epistemological problem was concerned with the relation between indirect and direct experience as origin of human knowledge. The controversy was not on the origin of knowledge as a historical and collective whole, for knowledge as a whole has no prescriptive effect upon an individual as far as political implication is concerned. The controversy was on the theory of individual learning. The Maoist theoretical stance was this: to be sure, much of an individual's knowledge comes from indirect experience. But to learn from other people's experience effectively, a base consisting of personal experience is necessary. This base serves as a filter through which indirect experience is first evaluated and then selectively learned. Thus, direct experience plays a determining role in an individual's learning process.[28]

The opinion of the Opposition was twofold: on the one hand, the "Great Leap" approach to areas in connection with this issue was "extremely left" or radical, that is, the portion of direct experience necessary for an individual's learning or "re-education" was unrestrictedly enlarged. As a radical reaction to the "bookish" tradition[29] in Chinese education, the new approach over-emphasized the role of physical labor and political participation. On the other hand, an individual learner could not participate in all realms of social practice at the same stage. They suggested that, for people who participated in scientific experiment, participation in physical labor and politics should be symbolic, that is, as a form of indicating attitudinal changes.[30]

The second epistemological problem was concerned with the relation between theory and action. Marx, in his "Theses on Feuerbach", said, "The philosophers have only interpreted the world, in various ways; the point, however, is to change it."[31] Mao took this seriously, so serious that he seemed to believe that a person's correct knowledge was possible only through his deliberate participation in the change process. Four inter-dependent elements are characteristics of Mao's "Active Theory of Knowledge Acquisition".

In the first place, knowledge acquisition is an enterprise of the masses. Not only struggle for production and class struggle, but also scientific experiment must be carried out in mass movements, that is, the mobilization of the resources of society and the "wisdom" of the masses. Thus, science is radically redefined.[32]

In the second place, mistakes are seen as good things rather than bad things. "In many instances, failures have to be repeated many times before errors in knowledge can be corrected and correspondence with the laws of the objective process achieved, and consequently before the subjective can be transformed into the objective or, in other words, before the anticipated results can be achieved in practice."[33] "In their social practice, men engage in various kinds of struggle and gain rich experience, both from their successes and from their failures."[34]

Analytically, this attitude toward errors becomes a source of legitimation for "mass-line" learning and changing in which deviances and mistakes are easily made. "Trial-and-error" becomes a moral of knowledge acquisition. Mao was very fond of his statement of "learning warfare from warfare" and he often showed his distrust of prescriptive knowledge.[35]

In the third place, the result of action alone is the criterion for truth test. For "what actually happens is that man's knowledge is verified only when he achieves the anticipated results in the process of social practice."[36] Stated differently, "those which succeed are correct and those which fail are incorrect."[37]

Finally, there is an element of "human will", Schram has pointed out the place of "heroism" in Mao's personality and the "voluntarism" in his Thought.[38] In many instances, Mao saw the consciousness of the masses not only as motivation to social change but also as a source of input to economic construction. He argued that the reason his opponents would not believe in "transforming consciousness into matter" was because they were afraid of the conscious masses. In his directives asking soldiers,

workers, farmers and students to learn "more than one skill ", to perform "multiplicity of roles" and to drastically "shorten the normal learning period", he emphasized the capacity of the human will.[39]

The third epistemological problem was concerned with the relation between the knower and the reality. Mao's stance is this: since the nature of objective reality is developmental, the knowing process is a continuous one. Ideal-typically speaking, the knower will never in a position to declare that he has the truth. Learning is an ever-lasting process. "Often, correct knowledge can be arrived at only after many repetitions of the process leading from matter to consciousness and then back to matter, that is, leading from practice to knowledge and then back to practice."[40] In his essay "On practice", Mao listed reasons for the need for continuous learning.[41] "This is because people engaged in changing reality are usually subject to numerous limitations; they are limited not only by existing scientific and technological conditions but also by the development of the objective process itself and the degree to which this process has become manifest."[42]

The last controversy concerning Mao's epistemology was the problem of "reality test". We have said that Mao's was mainly a "practical reality test". The Maoists contended that it was the sole criterion of truth test. The first field to stand up and protest was the natural science because it was the most seriously affected field under this ideological rule. It all started with Ho Tso-hsiu's "Some questions on the criterion of practice in the study of natural science" in the Red Flag Magazine in 1962. It stirred up a debate which lasted for four years, only to be brought to an end by the outbreak of the Cultural Revolution. The key figures representing the Opposition were Ho and Lin Ting-i, who based their argument mainly on the history of natural science. The key Maoist representatives were Tu Lei, Wu Chun-kuang and T'ao Te-lin. Most articles were published in Red Flag, Hsueh-shu Yen-chiu (Academic Research), Hsin Chien-she (New Reconstruction) and Wen-hui Pao (Wen-hui Daily).[43]

The following statements summarize the position of Ho and Lin:

1. Relative truth must be separated from absolute truth as a different link of knowledge. In a given stage of development of knowledge, people's recognition of objective things can only be of the nature of relative truth.
2. Relative truth is disprovable and can be revised. Relative truth which has been tested and found to be correct by practice is of no exception. It can be revised and it is necessary to revise it.
3. The lack of perfection and completion in knowledge must not be confused with mistake in knowledge. Therefore, both the practical test and logical verification are necessary, and the inseparable connection of them should be acknowledged. Practical test alone is not sufficient, otherwise it will lead one to empiricism.
4. There is an indirect form of practical test, that is, testing infinite knowledge (e.g., infinity of time and space) through finite practice.
5. In fact, the term "practice" has so far been misconceived. The true definition of the "criterion of practice" is not a specific practical action, but the sum total of practice. Generally speaking, a specific action of an individual's practice cannot be regarded as the criterion of practice for testing truth.

Tu, Wu and T'ao's positional statements are as follows:

1. Relative truth and absolute truth cannot be distinguished from each other. They are the same thing observed from the different ways.
2. A tested scientific theory within certain historical conditions and the sphere of its functions is a criterion dependable in every way, and is absolute in this sense. Knowledge that has been proved to be in conformity with objective reality will not be disproved by any "new practice". At the

same time, because it can be applied only within this sphere, it is also relative, and its application outside this sphere will yield wrong results.

3. We cannot take completion or incompletion, perfection or imperfection, as a criterion for demarcating absolute truth from relative truth. Completion or perfection is itself relative. The demarcation of absolute truth and relative truth according to the degree of accuracy in the reflection of objective reality is bound to end in relativism.
4. If relativity or absoluteness is discussed apart from the dependability of the criterion of practice, this will in essence reject that practice is the criterion of the truth of knowledge.
5. The only criterion by which to judge whether man's knowledge is correct and whether it conforms to the objective reality can only be practice. Formal logic cannot prove a scientific theory.

Even from this brief summary, it is quite clear that the Opposition represented by Ho and Lin tried to re-define the "criterion of practice" with the following means. First, they argued that this criterion itself was relative. By separating relativity from absoluteness, they were able to treat every existing scientific theory, including Marxist theory, as disprovable and subject to revision. The absolute truth belongs to the sum total of all scientific theories. Secondly, they tried to include logical verification as an indirect form of truth test. Finally, they refused a specific action of individual and isolated practice as the "criterion of practice". Thus, the criterion of practice as a principle of reality test has not only a relative nature but also becomes a historical abstraction. It is easy to see the intention of this redefinition, for as a result of this effort, verification in science is liberated from the ideological domination of the narrow definition of the criterion of practice as the sole reality test. The Maoists were aware of this intention. They

accused their opponents that their effort was to reject the criterion of practice and, since "practice" is a central concept in the Thought of Mao Tse-tung, the whole effort was to abolish the core of Mao's theory.[44]

B. Mao Tse-tung's Research Methods

In this section we try to organize Mao's scattered ideas on non-professional research around several concepts in sociology. The rationale for this attempt is that, since there is no systematic methodology for this type of research, Chinese non-professional investigators may come to Mao's writings for guideline.

Research Problem:

Analytically, a research problem may be initiated either by a concern for the increase of the body of knowledge or by an interest in solving a concrete problem. Mao has shown both kinds of interest, but he is more inclined to the latter orientation. He has observed that in China, "pick-up" utilization of knowledge[45] is quite impossible because "the infant bourgeoisie of China has not been able, and never will be able, to provide relatively comprehensive or even rudimentary material on social conditions, as the bourgeoisie in Europe, America, and Japan has done." The Communists, therefore, have to collect it themselves.[46] Although he talked of the need for a systematic and comprehensive knowledge, as a whole he saw the initiation of non-professional research in terms of practical purpose such as an instrument for decision-making or policy implementation.[47]

By treating research as a means of decision-making and policy implementation, Mao invented two techniques to deal with the problem of translating a practical problem into a research design. In his words, "one is to combine the general with the particular, the other is to combine the leadership with the mass."[48] The general means a general policy statement which is often in the form of a slogan. The particular is a "break-through" at a single point, that is, an exemplary unit which can represent the desired state of that policy. Combination of the two simply means the choice of that unit for the site of an investigation on the problem at hand.

The concrete procedures of this method are suggested as follows.

1. Definition of the general problem in the form of a policy statement.
2. Selection of sites for an investigation: select two or three units (but not too many) from the organization (of which the investigator is a member) itself and other organizations in the area.
3. Research: make a thorough study of these units. Interview some (again not too many) representative members.
4. Making change in the research process: give personal guidance to those in charge of these units to find concrete solutions for the practical problems facing them.[49]

The technique of combining the leadership with the mass is simply the "mass-line" method. According to Mao, nothing can be accomplished if the masses are not mobilized. Research is no exception. In non-professional social research, the role of the investigator and the role of the leader are often identical. The technique of mobilization lies in the ability to separate the relatively active part from the intermediate and the relatively backward groups. In Mao's writings, a social research and a mobilization movement are also identical. "A leading group should be found in each unit in the course of the movement, made up of a small number of activists and with the heads of the given unit as its nucleus, and that this leading group should link itself closely with the masses taking part in the movement."[50]

Data Collection

Mao emphasized the importance of "field study". If we consider the fact that the period when Mao conducted his own research was in the 1920s and 1930s, his preference is not difficult to explain. At that time, the main trend in professional social research, both in China and abroad, was field study.[51] However, there is no evidence that Mao opposes survey research. The reason for the absence of survey research in non-professional investigation in present days may be technical. The whole

sociological discipline was abolished in early 1950s. Since then there has hardly any survey social research even in the professional sphere.[52]

Mao called his method of data collection "fact-finding meeting". It consists of interviewing, group discussion and the making of recommendations. He listed several operation guidelines for such meetings.

