

287025

JPRS 81722

8 September 1982

China Report

POLITICAL, SOCIOLOGICAL AND MILITARY AFFAIRS

No. 335

19981130 056

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

DTIC QUALITY INSPECTED 8

11
80
AG-3

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

8 September 1982

CHINA REPORT

POLITICAL, SOCIOLOGICAL AND MILITARY AFFAIRS

No. 335

CONTENTS

PEOPLE'S REPUBLIC OF CHINA

INTERNATIONAL AFFAIRS

- Discord In U.S.-Soviet Nuclear Disarmament Talks
(Zhang Zhiping; WEN HUI BAO, 5 Jun 82) 1

PARTY AND STATE

- Relations With Western European Communist Parties
(Chen Weibin; LIAOWANG [OBSERVATION POST], No 4, 1982) .. 4
- Beijing Review: People's War Concept Not Outdated
(BEIJING REVIEW, 2 Aug 82) 8

- Regional Commentary on Administrative Reform
(ZHEJIANG RIBAO, 7 May 82; HARBIN RIBAO, 12 May 82) 10

Restructuring of Leading Groups
Search for Qualified Leaders
Responsibilities of Local Cadres, by Zu Zhichu
Party Rectification Through Education, by Qian Xingmen

- Strengthening Shandong Party Organization
(DAZHONG RIBAO, 1 Jul 82) 19

Organizational Reconstruction
Strengthen Discipline

- Commune Experience in Strengthening Basic-Level Party
Organization Reported
(Li Zunli, et. al.; DAZHONG RIBAO, 2 Jul 82) 25

- Anti-Intellectual Feeling in a Factory Deplored
(Tao Hongguang; WEN HUI BAO, 19 Jun 82) 32

Commentary Urges Proper Treatment of Intellectuals (WEN HUI BAO, 19 Jun 82)	34
Shanghai Intellectuals Given Priority Attention (WEN HUI BAO, 25 Jun 82)	37
Use of Intellectuals Investigated, Promoted (WEN HUI BAO, 18 Jun 82)	39
Party Members Cautioned Against Bribery (SHANXI RIBAO, 13 Jun 82)	41
Class Struggle Reflection Among Masses Noted (Fan Jiyu; SHEHUI KEXUE (SOCIAL SCIENCES), No 6, 1982)..	43
A Reappraisal of Pattern of Qualitative Changes (Jin Guantao and Hua Guofan; ZHONGGUO SHENHUI KEXUE [SOCIAL SCIENCES IN CHINA], No 1, 1982)	50
TAIWAN	
Briefs	
Chiang Message to Uruguayan President	75

INTERNATIONAL AFFAIRS

DISCORD IN U.S.-SOVIET NUCLEAR DISARMAMENT TALKS

Shanghai WEN HUI BAO in Chinese 5 Jun 82 p 3

[Article by Zhang Zhiping [1728 3112 1627]: "Window on the World, No 64: International Affairs Roundup"]

[Text] Ever since the United States and the Soviet Union signed the SALT I agreement in 1972, the two superpowers have greatly expanded their nuclear weapon stores and the number of nuclear weapons has grown beyond count. At the same time, both sides have made alarming developments in strategic and tactical nuclear weapons. Some have already been deployed (such as the Soviet Union's SS-20 missile) and some will soon be deployed in Europe (such as the U.S. cruise missile and the Pershing I missile), which greatly increase the possibility of "limited nuclear war" and threaten the people of all nations, especially the people of Europe, who have experienced two world wars and who live with the nightmare of "nuclear horror."

Pressures

For the past year, all European nations have continually had large-scale anti-nuclear weapon mass demonstrations. This movement has now spread to the United States. According to reports, over 100 mass organizations with over 500,000 members will hold a large-scale anti-nuclear weapon march in New York on June 20th during the United Nations Second Disarmament Conference. It is worth noting that the US Congress and world of public opinion both have some people who express agreement with the Soviet Union's stance of "a freeze on nuclear weapons" and "no first use of nuclear weapons." Moreover, they promote a fresh congressional debate and another vote on the SALT II agreement, which Reagan has already vetoed. All of this puts pressure on Reagan. The Soviet Union now has taken the peace initiative, there are congressional elections this year and US--European relations daily grow more tense, so prior to this trip to four European capitals, Reagan must consider the new conditions in re-thinking US-Soviet Union relations, especially in terms of the issue of limitations on military preparations.