First, those attending such meetings should be really experienced cadres of middle and lower ranks, or ordinary people.

Secondly, the interviewer should treat them (the interviewees) as his esteemed teachers, and should be respectful and diligent and comradely in attitude. This attitudinal aspect is important because the researcher is also a leader.

Thirdly, a fact-finding meeting needs not be large; from three to five or seven or eight people are enough. Ample time must be allowed and an outline for the investigation must be prepared.

Finally, the investigator must personally ask questions, take notes and discuss with those at the meeting.[53]

This is our preliminary survey of Mao Tse-tung's research methodology. The aforementioned book which gathered together Mao's ideas on research also quoted Mao's sayings about the goals of investigation and the correct lines of data analysis. We did not include these parts because they are merely in terms of the Marxist ideology and contain nothing concrete. However, from what we have mentioned, Mao's research method is a very crude one. Its advantage is that it treats research as an integral part of problem-solving. Furthermore, this simple method is written in a language so simple and vivid that even workers and farmers with primary school education can read it and use it. We shall assess the quality of non-professional social research in a later chapter, now let us turn to the structural aspect of this system.

Chapter III The Social System of Non-professional Research

The social system of applied research may be seen as a network of interaction between the researcher and his client.[54] But perhaps due to the increasing complexity of research organizations in the United States, a structurally more elaborate model which identifies ten major "actors" in the social system of research has been developed by Paul Lazarsfeld and his colleagues at Columbia University.[55] For a compromise, W. H. Form breaks down the construct of the Client into two parts, the "sponsor" and the "host" who, in many cases, are structurally distinguishable units.[56] In this study, Form's triadic model of classification is used because in the Chinese social system of research, some structural differentiation has appeared but a high degree of elaboration has not yet been reached.

A. The Sponsor

There were 443 organizations assuming sponsorship in our study. Several aggregate characteristics can be observed.

(1) Sponsoring social research is a rapidly growing activity.

Table 1 shows that the total number of sponsors grew from 66 in 1968 to 172 in 1969 and 205 in 1970, increasing 160 and 210 percent over 1968 respectively. This rapid growth indicated an increasing interest in empirical research.

Table 1. Level of Sponsors

	National	Regional	Local	Unknown	Total
1968	7	45	5	9	66
1969	19	139	11	3	172
1970	47	135	6	17	205
Total	73	319	22	29	443

Levels are classified in accordance with the Chinese Administrative hierarchy. Local level organizations are organizations at the People's Commune level and below. Regional level organizations include all organizations at or below provincial level and above commune level. Those above provincial level are organizations at the national level.

Among 443 sponsors, 72 percent are regional level organizations. The role of these regional governments in sponsoring research will be discussed later in this section. In this respect, the share of the local level organizations is small, only about five percent. National agencies did not play an important role either, but the number of national organizations assuming sponsorship was increasing from 10.5 percent in 1968 to 11.1 and 23.0 percent in 1969 and 1970 respectively. In comparison, the share of regional governments increased in 1969 and declined in 1970.

(2) Growing interest in collaborative sponsorship.

Table 2. Collaboration Among Sponsors

Number of Sponsors per Investigation

	One	Two	Three or more	Unknown	Total
1968	15	6	7	17	45
1969	27	29	21	19	96
1970	40	43	17	15	115
Total	82	78	45	51	256

Table 2 shows that in 1968, 28.9 percent of all research was financed by two or more organizations, as compared to 33.3 percent financed by a single organization. The following years showed a growing collaborating trend: in 1969 52.1 percent was collaborative research while only 28.1 percent was financed by a single sponsor; in 1970, the figures became 52.2 percent and

34.8 percent respectively. Among the cases of collaborative research, the number of multiple sponsorship also increased as time went on. Among them, 13 investigations were financed by four or more organizations simultaneously.

The trend of increasing collaborative sponsorship has several implications. First, increasing complication in research may require social as well as financial sponsor.[57]

Secondly, as a result of multiple sponsorship, there is complication of interaction among the sponsors. Research department may be created within each organization to represent its interest in the collaborative research. We have only to look at numerous "investigation groups" or "Research Bureaus" in Chinese press to substantiate this point.

Finally, there is also the need to create a new organization to represent the collective interest of the sponsors in the research process. At present there is no literature on the structure of the so-called "Jointed Investigation Committee" which we come across very often in the Chinese press. A reasonable guess is that such a committee consists of the sponsor as well as the researcher and the host. Then, in the complicate process of a collaborative research, the politics among these three groups of people is alone an interesting topic of research.[58]

(3) The role of the local government.

Table 3. Types of Sponsors

	Revolutionary Committees at Regional and Local Levels	National Agencies	Military Organizations	Unknown	Total
1968	35	15	7	9	66
1969	108	26	35	3	172
1970	118	52	18	17	205
Total	261	93	60	29	443

**National agencies are agencies of the State Council.

Franz Schurmann has done an admirable study on the relationships among the three major political forces in Chinese society in the Cultural Revolution.[59] Though the classification between the Party, the State Bureaucracy and the Military is far from refined and many difficulties arise when it is used to identify an actor, it reflects the aggregate political reality of the time. At the time when Revolutionary Committees replaced the old Party machine, local governments were no more under the sole control of the Party. The method of the "three-way alliance" turned the local governments into a battlefield of power struggles.[60] However, as seen from the angle of research, the local government was still an effective political and administrative tool in organizing social activities. Of all sponsors, 59 percent was local governments, as compared to 21 percent of State (national) agencies and 13.6 percent military organizations.

Table 4. Sponsors: Level by Type

Type	Level			
	National	Regional	Local	Total
Revolutionary Committees	0	247	14	261
National Agencies	70	17	6	93
Military Organizations	3	55	2	60
Total	73	319	22	414

The number of regional level organizations consists of national agencies and military organizations at this level. Table 4 differentiates these two types of organizations from those organizations which are usually called local government. Of 319 regional organizations, 88 were at Provincial level, 76 were Provincial Subdistrict organizations and 155 were at County level. This information will be useful for readers for whom the term "local government" applies only to County Government.

(4) The role of military organizations.

The Cultural Revolution saw the military men emerging as a prominent political force. Although the number of military organizations assuming sponsorship was small compared to other types of organizations, the importance should not be ignored for the following reasons.

First of all their enthusiasm in empirical research may be the most genuine. On the one hand, as a newly rising elite, they needed information more than other groups. On the other, they were much more enthusiastic in social experimentation than other groups, and since social experiment often initiates social research--both statements will be substantiated by our data--the military men showed a greater interest in fostering research.

Furthermore, military organizations were quite isolated from the social systems before mid-1960s.[61] No matter how small in scale it was, their intervention must be recognized as a significant development.

Finally, we must also consider the fact that in 1968-1970 some local governments were under the control of the armed forces. It is impossible to measure this influence, but our impression is that there seemed to be a high and positive correlation between the growth of non-professional social research and the rise of the military elite during 1969-1970.

(5) Patterns of collaboration.

Table 5. Collaborative Patterns Among Types of Sponsors

(a) By Time

	M-L	S-L	M-L-S	Total
1968	6	2	1	9
1969	22	4	2	28
1970	11	15	0	26
Total	39	21		63

(b) By Subject-matters

	M-L	S-L	M-L-S	Total
"Educational Revolution"	12	4	1	17
"Cooperative Medical Service"	7	0	0	7
Administration and other areas	20	17	2	39
Total	39	21	3	63

Notes: M=Military Organizations
L=Local Government Revolutionary Committees
S=National Agencies of the State Council

The most striking feature in Table 5 is that there was not a single case of collaboration in research sponsorship between the military and the national agencies. Wherever there was contact between these two groups, there was the "middle man", the local government (revolutionary committees). Military organizations also showed a greater interest in collaborative sponsorship than the national agencies. From the total of 60 investigations (see Table 3), 70 percent were in collaboration with other sponsors. As for the national agencies of the State Council, only 25.8 percent were collaborative research. The explanation for these two findings might be that military organizations did not have any concrete area under their direct control except the armed forces and related institutes. Here the term "social sponsor" through which the "host" is accessible becomes an important concept to understand the phenomena.

Another feature can be shown by correlating collaborative patterns with area of interest. National agencies showed no interest in "Cooperative Medical Service" and little interest in "Educational Revolution", the two major areas of social experimentation in the Cultural Revolution which saw the power of the

national agencies of the State Council seriously undermined. In this respect, the interest of the military group was well distributed.

Since information on the decision-making aspect of Chinese social research is hardly available, any discussion on the role of the sponsor in the research process can only be theoretical. In principle, the sponsor is expected to formulate the research problem in very broad terms, to recruit the researcher, and to finance the project; he is also expected to let the researcher specify the research problem, take care of the research process and manage the researcher-client relation. In actual research, it is seldom the case. The sponsor meddles in research process in many ways and greatly alters its course.

A common method is that the representative of the sponsor may closely "supervise" those parts requiring little specialized knowledge. In China, where professionalization is not developed, the influence of the sponsor must be greater than their Western counterpart.[62]

The influence of the sponsor is considerably increased if the organization assuming sponsorship has establishment a research department. We have mentioned that such an establishment is not uncommon among Chinese sponsors. Another consideration should be given to the ideology of Chinese research which treats investigation as an integral part of decision-making and policy implementation, and the leader and the researcher as identical.

A more subtle form of influence can be used. If the sponsor has close ties to the group being studied, it can influence the research by advising its clientele (the research host) how to "cooperate" with the researcher.[63] In many collaborative research, the "social sponsor" can do this. However, the Chinese sponsor would watch the research process closely because the outcome was politically important to him either as a <u>de facto</u> manifestation of policy support or as an indicator of the correctness of the timing, method of implementation and/or the "style of work".

B. The Host

(1) Demographic Characteristics:

(i) Urban-rural distribution.

Table 6 shows that, of 256 host organizations, 183 or 73.5 percent were located in the countryside. A common belief is that the Cultural Revolution affected the social life in urban area more than in the rural areas. It was not the case in regard to social research. If the relation between research and social experiments is considered, the effect of the Cultural Revolution upon the rural areas was not less than on the cities. Since "Educational Revolution" and "Cooperative Medical Service" were two major themes in the Cultural Revolution, a comparison may be illustrative. In 1968-1970, more than half of the cases of rural research dealt with these topics, as compared to only 27.4 percent in urban research. After the mid-1960s, "Cooperative Medical Service" emerged as a new institution in rural life, as reflected in Table 6 below.

Table 6. Location of Host Organizations

	Rural			Urban			Total
	A & O	ER	CMS	A & O	ER	CMS	
1968	4	25	3	5	8	0	45
1969	44	16	13	15	7	1	96
1970	42	20	16	33	4	0	115
Sub-T.	90	61	32	53	19	1	
Total	183			73			256

Notes: A & O=Administration and other areas
ER=Educational Revolution
CMS=Cooperative Medical Service

Table 7. Population Size of Host Organizations

(a) Rural

	Province	Provincial Subdistrict	County	Commune	Brigade	Team	Unknown	Total
A & O	1	3	31	18	28	6	3	90
ER	1	0	4	30	21	1	4	61
CMS	0	0	7	10	11	0	4	32
Total	2	3	42	58	60	7	11	183

(b) Urban

	Large	Medium	Small	Total
A & O	40	4	9	53
ER	10	6	3	19
CMS	1	0	0	1
Total	51	10	12	73

Notes: Large=over 1,500 people
Medium=150 to 1,500 people
Small=less than 150 people
A & O=Administration and other areas
ER=Educational Revolution
CMS=Cooperative Medical Service

(ii) Population size.

The difficulty of studying Chinese non-professional research reports lies in the fact that these reports contain very little information other than findings and recommendations. The size of population in a research is so important as a basic variate for the understanding of other characteristics of the sample that we have to make an estimate here. In Table 7 we use different schemes for classifying rural and urban size of population in a research. The administrative system is used to indicate rural size, which divides the whole nation of China into 29 Provinces or equivalent areas, 192 Provincial Subdistricts, 2,110 Counties,[64] and approximately 50,000 Communes.[65] The average population size of a Commune is 11,000, and the average for the Brigade is 1,500 while the average Production Team has 150 people.[66]

As for the urban organizations, those having more than 1,500 members are classified as large, less than 150 as small, and those in between, as medium size.

Table 7 (a) shows that Brigades, Communes and Counties were the most frequent research units, representing 32.8 percent, 31.7 percent and 22.9 percent of all rural cases respectively. Looking from the national-regional-local schema we used in classifying the sponsor, then more than two thirds of rural "host organizations" fall on the local level, as compared to less than five percent of all sponsors falling on the same level (see Table 1). Since we based our estimates upon information on the administrative system, this comparison becomes a strong basis for our proposition that most sponsors occupy higher hierarchical positions than those of the host organizations. Mao told his cadres to be "looking downward", to investigate the social realities at the grassroots;[67] our data suggest that his teaching was well received. If we also consider the "mass-line" character of the research ideology, the Chinese social research may be seen as a way of channeling opinions and sentiments of the people upward to the leaders.

Table 7 (b) shows that in the cities, 70 percent of non-professional research took place in large organizations. The reason may be that at the present stage of development in Communist China, the basic unit of urban life is the big factory, while in the countryside, the commune or the brigade is the basic unit of organized social life.

(2) New Institutions in the Rural Social Structure:

Structural differentiation is seen by some theorists as indicator of modernization.[68] In the first decade under Communist rule, Chinese Government maue a tremendous effort to modernize the country. But due both to the backward base-line of development and the development strategy which followed the "Soviet Model", with emphasis on heavy industry, modernization was hardly "taking off" in most rural areas. In 1958, a new approach which emphasized rural development was used. An outstanding feature of this approach was to build up many functionally specific institutions simultaneously at village level. Table 8 below tries to organize data in this regard.

Table 8. Presence or Absence of Newly Established Institution in 1957-1970

	Rural				Urban			
	Education		Health		Education		Health	
	(no.)	(%)	(no.)	(%)	(no.)	(%)	(no.)	(%)
Present	28	45.9	29	90.6	6	31.5	0	0.0
Absent	33	54.1	3	9.4	13	68.5	1	100.0
Total	61	100.0	32	100.0	19	100.0	1	100.0

Institutional medical care seemed to be the most urgent need in the rural areas. Education was also insufficient in the countryside. But both were quite adequately taken care of in the cities.

C. The Researcher

Non-professional and professional researchers have fundamentally different frames of reference because of their differences in the following aspects.

(1) Institutional Setting.

The professionals belong to institutions where the primary goal is the increase of the body of knowledge. Their only functional role is to serve as researchers. This is not the case for the non-professionals who belong to "instrumental organizations"[69] where the primary goal is not academically oriented. The non-professionals have other functional tasks in addition to research. In most of the cases, research is one of the means they use to attain their pragmatic objectives either as policy-makers or as executives. Thus, non-professional research is a kind of applied social research. Consequently, intellectual curiosity, refinement of tools for investigation and measurement, and the emphasis on technical standard of procedures and presentation which are general attributes of professional research may not be found in non-professional research. Practical usefulness may be the sole concern of the non-professionals.

(2) Role Expectation.

Different role expectations also affect the attitude towards research by the professionals and the non-professionals. Due to the multiple functional role required of a non-professional researcher, his attitude towards science, research and technology tends to be more pragmatic. From time to time, he may even show his contempt for basic research. In one of the "investigation reports" we collected, the graduates from a formal Agricultural College in Northern Kiangsu Province who conducted a general survey of plants in the area were accused of impracticality, selfish motivation and waste of resources.[70]

(3) Reward System.

The practice in natural science to label a newly found phenomenon with the name of the scientist who first discovers it as a form of reward reveals the significance of originality in scientific research. This provides us with a basis of comparison between the reward system of the professional and non-professional research. An interesting aspect is to compare whether the researcher put their names on the report or simply indicate the name of the collectivity. Nearly all the "investigation reports" we have collected gave the nomes of the collectivities or used "a group of investigators". In this respect, the professionals are more "individualistic": in specialized journals which resumed publication in 1972, most articles carried the names of the authors.

(4) Form of Presentation

Training may not only affect the orientation of the researcher, but also determine his way of presentation. The elaborate procedures in the works of the professionals are totally absent in "investigation reports" There is no footnote, no literature review, no formalization or standardization of presentation, nothing but the substantive results. Non-professional reports do have a style of its own, but it is quite different from the style of the professionals. In chapter V we shall illustrate this point with examples.

From the above discussion, we may say that the frame of reference of the non-professionals is that of the "generalist", as compared to the professionals' "specialist" perspective. In the final analysis, the causes for this difference in perspective are structural. Form of presentation due to training, reward system, role expectation and institutional setting determine the behavioral patterns of the researcher.

Due to the anonymity of non-professional reports, we can identify only two groups of researchers, the journalists and the administrators. According to the report of Roderick MacFarquher,[71]

the journalists only play the role of a coordinator in Chinese social research. For instance, 100 journalists from the People's Daily are in various parts of the country helping others to write their own articles. The People's Daily staff does not go out on news-gathering expeditions, but instead visits officials connected with its specialty, discusses possible topics, commissions articles and then touches them up to make sure they read well. There was hardly any information on cadres as researchers, except the number of administrators participating in non-professional research.

Chapter IV. The Substance of Non-professional Research: An Assessment

To assess the function of the non-professional research in society is simply to ask the following question: what social need does it satisfy? In this case, the answer is the impending need for understanding the reality in a period of radical social change. The rationale for the choice of non-professional research may consist of the following points.

First, the scarcity of the professionals available in contemporary Chinese society is the most fundamental reason for using non-professionals.

Secondly, the discrepancy between the slow speed of professional training and the urgency of the need for knowing social conditions also affects the choice of the non-professional approach.

Thirdly, the Communist leaders' aspiration for rapid development is another reason for the use of the non-professionals who can be immediately mobilized.

Finally, these leaders' fear of professional elitism also contributes to the decision of building up a system of non-professional research.

The first two causes represent the objective constraints upon which the decision was made, while the remaining two represent the desires of the decision-makers. Non-professional social research, therefore, may be said to be a desired means employed by the Communist leaders to attain the goal of information-gathering under the aforementioned circumstances. Implicit in this statement is that the non-professional research is a transitional tool used as a substitute for professional research. However, in the mind of some Chinese leaders, non-professionalism is an end to itself.

The substance of non-professional research will be evaluated in two ways. On the one hand, we shall try to present its findings about the institution-building experience in medical care and education in 1968-1970 and let the readers judge for themselves the quality of these findings. Since these two subject matters were the central themes of the Cultural Revolution, other types of research on them are available and comparisons are possible.[72] On the other hand, the uses of non-professional research in other areas will be briefly documented.

Under the Communist Revolution, particularly since the mid-1960s, Chinese society has been turned into a large laboratory of social experimentations. Not only the institutions such as education and health care have undergone radical transformation, but also the institution of social research is being changed. The definitions of the knower and his objects are simultaneously being altered. This is the unique character of Chinese social research in 1968-1970. Both the systems of professional and non-professional research were affected. The influence of the Cultural Revolution upon non-professional research was even greater. On the one hand, the need for new information was greater than before; and on the other, most professional institutes were forced to close in 1967 by the Cultural Revolution. As a consequence, non-professional was expanded and was being institutionalized. This newly established institution shared many characteristics of other new institutions, such as the "Cooperative Medical Service" system and the "People-run Education". This nature of institutional interdependence or mutual influence is a characteristic implicit in the evidences of this chapter.

A. Sample of Results from Non-professional Research: The Cooperative Medical Service System

The quality of the results from non-professional research may be illustrated from two samples, the development of the "Cooperative Medical Service" system, and the "People-run" schools.