"Reductions"

On May 9th, Reagan spoke at his alma mater Eureka College and made some new and interesting remarks concerning foreign policy. He advocated immediate US-Soviet Union talks on strategic weapons reductions and moreover hoped that he could arrange a meeting with Brezhnev "as soon as possible." Western publications felt that the tone of Reagan's remarks was surprisingly "warm," he no longer mentioned Soviet Union international "restraint and withdrawals" as pre-conditions for meetings between heads of state and he also did not say that talks with the Soviet Union must be conducted from a position of strength.

Reagan's speech also had another change which caught people's attention--he changed the phrase "limitation" of strategic nuclear weapons to "reductions" of strategic nuclear weapons. Although this is only a change of one word the meaning differs greatly. Washington believes that the SALT II agreement "limited" only the US and favored the Soviet Union. So, what Carter approved of Reagan then rejected.

Reagan's case for reductions consisted of two sections and the goal is to reduce Soviet Union nuclear superiority to a level of general equality with that of the US. In the first stage both sides will reduce their land-based and sea-based ICBMs (the Soviet Union has 2,400 and the US has 1,700) to a level of 850, which is to say that the Soviet Union will reduce their number by 1,550 and the US by only 850. In warheads for land-based missiles, the Soviet Union has 5,500 and the US has 2,150. According to Reagan, both sides should reduce their missile warheads by one-third, which would retain about 5,000 of them. Moreover, the number of missile warheads could not exceed the number of land-based missiles by more than one-half, which would be 2,500. In this case, the Soviet Union would reduce its numbers by 3,000, while the US would have no reductions. In the second stage, the throw-weight of the missiles would be reduced to comparable levels. Because the Soviet Union has larger land-based missiles than the US, each missile can carry from 4 to 10 warheads, so there is a 3 to 1 superiority in throw-weight over the US. This would require the Soviet Union to make huge reductions.

Reagan of course would be unwilling to forgo US superiority in cruise missiles, strategic bombers and submarine-launched missiles.

"A Freeze"

On May 18th, Brezhnev made his response to Reagan's suggestions. On the one hand he criticized Reagan for plotting to achieve "one-sided superiority" and on the other hand he expressed a willingness to reopen strategic arms limitations talks. He moreover pointed out that when the talks started both sides should "freeze" their nuclear weapons stores.

No one was surprised at this Soviet Union maneuver regarding the talks. Last year in October, prior to the Geneva talks on limiting mid-range nuclear weapons, Brezhnev made a suggestion to "temporarily halt" the deployment of mid-range nuclear missiles in Europe. It was later revealed that the so-called "temporary halt" allowed the Soviet Union to leagalize the deployment of 300 SS-20 missiles (carrying altogether 900 warheads), and at the same time prevented the NATO nations from starting the 1983 deployment in Western Europe of 572 US cruise missiles and (Panxing) I missiles, thus tying the hands of the NATO nations when they are faced with the threat of powerful Soviet Union nuclear weapons in the battle zone. This time, before the talks on reducing strategic nuclear weapons had started Brezhnev quickly played his old tune, and with the same goal: the Soviet Union already has nuclear superiority in land-based missiles, so they can only "freeze" and cannot reduce their number.

Because of requirements in the domestic politics and foreign relations of both the US and the Soviet Union, the new round of talks on limiting nuclear weapons starts in Geneva on June 29th. However, these will be long and difficult talks and the outcome of these talks will be no better than the ongoing ones on limiting mid-range nuclear weapons. Perhaps the talks will not be as prolonged as the disarmament talks between China and Europe (over eight years already), but the barganing on both sides will probable be fiercer than in any previous arms limitations talks. Western observers correctly pointed out that both sides are battling for nuclear superiority and the contest will not be limited to the conference table. The nuclear arms race between the two superpowers can only be accelerated by the discordant accompanymment of the nuclear arms talks.