On September 29, 1964, the People's Daily reported that a nation-wide medical care system was being built up. "The number of urban hospitals and sanatoria exceeds ten thousand, every one of the 2,000 Counties has at least one hospital and every one of the 75,000 people's communes has its clinics and health centers. In addition, many factories, mines, government organizations and schools have their own hospitals and clinics. In recent years, most graduates of China's medical colleges and secondary medical schools have gone to staff the County hospitals which form the core of the medical service in China's vast countryside. In size, equipment and technical level, many of the County hospitals compare favorably with some of the biggest pre-liberation provincial hospitals."[73]

It is clear from the above description that the emphasis of the Pre-Cultural Revolution medical policy was on quality, both in training and in equipment, and in central planning. Quantitatively, the goal was one hospital for each county, one medical center for each commune, and "even production brigades could have their clinics or health centers, staffed by people with special training in medicine and midwifery."[74]

The Maoist aspiration in regard to quantity is one hospital for each commune, one medical center for each brigade, and the most production teams should have their own clinics. What does this difference in targets mean to the system demands and supplies? The following statistics will help answer this question.

China had approximately 150,000 doctors and 170,000 assistant doctors at the time when Mao issued his "June 26 Directive" in 1965, in which he severely criticized the Ministry of Health, ordered that medical and health work should put stress on rural areas, and signaled the start of a social experiment in medical care in China's vast countryside.[75] The average annual number of graduates from all medical schools was 6,000 in the late-1950s.[76] Significant increase during 1959-1965 is doubtful,

considering the effects of the economic crisis in that period. Thus assuming all medical graduates and workers can be distributed evenly, it would take more than seventy years to train enough doctors so that each one of the 750,000 brigades in China could have at least one doctor. Other difficulties include the supplies of equipment and medicine and the financing of the program.

It is clear that there is only one choice: quality or quantity. Mao chose the latter, and thus a social movement of training "barefoot doctors" and collecting Chinese medicine was launched.

The following data represent the results from 17 "investigation reports" on the "Cooperative Medical Service" system during 1968 to 1970. The first aspect of this system we are going to present is the rise of the "barefoot doctors".

According to the "investigation report" by the Shanghai Revolutionary Committee, "barefoot doctor" is an affectionate title the poor and lower-middle (income) peasants on the outskirts of Shanghai have given to health workers who spend part of their time farming, and part in medical work.[77]

In 1958, medical circles in Shanghai organized a contingent of 10,000-strong to go to the rural areas and, in cooperation with clinics of the people's communes, they trained large numbers of health workers who were not divorced from production while engaged in short-term classes or in medical practice.

Statistics of June, 1960, show that there were over 3,900 health workers in more than 2,500 production brigades of the ten counties under the municipality of Shanghai. They gave medical treatment and carried out preventive measures and propaganda work, making outstanding achievements in changing public health and medical conditions in the rural areas.

In August, 1961, Liu Shao-ch'i, the then President of the People's Republic, ordered the "barefoot doctors" to drop medical practice, and reduced the number of health workers from 3,900 to just over 300. During the "Socialist Education" movement launched by Mao in 1963-64, the health protection network on the outskirts of Shanghai was gradually rebuilt. The number of health workers again increased to more than 2,300. In response to Mao's "June 26 Directive" on health service, the total number of "barefoot doctors" was increased to more than 4,500; on the average, every brigade has 1.8 "barefoot doctors". These "barefoot doctors" in turn trained more than 29,000 health workers for the production teams.[78]

The following "investigation report" shows how a brigade could build a self-reliant medical care system by not only training its own "barefoot doctors" but also manufacturing a large amount of medicine.

Shao Kao Chio Brigade, Wu-Hsiang County, Shensi Province, has a population of 300. In 1960, the brigade built a small clinic. In 1965, the clinic already accumulated a fund of 2,000 yuan and two shelves of medicine, one Western-type, and the other Chinese medicine. It was staffed by a "barefoot doctor" and his assistant.

In the early period of the Cultural Revolution, the brigade leadership investigated into the annual rates of ailments and patients among its population. They found that in order to meet the needs, the brigade had to produce 750 catties or about 1,000 pounds of Chinese herbal medicine.

Based on this non-professional investigation, the brigade launched a mass movement of planting, collecting and manufacturing Chinese medicine. At the same time they trained twenty six additional "barefoot doctors". Thus, with the leadership of the brigade, the support of the masses, and the helps of external organizations, this brigade established its "Cooperative Medical Service" on a firm base.[79]

Concerning the financing of the brigade medical care system, there is an interesting "investigation report" which tells us about how a medical insurance system was developed. Let us quote from the report.

"The Stars Brigade, of Ch'u Chiang County, Kwangtung Province, has a population of 2,916 including a labor force of 1,139 persons. Every year, about two percent of the population were seriously ill and had to be sent to hospital for treatment; and about ten percent of the population suffered from common ailments. The brigade built up its cooperative medical service in 1957. Between 1957 and 1964, all medical expenses were borne by the brigade (collectivity), while the patient only had to pay for a registration fee. The payment of medical expenses in this way cost the brigade about 8,000 yuan each year.

"From 1965 up to now (1969), medical expenses have been paid by the brigade, production teams and commune members. During the distribution of income every year, all three parties set aside a joint sum for medical care. The total amount and proportion between the three were discussed and decided upon at the representative conference of the poor and lower-middle peasants. Taking medical requirements and economic conditions into consideration, the proportion was adjusted every year. Practice in recent years suggested that every commune member paid one yuan annually for medical expenses, the production team paid one yuan per capita from the welfare funds, and the brigade paid around 2,000 yuan from its side-line occupation income. The total came to about 8,000 yuan.

"Under the system of cooperative medical service, commune members can promptly see the production team health workers for minor ailments, or visit the brigade clinic for more serious illness. In cases too difficult for the brigade clinic, patients are sent to people's hospitals at the administrative district or county level which have signed medical treatment contracts with the brigades. Patients' fees are paid once a year by the brigade."[80]

Similar system of medical insurance was reported by other researchers who investigated other localities.[81] Later on this became the model system throughout China.[82] In 1968-1970, it was said to be of great success and was welcome by the peasants. However, a recent "investigation report" admitted that peasants opposed the insurance system. The reason given by the investigators was twofold: on the one hand, a premium of one yuan per head meant a heavy economic burden for the peasants; on the other, the level of awakening" of the people was still low at present time. Therefore, the report said, in 1971, the insurance system was canceled by the commune where they conducted the research. The new rule is that each peasant, instead of paying one yuan per year in cash, should contribute an amount of Chinese herbal medicine equivalent to three yuan to the clinic.[83]

This report sheds some light on the process of mobilizing people into the new system. The process of overcoming resistance is labeled by Chinese investigators as a process of "class struggle".[84] In this process, the mobilization of the masses is essential, especially those people who are the most in need of the new system. This is why Chinese non-professional researchers often declare that mass movement is a feature of institution-building.[85]

Table 9 below presents the process of development of a "typical" system of "Cooperative Medical Service" as summarized from 13 Communist "investigation reports".

Table 9. Cooperative Medical Service:
System Inputs, Process and Outputs

System Component	Variate	Value
I. Inputs	(a) Patient Ratio: (Number of persons fell ill each year in 100,000 population.)	
	i) Serious ailments:	2,000
	ii) Common ailments:	10,000
	(b) Doctor Ratio:	
	i) No. of "barefoot doctors" in 100,000 population:	285
	ii) No. of assistants in 100,000 population:	2,075
	(c) Average Premium Per Capita:	
	i) Paid by member per year (yuan):	1.57
	ii) Paid by collectivity per year (yuan):	.60
	(d) Capital equipment Ratio: (Per doctor per year, unit: yuan)	772.00
II. Process	(a) Class struggle or politics in command: the organization of the leading group of activists.	
	(b) Mass movement.	
	(c) Non-professional investigation.	
	(d) Concrete problem-solving based on the above.	
III. Outputs	(a) Percentage of total patients taken care of by the "barefoot doctors":	75 to 80
	(b) Rate of Cured (%):	85
	(c) Effectiveness of the system as a result of preventive measures: decrease of patients in the first year after the establishment of the system compared to the preceding year (%):	63

(Table 9 continued)

Sources: Statistics of this table are taken from the following 13 "investigation reports". Red Flag Magazine, No. 1, Jan., 1969, pp. 35-42. The remaining reports appeared in People's Daily. Dec. 5, 1968, p. 1; Dec. 7, 1968, p. 3; Jan. 18, 1969, p. 4; Mar. 1, 1969, p. 4; Dec. 21, 1969, p. 2; April 3, 1970, p. 1; May 17, 1970, p. 3; July 14, 1970, p. 3; July 19, 1970, p. 3; July 27, 1970, p. 3; Aug. 21, 1970, p. 2; Oct. 28, 1970, p. 3.

B. Results of Non-professional Research on "People-run" Educational System

Non-professional social research played an important role in the development of the people-run schools system, an institution which took care half the rural educational need after 1967. The establishment of the people-run school system was one component of "Educational Revolution" in Cultural Revolution. Before the Cultural Revolution, schools were under the control of the bureaucracy of the State. In the rural areas, teachers were assigned and paid by the county government. In the people-education system, schools were operated by the peasants, that is, under the control of the commune or brigade organizations. In this section, we shall present a sample of results from non-professional research on the structure, the developmental process and the consequences of this new institution of people education.

The first component of the people-run school system are teachers. The Maoist approach, like in the medical care system, is to depend upon the "generalists" rather than on formally trained teaching staff. The Maoists invented a term, the people teachers, as an equivalent to the "barefoot doctors" in cooperative medical service system. Most people teachers were recruited from educated workers and peasants. Table 10 summarizes the statistics on the proportion of people teachers in the new school system from eight "investigation reports".