11582
CSO: 4005/1013

PARTY AND STATE

RELATIONS WITH WESTERN EUROPEAN COMMUNIST PARTIES

Beijing LIAOWANG [OBSERVATION POST] in Chinese No 4, 1982 p 36

[Article by Chen Weibin [7115 4850 2430]: "Reestablishment and Development of Relations between China and Several Western European Communist Parties"]

[Text] During the last 2 years, the successive resumption and improvements of party relations between the CPC and the communist parties of several Western European countries have attracted the attention and interest of the international community. Of course this has also discomforted those who vaunt themselves as the "leading party" and as the "center of the communist movement."

Here is a brief summary of the most important events.

--April 1980: Berlinguer, the general secretary of the Italian Communist Party, led an Italian Communist Party delegation on a visit to China, and restored relations between the Italian and the Chinese Parties.

In November 1980, Carrillo, general secretary of the Communist Party of Spain, led a Communist Party of Spain delegation on a visit to China, and restored relations between the Spanish and the Chinese Parties.

In November 1980, Dhrakopoulos, secretary general of the Communist Party of Greece-Interior [KKE (int)] led a delegation on a visit to China, restoring relations between the two parties.

In July 1981, Peng Zhen, member of the Politburo and of the Secretariat of the CPC Central Committee, led a CPC delegation in return visits to both the Italian Communist Party and the Communist Party of Spain.

In March 1982, Gremetz, member of the Politburo and of the Secretariat of the Central Committee of the French Communist Party, led a delegation of the French Communist Party on a visit to China. Preparations were made for a formal restoration of relations between the French and Chinese Parties. The CPC Central Committee invited George Marchais, general secretary of the French Communist Party, to visit China at a time convenient to him.

In March 1982, Joop Wolff, member of the Executive Committee of the Central Committee of the Communist Party of the Netherlands, visited China and had an exchange of views with leading comrades of the CPC concerning the question of

further advancing the relations between the Dutch and Chinese Parties. The CPC Central Committee invited Henk Hoekstra, chairman of the Central Committee of the Communist Party of the Netherlands, to visit China at a time convenient to him.

It can be seen from this summary list that the trend is developing further.

During the 60's there were disagreements and quarrels between the CPC and the communist parties of several Western European countries concerning various problems. Party relations were broken off for a time. What approach should be taken towards this unpleasant period of history?

Deng Xiaoping, vice-chairman of the Central Committee of the CPC, has said, "In the past CPC has quarreled with the Italian Communist Party. It looks as though the Chinese comrades had some erroneous views, but the Italian comrades can't be said to have been entirely correct either. Let's let these bygone quarrels be bygones."

Shortly, before his visit to China, Carrillo, general secretary of the Spanish Communist Party, said: "Normal relations were disturbed because both parties made mistakes. The Chinese party made mistakes, and the Spanish party also made mistakes." Now, neither we nor the communist parties of these Western European countries are going to get tangled up in things that happened in the past. We now stand together again, facing the future.

What are the common grounds that enable the Chinese party to shake hands anew with parties with which we had quarrels in the past? Here let us again cite a few comments.

Deng Xiaoping: "Relations between parties should be equal, comradely relations; they should not be 'father and son' relations. The affairs of any country can only be assessed by the Marxist-Leninists, the communists, of that country. They themselves should correct the mistakes which they make. No one should regard his own views and experiences as a 'model' to be imposed on others."

Hu Yaobang: The Chinese and Italian parties "are determined to strictly and scrupulously abide by the fundamental principles of absolute equality, independence and self-government, and mutual respect, in relations between the two parties. "

Berlinguer: "The basis for the reestablishment of relations between the parties (of Italy and China) is respect for the self-governance and independence of both parties, and respect for the respective standpoints of both parties: frank discussion of differences of opinion and disagreements between the two parties, and the search for even better understanding, and for all possibilities of cooperation." The Italian Communist Party "rejects the kind of viewpoint that claims that there can only be one universally applicable model for the transition to socialism."

Carrillo: "Each party should walk on its own two legs, use its own brain to think problems, and oppose the imposition by any party of its own viewpoint on other parties. " "There are more points of agreement than disagreement between

our Spanish and Chinese parties. Our two parties must restore and develop our traditionally friendly relations on the basis of fraternal frankness and mutual respect."