Table 10. The Proportion of the Number of People Teachers to the Total Number of Teaching Staff in China's New Educational System

Report	Location (Urban/ Rural)	Area Investigated	No. of People Teachers	All Teachers	Percentage of People Teachers
1.	Rural	4 communes	145	279	51.9
2.	Rural	1 school	22		
3.	Urban	13 schools	229		
4.	Urban	1 factory	60		
5.	Rural	1 school	24	42	57.1
6.	Rural	1 school	3	10	30.0
7.	Rural	1 school	14	17	82.3
8.	Rural	1 commune	29	56	50.4
Average					54.9

Sources:
Report 1: People's Daily, Dec. 9, 1968, p. 3.
Report 2: People's Daily, Nov. 16, 1968, p. 3.
Report 3: People's Daily, Dec. 7, 1969, p. 4.
Report 4: People's Daily, Mar. 24, 1969, p. 3.
Report 5: People's Daily, July 10, 1969, p. 3.
Report 6: People's Daily, Jan. 6, 1969, p. 1.
Report 7: People's Daily, July 28, 1970, p. 3.
Report 8: People's Daily, Nov. 7, 1968, p. 3.

This data shows that the number of people teachers exceeds that of formally trained teachers. One explanation for this phenomenon is that a portion of the formally trained teachers were purged because of their class background. For instance, 42 percent of the 77 formally trained teachers at Yenan Middle School, Tientsin, were purged. They were either sent to exile in Inner Mongolia or sent to the countryside to become farmers.[86] At Hungkwang Primary School in Kiangsu Province, one third of the formally trained teachers were sent down to the farms, another one third re-educated, and the vacancies they left were filled by peasants and workers.[87]

Another issue was to replace the cash payment system for teachers with a "work-points" system. This caused many problems. In the first place, there is hardly any common criterion to rate teaching and farming. In some places, political participation rather than work performance was used. Controversies arose on how to judge the degree of "activeness". In the second place, most of the teachers were not local citizens, thus raising the issue of whether their original brigades or the brigades where they taught should pay them "work-points". This was hardly an issue under the previous system when teachers were paid by the county government in cash. Lastly, the living standard of teachers under the new system had sharply declined to a level lower than the poor peasants. The reasons are, according to several reports, that teachers did not have "reserved plots", could not raise pigs, had no side-line productions which accounted for almost one third of the peasants' family income, and that teachers spent a large portion of their income on books and stationeries.[88]

The second component are students. In order to mobilize children to go to school, non-professional research was used to find out why school-age children would not go to or drop out from schools run by government in the past. According to several reports, the following causes were crucial.

1. Economic factors. Education was too expensive for rural families. In 1957, the total expenses for a high school student was 160 yuan per year, approximately two thirds of the annual income of an able-bodied worker in the rural areas.[89] In 1965, the total expenses to send a child to primary school was about 80 yuan per year.[90] Said one researcher, "The financial burden was too great for them to educate their children; the school followed such foreign rules that they thought it infeasible to send their children to school." The "foreign rules" mean such things as the collection of fees for tuition and school uniform.[91]

2. Social factors. First of all, schools were located at places miles away from most families. Furthermore, poor parents need their school-age children to take care of their younger brothers and sisters during the day. Sometimes parents need their children to help in farmwork. A more common cause was that most students from poor families could not pass examinations and were either rejected at the entrance examination or dropped out during the process.[92]

3. Political factors. Many reports say that why the old system failed is due to the fact that schools were run by the bourgeoisie and therefore children from poor families were discriminated. Some farmers were reported to have refused to send their children to school because they thought that the teachers there were politically backward.[93]

4. Other factors. Other causes include the age restriction at entrance examination, the discrepancy between theory and practice, the length of schooling and the examination system.[94]

These problems are to be dealt with by the new system. The principal strategies include the control of school power by the workers and peasants, mass movement, the replacement of cash payment to the teachers with the "work-points" system, and a closer relationship between the educational institution and its social environment. In the following "investigation report", an exemplary experience on school management of the Kangtung Brigade in Shantung Province was summarized.

"A meeting of cadres of the brigade and representatives of poor and lower-middle peasants and revolutionary teachers and students shall be called at the beginning of each month to sum up the work of the school in the preceding stage and make plans for the ensuing stage. Informal meetings of teachers and students and poor and lower-middle peasants shall be organized in all production teams at the end of each month to examine the implementation and the relations between the school and the production teams. The brigade and its production teams shall put the work of the school on their agenda, while the school should concern for the work of the production teams and maintain close relations between teachers and students and the parents. The brigade and the school shall jointly carry out political and ideological work with the teachers, students and their parents. The poor and lower-middle peasants should be asked to teach the students in their classrooms, and the students shall take part in the productive labor of the production teams in an organized and planned manner."[95]

The importance of the power structure of the schools was also stressed by the researchers. The following shows several examples of the re-organization of the school board.

Of 83 directors from 14 school boards in Chiu-keng Commune, Chun-an County, Chekiang Province, 65 percent are poor and lower-middle peasants who make all important decisions concerning school administration and curriculum.[96]

In Harbin, the school board of Middle School Number 43 of Harbin City is composed of 6 workers, 5 teachers, 4 students, 1 soldier from the People's Liberation Army, and 1 militia man.[97]

The results of the new system can be considered from the quantitative and the qualitative aspects. Table 11 below shows the achievement of the people-run schools in terms of universal primary education.

Table 11. Achievement of the People-run School System: Change in Universal Primary Education

Report	Time of Establishment	Before (Percentage of school-age Children in school)	After	Change (%)
1.	1964	55.0	90.0	35.0
2.	1964	60.0	93.0	33.0
3.	1967	63.0	100.0	37.0
Average		59.3	94.3	35.0

Sources: Report 1: People's Daily, Dec. 10, 1968, p. 1. trans. in SCMM, No. 638, pp. 15-19.
Report 2: People's Daily, Nov. 7, 1968, p. 3.
Report 3: People's Daily, Oct. 18, 1968, p. 1.

Qualitatively, the Maoist ideals are better implemented in the new system. Although most qualitative changes are attitudinal ones, the researchers are able to quantify some items. For instance, "love for physical labor" is rigorously practiced in the new system while absent in the old. Consequently graduates under the old system despised physical labor, went to the cities, and refused to stay in the village to serve the farmers.

In 1957, according to an opinion poll, 90 percent of the senior students of Tsinghua University at Peking wanted to continue their studies or remain in the academic circles, while only 10 percent were willing to work in the factories after graduation.[98]

In Shui-yuan Commune, Ying-kou County, Liaoning Province, a high school graduate refused to accept the position of an accountant offered by his own brigade, saying, "How can you expect a man who has studied for more than nine years to do such a job."[99]

In a production team in Heilungkiang Province, all the 18 educated youths left for the cities, consequently the team did not have an accountant for many years.[100] In a commune of Kansu Province, one third of the 102 production teams could not find an accountant as late as 1968, ten years after their organization.[101] Numerous reports make the same accusation against the old educational system and state that under the new institution, students have far better orientation.

C. The Uses of Non-professional Social Research

In 1964, in a talk before the Nepalese Educational Delegation, Mao Tse-tung made the following statement concerning the development of social science in China:

"There is a factory attached to the science and engineering faculties at Tsinghua University, because students must learn from both books and work. But we cannot set up factories for arts faculties such as a literature factory, or a history factory, an economics factory or a novel factory; these faculties should regard the whole of society as their factory. Their teachers and students should make contact with the peasants and urban workers as well as with agriculture and industries. How else can their graduates be of any use?"[102]

Putting an equation between natural and social science, Mao was determined to turn social science into a productive institution as he had done to natural science. During the Cultural Revolution, schools were closed and students went to their respective "factories" to make themselves useful. The purely academic disciplines were deliberately transformed into a mass enterprise closely related to the ultimate societal goals. Social scientists were no longer professionally trained elites but volunteer workers. Non-professionalism was emphasized. Utilization became the central theme in social research.

In the period from 1968 to 1970, the number of cadres participated in non-professional social research increased sharply. In the Communist Party Organization of Hsiang-t'an County, Hunan Province, seven of the nine Party executives participated in research. In the government of the same county, 86 percent of administrative staff went down to 66 communes to conduct research.[103] Nearly all the Revolutionary Committee members or top executives of the following organizations had participated in non-professional research. They were Ts'ai Chia Pao Commune of Tientsin.[104] Lin-t'ao County in Kansu Province,[105] and Lo-ch'ang County of Kwang-tung Province.[106] In the city of Tsingtao, Shantung Province, two-thirds of all top executives went to the grassroots level and conducted investigation there.[107]

Besides the growing interest on the side of the leadership, there was an increasing number of the masses participating in non-professional investigation. The following two reports provide illustrative examples. In 1968, the Beacon Commune of Heilungkiang Province organized 210 "investigation teams" with 1,200 members to conduct social research on the situation of class struggle in the area.[108] In the same year, at an automobile factory in the city of Tsitsihar, Inner Mongolia, the revolutionary committee was able to mobilize nearly one thousand workers to participate in research. Virtually no existing problem escaped the scrutiny of this army of researchers.[109]

Non-professional social research was also used in teaching. In the T'ang-pei Brigade of Hsia-chi Commune, Pao-ying County, Kiangsu Province, 64 young intellectuals were organized to participate in social research. In 1969-1970, they had interviewed 200 families, held 50 fact-finding meetings, and compiled 15 books on "village history". The result was that 31 of the 64 young intellectuals were elected "activists".[110] The "May 6" Middle School in Hsin-t'ien Commune, Kuei-hsi County, Kiangsi Province, mobilized 139 students and six teachers to investigate the exemplary experience of six brigades, and had at the end written 155 "investigation reports".[111] Several investigation teams were organized by the leadership of a suburban middle

school in Shantung Province. They investigated 15 communes, 252 brigades, interviewed more than 800 families, resulting in finding out the actual needs of the citizenry.[112]

Non-professional social research meant problem-solving, the Communist leaders claimed. Since 1968, Chinese newspaper have been full of stories providing evidences on how non-professional research can help solve concrete problems. The following are some examples.

A People's Liberation Army unit was reported to have used social research in determining the effects of vinegar on cold and related diseases.[113]

A trading company in Hopei Province used social research for future planning. In November, 1968, it held 27 fact-finding meetings with peasants, cadres and women. The result was they improved their service.[114]

During a non-professional social research, the revolutionary committee of Meng-ch'eng County of Anhwei Province found that there was an imbalance of supply of good cotton seed in various parts of the county. They immediately re-arranged the distribution of 230,000 catties of seed. A problem which might have tragic consequences was timely solved.[115]

From the evidences we have just documented, we are impressed with the similarity between the new institution of social research and those of education and medical care. The processes of learning and doing are identical and are closely linked to the goals of society. There was enthusiasm to build functionally specific institutions, while at the same time, the role of the professionals in such structures was de-emphasized. Mass movement, role broadening, community support, political mobilization, and self-reliance were the principal strategies of institution-building in 1968-1970. Non-professional social research became an important instrument in the social development of Communist China.

Chapter V. An Evaluation of Non-professional Research Techniques

A. Methodology

As illustrated in Table 7, 47 investigations studied areas equivalent to or larger than a county, that is, with population close to one million. Even a commune has more than ten thousand people. If the Chinese investigators did not prefer survey research, as we have already indicated, how did they conduct their research? In order to answer this question, the methods of sampling, interviewing and data analysis used by Chinese non-professional researchers will be presented in this section. Each method is illustrated by an example.

Purposive Sampling

The Revolutionary Committee of Kwangtung Province sponsored a non-professional research in 1968, and the report was published on People's Daily.[116] The purpose of the research was to find out "how rural schools could be administrated by the poor and lower-middle peasants" in the whole province. The investigators selected eight units consisting six brigades and two communes as their sample. The sampling was purposive because these units were "typical exemplars" in regard to particular aspects of school administration. The purpose of the sample was to select areas where the schools were well managed by the poor peasants and a model could be built upon their experience. Although it was not a random sample, the researchers did not hesitate at generalizing their findings as the conditions of "Educational Revolution" in the whole province. It was not uncommon for non-professional investigators to confuse the "ought" with the "is". Policies based upon this type of research are not different from those based on realistic aspirations. When conditions of the more progressive parts are presented as the reality of the whole, and when they become the basis for decision-making, people in the less progressive parts are required to catch up. This generates frustrations in the social system.

Interviewing and Group Discussion in Data Collection

Investigators from the Liaoning Daily conducted a research on rural educational revolution in 1968. They described the method as follows.

"Recently we went to several rural communes, held more than ten panel discussions, in which poor and lower-middle peasants, teachers and cadres at commune and brigade levels were interviewed. Our conclusion: educational revolution movement has solved many problems which were regarded as having no solutions."[117]

The outstanding feature of this report is that it rallied a set of directly quoted "opinions" of some respondents and presented as the main data. Although the sentiments of the masses were vividly captured, these "facts" only justified the need for a revolution in education rather than supported the conclusion the investigators had put forward. Most non-professional investigations used this approach and therefore had the same advantage and disadvantage.

Comparative Method in Research and Data Analysis

The Revolutionary Committee of Yang-chou Provincial Subdistrict, Kiangsu Province, sponsored an evaluative research on the accomplishments of the Hou-chang School of Agriculture in 1968.[118] It is the most sophisticated piece of research among the cases we used here for illustrations. It employed different methods to study different areas of the growth of the school--the most interesting one being a comparison with another similar school.

At the time of the research, Hou-chang School of Agriculture had 4,179 students. First, the report described why the school was established. The most important cause was system demands. In 1965, Hou-chang County with a population of several hundred thousand had only 39 agricultural technicians and ten veterinarians. The only agricultural school in the area was the Northern Kiangsu College of Agriculture which served several counties in the northern part of Kiangsu Province but turned out only 168 graduates per year. Hou-chang School of Agriculture was established in March, 1965, to meet the urgent needs of the county.

Then, the report listed several characteristics of this new school. The school was said to be politically oriented. Administrative power was controlled by the poor and lower-middle peasants. Of 4,179 students, 73 percent were children of poor families. The practical principle of "learning-by-doing" was one of the guidelines of education in the school.

Then it proceeded to compare the new agricultural school with the established, formalized and government-run Northern Kiangsu College of Agriculture. Table 12 below shows the results of the comparison.

Table 12. Comparison of two Technical Colleges

Variables	Hou-chang	Northern Kiangsu
1. Efficiency: (a) student-staff ratio (no. of students per one teacher)	300.0	1.81
(b) overhead per student per year (yuan)	12.0	3600.00
2. Effectiveness: no. of graduates per year*	866.7	168.2
3. Quality: the highest yield in wheat production experiment (catties per mou)	160.0	75.0

* Hou-chang School of Agriculture produced 2,600 technicians in three years, while the Northern Kiangsu College of Agriculture had 2,691 graduates in 16 years.

Finally, the report evaluated the change in Hou-chang County since the establishment of the new school. In 1968, the county had 27 technology-stations, as compared to four stations in 1965. It had 2,600 agricultural technicians to serve the people.

B. Form of Presentation

An objective evaluation of the procedural format of presentation in China's non-professional research should follow these steps: first, it should be evaluated in terms of the standard of professional research within Communist China; second, it must be evaluated in accordance with professional standard in the West. The first step is necessary because it has at the basis of comparison similar conditions of traditional influences with respect to procedural patterns, the ideological dimension of communication, and the political control of the mass media. Both research systems are operating under the same set of environments. However, since we shall choose the professional standard of the pre-Cultural Revolution period as our basis of evaluation, due to the fact that most of the specialized journals stopped publication in 1967 and did not resume publication until 1972, we are unable to control the variations resulting from the difference of time period.

The second step is taken because of our conviction that the professional formalism of Western social science is the most efficient method of knowledge accumulation and utilization. Our opinion in this regard is that Chinese non-professional research can learn a good deal from the experience of the West without any significant sacrifice in terms of principles. Certain standardization in procedures and practical usefulness are not contradictory goals for non-professional research. We hope that an assessment with the professional standard of Western social research may reveal the areas in which the non-professional research in Communist China are most in need of improvement.

Concerning the formal aspect, the fundamental components of a professional research report consist of background data, operation procedure, research process and the conditions upon which empirical generalizations are made. In the following analysis of a professional report, we shall show that how these elements can be contained within a presentation which was closely kept in line with the ideological demands.

This report, "How the members of our commune read and appraise literature works", was written by the Rural Labor Participation Unit from the Chinese Academy of Sciences at the Chiuli Commune, Shou County, Anhwei Province, and was published in Wen-hsueh P'ing-lun (Literary Review), a national journal.[119] It is chosen because it represents one of the least formalized professional research reports published on the eve of the Cultural Revolution. The research methods it employed were essentially those of the non-professional research. This information is contained in the first part of the report. It said, "The principal means of investigation was the forum. We held 14 forums of various kinds with a total attendance of 95 persons. Besides, we conducted written inquiries among 17 youths with primary school cultural standard or higher."[120]

Also contained in the background data are: (1) the time period during which the research was conducted, which was from October 13 to October 30, 1965; (2) the population size of the research, which was equivalent to four brigades; (3) the sample size, which consisted of 77 respondents; and (4) the occupational, educational, class status and political backgrounds of these respondents.

The general problem of this research was literary preference among commune members. Literature was operationally defined as novels, short stories, poetry and critical essays. Each of the first two categories was sub-divided into two groups. contemporary and classical. Preference was studied in terms of the respondents' past experience, their own schemes of evaluation and their standard for appraising literary works.

With respect to the respondents' experience with literature, the questions "what book have you read?" and "what books are you most fond of?" were asked. It was also measured by the number of times a particular book was borrowed by the peasants from the "cultural rooms" in various brigades.

The investigators made it clear that their first empirical generalization --"the commune members under investigation prefer full-length novels to other categories; for the remaining categories, they prefer short stories to poetry and critical essays" --was made under a particular set of conditions. For instance, in the Chiuli Commune at the time of investigation, only one member who was a primary school teacher had subscribed to Literary Review, a major source of critical essays.

To control this availability or accessment factor, the researchers organized part of their respondents into experimental groups, and exposed them to pre-selected poetry and critical essays. Based upon the interviews with these respondents after deliberate exposures, they made another empirical generalization. "Provided that a work conveys healthy thoughts and sentiments and suits their taste, the commune members' reading habit of reading nothing but novels can be changed."[121]

Thus, the report separates facts and empirical generalizations from other ideological statements. Presentational formats of this type are useful procedural forms Chinese professional researchers have developed to adapt the ideological environment without the sacrifice of scientific criteria like objectivity and verifiability.

Therefore, the presence of background data, operation procedures, research process and conditions of empirical generalizations becomes one of the factors with which we distinguish Chinese professional research from non-professional research. The absence of all or some of these formal elements, as is evident in the "investigation reports" we collected, is one of the limitations of non-professional research in becoming a permanent efficient tool of information-gathering.

We said before that, in the "investigation reports", there is no footnote, no literature review, nothing but the substance. We also said that this might be the result of training. An evaluation of the non-professional research with Western

standard is actually simple, because there is virtually no formal procedure in the former. An understanding of the causes of the absence, however, is another matter.

Compared to the formalization of Western social science, Chinese social research also lags in the standardization and elaboration of procedure. Both the traditional attitude toward science and the ideology which stresses extreme practicality may be the causes. Surely there are others. Will non-professional research be formalized in the future? The answer to this question may determine its status in terms of scientific knowledge acquisition and its fate at the end of the transitional period when professional research has been adequately developed. Indeed, a more general question is: will there be professionalization or specialization in the new institutions such as the non-professional social research?

Chpater VI. Conclusions

Now it seems appropriate to sum up the main ideas in the three sets of facts we have presented so far. In the first part of our study we tried to explicate the governing ideology of the Chinese system of research by contrasting the Maosit epistemology which has dominated Chinese society since the Cultural Revolution, and the Liuist epistemology which represents the only systematic and powerful alternative to Maoism. The following are the important theses of Mao's governing ideology.

1. An adequate pool of direct personal experience is a necessary precondition for the acquisition of correct knowledge.

2. To know is to practice, to change; and through social practice and deliberate change can one acquire correct knowledge. Mass movement, trial-and-error, and political awakening are the three basic strategies of deliberate social change.