Marchais: "There is no 'model' for building socialism, nor is there a 'model' for policies from one party to another. At the present time there is no world 'center' for the international communist movement, nor are there any regional 'centers'. The communist parties of all nations determine (their own) policies independently.

The Communist Party of Greece-Interior [KKE (int)] after the formal restoration of relations with the CCP, made a statement: "The Communist Party of Greece-Interior [KKE (int)] and the CCP have restored relations between the two parties in accordance with the principles of equality and autonomy, mutual respect, non-interference in internal affairs, and opposition to leading parties. These principles are the only possible basis for the development of friendly cooperation among communist parties and workers' parties in the present era."

If we sum up the above comments, we can in general describe the common basis for the restoration and development of relations between the CPC and the Western European communist parties as follows: relations between the CPC and the Western European communist parties as follows: relations between parties must adhere to the principles of independence and self-governance, absolute equality, and mutual respect. The existence of "leading parties" or "centers" in the international communist movement is resolutely opposed. Interference in the internal affairs of the parties of other countries is opposed. The imposition by any part of its will upon others is opposed. In the combining of the universal truths of Marxism-Leninism with the concrete situation in each country, it is maintained that the party of each country ought to be permitted to seek its own road to the goal of socialism in accordance with its own concrete situation, while the imposition of the model of any country as the sole model upon others is opposed. Since the concrete situation in each country is different, and the experiences and environment in which the party of each country finds itself are different, it is normal that they should have different views on some issues, and adopt different measures, and it is through the exchange of views, rather than libeling and putting labels on others, that inquiry and consultation can take place, while leaving judgement to history and practice.

The common ground between China and the communist parties of the Western European countries is not limited to these points. However, on this common basis we can look forward to a healthy development of inter-party relations. Of course, this does not imply that all problems will be viewed and understood in the same way, but this need not interfere with the normal development of inter-party relations. As Comrade Hu Yaobang has said, "When there are divergences and differences in our understanding of certain problems, this can only stimulate us to enlighten one another, to inquire of one another, and to seek mutual progress and improvement on the basis of Marxism, through continuous praxis and testing.

The CPC and the communist parties of the Western European countries are working together to further the resumption and development of party relations, on the basis of the principles of independence and self-governance, mutual respect, and seeking common ground while reserving differences. This is in accordance with the interests of the Chinese people and the peoples of Western Europe, and it also accords with the interests of the international communist movement.

12187

CSO: 4005/1031

PARTY AND STATE

BEIJING REVIEW: PEOPLE'S WAR CONCEPT NOT OUTDATED

HK061054 Beijing BEIJING REVIEW in English No 31, 2 Aug 82 p 3

["Notes from the Editors" by Special Editor Guo Fang]

[Text] China is striving to modernize its national defence to cope with a possible modern war in the future. Can we say that the concept of people's war is outdated?

In my opinion, any modern war that could confront China in the future would be the same in some fundamental respects as the anti-aggression wars or revolutionary civil wars China fought in the past. Therefore, it cannot be assumed that the concept of people's war is outdated.

For a long time to come, our weapons may remain inferior to the enemy's in a future war. China is modernizing its national defence in order to defend itself against foreign invaders and safeguard world peace. But no matter how sophisticated our armaments become, the Chinese Army will never seize a single square inch of foreign territory. What we will face is a war of aggression by the hegemonists, in which our army will fight a better equipped enemy. But it will be fought under China's actual conditions. The strategies and tactics of using a weaker force to overcome a stronger force, which we have created for a people's war in the last half century, are for the most part still suitable today. It is still fundamentally true that it is men, not materials, that decide the outcome of a war. If a war breaks out, we will mobilize the masses of people to swamp the enemy in the ocean of a people's war. It goes without saying, though, that the concept of people's war should be enriched under modern conditions and that many new issues different from a people's war in the past should be earnestly studied and new ways and means to tackle them should be probed.

Our army was and still is a people's army. In China, the building of a modernized military force and the implementation of the people's war concept complement each other. Having switched the emphasis of work on to the modernization drive, the Chinese People's Liberation Army still attaches great importance to carrying forward its fine traditions and to serving the people wholeheartedly. The army loves the people and the people trust the army. This factor and the close unity between the army and the government remain the fundamental conditions for defeating the enemy under modern conditions.