3. Knowing is an ever-lasting activity; and revolution must be continuous.

4. Practice again is the sole criterion of reality test.

In the second part of this paper, social research is seen as a social system with different actors playing different roles. Several structural characteristics have been observed.

1. With an increasing number of organizations assuming sponsorship, hosting research or making their own investigation, organized research becomes an integral part of social life in Communist China. Social research is fused with politics, decision-making, policy implementation, governing and leading, social mobilization and education.

2. Functionally specific research departments are being established within organizations; however, they are manned by administrators of other units of the same organization. There is a tendency for the organization leader to assume the role of the principal investigator. In other words, specialization or professionalization within the research organizations does not occur;

structural differentiation is not followed by division of labor. Due to the short span of time under study, the problem of whether specialization will occur in later development requires further studies.

3. Although there is little formalization in the research organizations, complexity does increase due to the growth of interest in collaborative research.

4. As an institution, the Chinese system of non-professional research is very responsive or adaptive to the peculariti es of its environment. Unique but quite appropriate strategies, methods, and procedures have been developed to cope with both the ideological and technical constraints on the system. To a surprising degree, the system is able to follow closely the ideological prescriptions and at the same time gather a good deal of significant and useful information.

In the final part we have seen non-professional social research in quite a different way. We compare the experience of institution-building in non-professional social research to those in education and medical care. We found a high degree of similarity in the following aspects.

1. Political rather than technical criteria are used to filter the flow of resources into the input system and to evaluate the results.

2. Both structural and motivational variables are emphasized, that is to say, the approach is to change institutions as well as to change people simultaneously. Mass movement, political campaign, structural arrangements, and self-reliance or heroism are all employed to aim at one "battle" or to concentrate upon one social action. On the other hand, one single social action is expected to produce many effects, that is, to perform the functions of truth-testing, problem-solving, education and attitudinal change. This expectation of multiple effects is one of the rationale for the frequent uses of mass action programs.

3. Institution-building effort is to be accompanied by institutional interdependence and overlapping memberships or role broadening as a way to prevent fragmentarism and assure coordination and social integration. In this regard, Structural differentiation is desirable while role specialization is not.

4. Non-professional research is not only used to diffuse the exemplary experience and solve practical problems, but also as an evaluative tool of institution-building. The tendency is to quantify the results which are regarded as the sole criterion of truth test. However, social research is not restricted to measuring alone. It is also a process of correcting errors or testing new theories. Knowing and doing are identical and both in turn are related to the attainment of the ultimate goals of society.

Several conclusions may be drawn from this study.

First, non-professional social research is a unique process of the Chinese Revolution. This uniqueness is characterized by the fusion of political revolution and scientific revolution into one process. Political and technical developments become inter-dependent and mutually reinforcing agents in a period of radical social change.

Secondly, the case study of Chinese non-professional social research contributes to the general theory of social division of labor. The contribution lies in the fact that it provides empirical data on the structural preconditions of division of labor in a social system. Durkheim's statement that division of labor does not go forward without a demand for greater expenditure of energy explains the phenomenon of a lag of role specialization behind structural differentiation.[122] The fact that information-gathering institution has become functionally specific and structurally distinct while task specialization is still underdeveloped demonstrates the demand side of Durkheim's theory of division of labor in society. It also contributes to the general sociological theory about the relationship between social structure and role specialization.

Finally, the study of Chinese experience on research also suggests an alternative approach to the consequences of structural differentiation and specialization. Chinese leaders argue that structural differentiation does not necessarily lead to division of labor, and that men can eliminate the undesirable effects of these two processes.[123] However, as we have said, what the Chinese are really against is not role specialization as such, but rather the related phenomena such as professional elitism. Thus the Chinese alternative is actually an ideal unity of expertise and discipline, a theme which is also central to Weber's ideal construct of the bureaucratic rule.[124]

Notes

1. Genevieve C. Dean, "Science, technology and development: China as a 'case study'", China Quarterly, No. 51, (1972), pp. 520-534.
2. Mao Tse-tung, Selected Works, Peking: Foreign Language Press; 1965, Vol. 1, pp. 23-59.
3. Tiao-cha Pao-kao Wen-hsuan (Selected Investigation Reports), Hong Kong: Joint Publishing Co.; 1969, Vols. 1-2
   Shanghai Tiao-cha Pao-kao Hsuan (Selected Investigation Reports of Shanghai), Shanghai: New China Book Store; 1970.
4. The main sources are SCMM and SCMP.
5. Senior Class, Department of Philosophy, Peking University, "Folksongs in Weng Chuan Commune: An Investigation", and "No gods in Weng Li Chuan", in Peking University Journal, Humanities Section, Vol. III, (1958-1961), pp. 9-27.
6. Donald P. Whitaker and Rinn-Sup Shinn, Area Handbook for the People's Republic of China, Washington: The Superintendent of Documents; 1972, p. 358.
7. Ibid., p. 359
8. Ibid., pp. 359-360.
9. James Chu-yul Soong, The Red Flag (Hung Ch'i), 1958-1968: A Research Guide, Washington, D. C.: Center for Chinese Research Materials, Association of Research Libraries; 1969, p. xvi.
10. Hsuan Mo, Chung Kung Wen Hua Ta Ko Ming Yu Ta Lu Chih Shih Fen Tzu (The Cultural Revolution and the Intellectuals), Taipei: Studies on Chinese Communism; 1973.
11. Mao Tse-tung, Mao Tse-tung Lu Tiao-cha Yen-chiu (Mao on Research), edited by Statistical Data Bureau, Department of Planning and Statistics, The Chinese People's University, Peking: Joint Publishing Co.; 1961.
12. See, for instance, People's Daily, July 5, 1972, p. 1; and People's Daily, Jan. 1, 1971, p. 1.

13. See p. 13 below.
14. People's Daily, July 24, 1972, p. 1.
15. Mao Tse-tung, Selected Readings, Peking: Foreign Language Press; 1971, pp. 502-3.
16. Ibid., pp. 65-133.
17. Ibid., p. 502
18. Stuart Schram, Mao Tse-tung, Harmondsworth, Middlesex: Penguin Books; 1966, p. 223
19. Ibid., pp. 220-1.
20. By "Opposition" we mean the coalition of political forces led by Liu Shao-ch'i and Peng Teh-hui after the disaster of the "Great Leap" movement. Although politically speaking it was not a coherent coalition, it supported nearly all opponents to Mao's Thought in every ideological realm. See Institute for the Study of Chinese Communist Problems (ISCCP), A Special Collection of Materials on Liu Shao-ch'i, Taipei: ISCCP; 1970; and Center for Chinese Studies, Hong Kong (CCSHK), Peng Teh-hui, Hong Kong: CCSHK; 1969.
21. For a historical view of the struggle of the "two-roads", see Jack Gray, "The two roads: alternative strategies of social change and economic growth in China", in Stuart Schram (ed.), Authority Participation and Cultural Change in China, Cambridge: University Press; 1973, pp. 109-157.
22. Hsuan, op. cit.; also see Hung Kwang-yu, "Concerning the class struggle in the realm of ideology", Red Flag, No. 1, 1974, p. 15.
23. Wu Han Pi Pan Chuan Chi (Criticisms on Wu Han), Hong Kong: O. K. Agency; 1970. Also, Hou Yu-fu, "Not permit Teng To to vilify the people's commune", Ching-chi Yen-chiu (Economic Research), No. 5, 1966, trans. in SCMM, No. 555, pp. 1-3.
24. Hsueh Mu-chiao, Chi-hua Ching-chi yu Chia-chih Kuei-lu (Planned Economy and the Law of Value), Peking: Chinese Youth; 1957.

25. History Department, The Chinese People's University, Ming Ching She Hui Ching Chi Hsiang Tai Ti Yen Chiu (Studies on the Stages of Economic Development in Ming and Ching Societies), Shanghai: People's Press; 1957, especially pp. 1-5.

26. Tsai Mei-piao, "Commenting on some questions arising from the discussions on the history of Chinese peasant wars", Li-shih Yen-chiu (Historical research), No. 4, 1961. Also see, Wu Tien-ying, "Two points at issue arising from discussions on the question of peasant war", Hsi Chien-she (New Reconstruction), Nos. 1-2, trans. in SCMM, No. 552, pp. 25-41.

27. Chien Po-tsan, Hsueh Shuo Lun Chu Chi (Essays by Chien Po-tsan), Hong Kong: O. K. Agency; 1968.

28. Lu Jih, "Lun Kuan Chiao Ching Yuang" (On Indirect Experience), Kuang Ming Daily, Jan. 12, 1962, p. 4.

29. Mao Tse-tung, Selected Works, Peking: foreign Language Press; 1965, Vol. III, pp. 17-26.

30. Revolutionary Committee, Tsinghua University, and Revolutionary Committee, Peking University, "Sustain and develop the results of educational revolution in universities", Red Flag, No. 1, pp. 53-8.

31. L. S. Feuer (ed.), Basic Writings, New York: Anchor Books; 1959, p. 245.

32. For the re-definition of science in USSR, see G. Fischer, Science and Ideology in Soviet Union, New York: Atherton Press; 1967, p. 7.

33. Mao, Selected Readings, op. cit., pp. 78-9.

34. Ibid., p. 502.

35. Mao Tse-tung, Selected Military Readings, Peking: Foreign Language Press; 1966, pp. 84-5.

36. Mao, Selected Readings, op. cit., p. 67.

37. Ibid., p. 503.

38. Schram, op. cit., pp. 212-4.

39. Hsueh Hsi Tsung Shu (Collection for Learning), Hong Kong: Joint Publishing Co.; 1971, pp. iii-iv.

40. Mao, Selected Readings, op. cit., p. 503.

41. Ibid., pp. 77-9.
42. Ibid., p. 78.
43. For a brief summary of the debate, see Chan Peng, "The situation on the discussion of the question of the criterion of practice", Red Flag, No. 10, 1964, trans. in SCMM, No. 422, pp. 32-4; also
Ho, "We cannot deal with the criterion of practice isolated from the historical viewpoint", Hsin Chien-she, Nov., 1962;
Ho, "On the relationship between relative truth and absolute truth", Wen-hui Pao; Aug. 6, 1963;
Ho, "More on the question of the criterion of practice in the study of natural science", Red Flag, No. 10, 1964, trans in SCMM, No. 422, pp. 41-51;
Lin, "A tentative discussion on the dialectic character of the criterion of practice", Hsin Chien-she, Nov. 1-2, 1966, trans. in SCMM, No. 546, pp. 25-35;
Tu and Wu, "On the understanding and application of the criterion of practice", Hsueh-shu Yen-chiu (Academic Research), No. 4, 1962;
Tu and Wu, "The question of the correct application of the historical viewpoint in the exposition of truth", Hsueh-shu Yen-chiu, No. 3, 1963;
Tu and Wu, "Practice is the sole objective criterion of truth test", Red Flag, No. 10, 1964, trans. in SCMM, No. 422, pp. 35-40;
Tao, "Some questions relating to absolute truth and relative truth", Hsin Chien-she, Oct., 1963.
44. Tu and Wu, "Practice is the sole objective criterion of truth test", trans. in SCMM, No. 422, pp. 35-40.
45. "Pick-up" utilization means cases in which an agency realizes that a specific already published finding can be immediately used for a practical purpose. Paul F. Lazarsfeld, "The map of utilization", (mimeograph) 1973, p. 12.
46. Mao Tse-tung, Selected Works, op. cit., Vol. III, p. 13.
47. Ibid.
48. Ibid., p. 117.
49. Ibid.

50. Ibid., p. 118.
51. "Prior to World War II, fieldwork (participant observation, informant interviewing and use of available records) dominated social research," says Sam D. Sieber in his "The integration of fieldwork and survey methods", American Journal of Sociology, Vol. 78, No. 6, p. 1335. Also
Morton H. Fried, "China", in J. S. Roucek (ed.), Contemporary Sociology, New York: Philosophical Library; 1958, pp. 996-1002.
52. Wu Ching-chao, "Is there a place for sociology in new China?" Hsin Chien-she (New Reconstruction), Jan., 1957.
53. Mao, Selected Works, op. cit., Vol III, p. 12.
54. Paul F. Lazarsfeld, Sewell and Wilensky (eds.), The Use of Sociology, New York: Basic Books; 1967, pp. ix-xxxiii.
55. Douglas McDonald and Paul F. Lazarsfeld, "The organization of applied social research: an outline", New York: Bureau of Applied Social Research, Columbia University; 1972.
56. William H. Form, "The sociology of social research", in Richard O'Toole (ed.), The Organization, Management and Tactics of Social Research, Cambridge, Mass.: Schenkman Publishing Co.: 1971, pp. 3-42.
57. Ibid., pp. 5-7.
58. For an illustrative example, see Carol H. Weiss, The Consequences of the Study of Federal Student Loan Program, New York: Bureau of Applied Social Research, Columbia University; 1970.
59. Franz Schurmann, Ideology and Organization in Communist China, New Enlarged Ed., Berkeley, Calif.; University of Calif. Press; 1970, pp. 532-575.
60. Ibid.
61. Jiirgen Domes, "The role of Military in the formation of revolutionary committees: 1967-68", China Quarterly, No. 44, (1970), pp. 112-145. For a structural analysis of the role of the military in the Cultural Revolution, see Harvey Nelsen, "Military forces in the Cultural Revolution", China Quarterly, No. 51, (1972), pp. 444-474.
62. Form, op. cit., p. 6.
63. Ibid.

64. Internal Service (ed.), Simplified Handbook of the Administrative Areas of the People's Republic of China, Peking: Atlas Press; 1965, p. 1.
65. China Reconstructs, Vol. XXII, No. 11, (1973), p. 2.
66. At the end of 1958, when there were 26,000 communes in China, the average size was 22,000, see The State Statistical Bureau, Ten Great Years, Peking: Foreign Language Press: 1960, p. 43. After fifteen years' re-organization, the present size of an average commune is about half the original size. For the reasons for re-organization, see A. L. Strong, The Rise of the Chinese People's Communes-and Six Years After, Peking: New World Press; 1964, p. 218.
67. Mao, Selected Works, op. cit., Vol. III, pp. 11-3.
68. Neil J. Smelser, Social Change in the Industrial Revolution, Chicago: University of Chicago Press; 1959.
T. Parsons, "A paradigm for the analysis of social systems and change", in N. J. Demerath and R. A. Peterson (eds.), System, Change, and Conflict, New York: The Free Press; 1967, pp. 205-8.
S. N. Eisenstadt, Social Differentiation and Stratification, Glenview, Ill.: Scott, Foreman and Co ; 1971, pp. 1-23.
69. McDonald and Lazarsfeld, op. cit.
70. People's Daily, Oct. 26, 1968, p. 1.
71. Roderick MacFarquher, "A visit to the Chinese press", China Quarterly, No. 53, (1973), pp. 144-152.
72. Michel Oksenberg (ed.), China's Developmental Experience, New York: Praeger; 1973.
Schram, (ed.), Authority Participation, op. cit.
73. NCNA, "China's hospital and health network", SCMP, No. 3309, pp. 16-7.
74. Ibid.
75. Victor W. Sidel, "Medicine and public health", in Oksenberg, op. cit., p. 116.
76. The State Statistical Bureau, Ten Great Years, op. cit., p. 196.
77. Red Flag, No. 33, 1968, trans. in SCMM, No. 628, pp. 3-10.
78. Ibid.

79. People's Daily, Dec. 21, 1969, p. 2.
80. People's Daily, Jan. 11, 1969, p. 1, trans. in SCMM, No. 642, pp. 27-33.
81. People's Daily, Jan. 18, 1969, p. 4, and People's Daily, Mar. 17, 1969, p. 4, among others.
82. Sidel, op. cit.
83. Kuang Ming Daily, Nov. 8, 1973, p. 3.
84. For the Maoist definition of the concept "class", see Tsutomu Nakanishi, The Chinese Revolution and Mao Tse-tung Thought, Tokyo: Aoki Shoten; 1969, trans. in Chinese Law and Government, Vol. IV, Nos. 1-2, (1971)
85. The Weberian viewpoint of the relationship between the leader and the masses in regard to institution-building is essentially a symbolic one, see S. N. Eisenstadt, Max Weber on Charisma and Institution-building, Chicago: The University of Chicago Press; 1968, Introduction. This view of the indirect and psychological communication between leader and the followers is just the opposite to Mao's idea which emphasizes direct, face-to-face communication. See Richard M. Pfeffer, "Leaders and masses", in Oksenberg, op. cit., pp. 157-174.
86. People's Daily, Dec. 8, 1968, p. 3.
87. People's Daily, Nov. 16, 1968, p. 3, trans. in SCMP, No. 4323, pp. 10-2.
88. People's Daily, Jan. 6, 1969, p. 1; People's Daily, Jul. 10, 1969, p. 3; and People's Daily, Feb. 6, 1969, p. 2.
89. People's Daily, Dec. 2, 1968, p. 3.
90. Kuang Ming Daily, Nov. 19, 1968, p. 1.
91. Red Flag, No. 5, 1968, trans. in SCMM, No. 638, pp. 15-9, and People's Daily, Oct. 28, 1968, p. 1.
92. People's Daily, Jan. 20, 1969, p. 3; People's Daily, Oct. 31, 1968, p. 2; and People's Daily, Oct. 28, 1968, p. 1.
93. Red Flag, No. 5, 1968, trans. in SCMM, No. 638, pp. 15-9; and People's Daily, Oct. 28, 1968, p. 1.
94. People's Daily, Oct. 18, 1968, p. 1; People's Daily, June 18, 1969, p. 3.

95. Kuang Ming Daily, Sept. 2, 1968, trans. in SCMP, No. 4269, pp. 3-11.
96. People's Daily, Oct. 18, 1968, p. 1.
97. People's Daily, Dec. 9, 1968, p. 3.
98. Chinese Youth, Lun Yu Hung Yu Chuan (On Redness and Expertise), Peking: Chung Kuo Ching Nien Press; 1958, p. 117.
99. People's Daily, Sept. 16, 1968, p. 2.
100. People's Daily, Oct. 28, 1968, p. 1.
101. People's Daily, Nov. 10, 1968, p. 3.
102. Jerome Ch'en, Mao Papers, London: Oxford University Press; 1970, p. 23, quoted in Krisha Prakash Gupta, "Society as a factory: Maoist approach to social sciences", China Report, May-June, 1972, p. 38.
103. People's Daily, Nov. 4, 1970, p. 2.
104. People's Daily, Mar. 19, 1970, p. 2.
105. People's Daily, Sept. 21, 1968, p. 2.
106. People's Daily, Sept. 24, 1968, p. 1.
107. People's Daily, Sept. 21, 1968, p. 2.
108. People's Daily, Jan. 9, 1969, p. 2.
109. People's Daily, Nov. 24, 1968, p. 1.
110. People's Daily, Nov. 4, 1970, p. 3.
111. People's Daily, Oct. 30, 1969, p. 4.
112. People's Daily, Jan. 19, 1969, p. 2.
113. People's Daily, Dec. 22, 1971, p. 3.
114. People's Daily, Mar. 23, 1969, p. 4.
115. People's Daily, Mar. 21, 1970, p. 4.
116. People's Daily, Oct. 24, 1968, p. 1.
117. People's Daily, Oct. 25, 1968, p. 1.
118. People's Daily, Oct. 26, 1968, p. 1.
119. Wen-hsueh P'ing-lun (Literary Review), No. 1, Feb. 28, 1966, trans. in SCMM, No. 556, pp. 28-37.
120. Ibid., p. 29.
121. Ibid., p. 32.
122. Emile Durkheim, The Division of Labor in Society, New York: The Free Press; 1964, pp. 44-68.

123. For a historical review of the critics of the social consequences of division of labor in society in particular and modern industry in general, see Reinhard Dendix, "Tradition and modernity reconsidered", in Comparative Studies in Society and History, Vol. IX, No. 3, (1967), pp. 294-313.

124. Peter M. Blau and W. Richard Scott, Formal Organizations: A Comparative Approach, London: Routledge & Kegan Paul; 1963, p. 35.