The three-in-one military system that combines the field armies, local forces and the militia, which was so effective in past wars, will be adhered to in the future. For example, the weak points of an enemy fighting an unjust war will inevitably manifest themselves no matter how powerful and well-equipped it is. We will carry out various forms of guerrilla warfare and attack the enemy's rear areas, destroying its communications and transportation facilities (including oil pipelines), cut off its supplies, harass its forces, tie them down and wear the enemy out, thereby coordinating with the actions of our main forces.

Certain military principles, which proved effective in the past, will not entirely meet the needs of a modern war. These include the principles that "our army's main sources of manpower and material are at the front" and that the army is at the same time a fighting force, a work force and a production force.

All in all, Mao Zedong's military thinking, including the concept of people's war, will remain the guideline for the PLA in its future construction and combats. The fundamental theories and most of the principles he set forth will be upheld and will at the same time be enriched and developed in accordance with the needs of a modern war. Mao Zedong's military thinking will thus be developed.

CSO: 4000/178

PARTY AND STATE

REGIONAL COMMENTARY ON ADMINISTRATIVE REFORM

Restructuring of Leading Groups

Hangzhou ZHEJIANG RIBAO in Chinese 7 May 82 p 1

[Article "Cadre Expertise"]

[Text] Sheng County has successfully established leasing groups in industrial and communications enterprises based on the criteria of having revolutionary, younger, better educated and more specialized cadres. They have upheld following the mass line and have boldly promoted middle aged and young cadres who have solid political character and specialized knowledge. They have taken preliminary steps toward restructuring leading groups that have older cadres with low levels of education and too few specialized personnel. In just over a year, 35 county enterprises under the County Economic Commission have rearranged 100 plant level leading members. Of these, 45 percent are newly promoted middle aged and young cadres with specialized knowledge.

This country's industrial and communications enterprises restructured and established leading groups on the basis of what information was revealed, on criticisms that have been made and on investigations. The majority were found to be from fair to excellent. However, commonly existing problems such as averaged and undereducated cadres plus the lack of specialized personnel caused these groups to be unable to meet the needs of the establishment of the four modernizations. In order to ensure that the leading groups in industrial and mining enterprises gradually become more revolutionary, younger, better educated and more specialized, the county first of all adopted the methods of presenting the facts and reasoning things out. They eradicated the three "Incantations of the Golden Hoop," that is that "young cadres are ill at ease, technical cadres are not content and nonparty personnel have no faith." They established correct standpoints for choosing people for jobs and opened up the way for seeking qualified people.

While launching work in restructuring and establishing leading groups, Sheng County ran into the problem of the cadre management system. The

industrial department responsible for production had no control over cadres, and the Organization Department that supervised cadres had no control over production. Although the Office for Industry and Communications and the Industry Bureau both have personnel cadres, the Industry Bureau only supervises staff and workers, not cadres. The Office of Industry and Communications supervises cadres but it does not have the authority to appoint and dismiss cadres, rendering them largely ineffectual. Sometimes, because of the differing views of the Industrial Management Department and the Organization Department, basic level plants and mines report to one cadre so that it can take from 6 months to a year to receive comments. The lack of coordination of rights and responsibilities in this cadre management system has seriously affected the establishment of leading groups in industrial and communications enterprises. In confronting this situation, Sheng County clearly set down that decentralized management be implemented for cadres. In addition to the secretaries in the party committee system in major plants and certain key enterprises run by county plants and mines and factory directors appointed and supervised by the county CCP committee, the Economic Commission has the right to investigate, reassign and dismiss other cadres. Once their duties were defined, the Economic Commission worked closely with the Organization Department and faithfully improved their work in investigating and reassigning basic level leading groups. All cadres supervised and appointed by the county CCP committee put the Organization Department of the county CCP committee first and worked with the Economic Commission to conduct investigations. All cadres supervised by the Economic Commission put the Economic Commission first and worked with the Organization Department to conduct investigations. This kind of coordination and concerted effort has facilitated unity of thinking and accelerated progress in work. At present, among the 35 enterprises run by the Economic Commission, there are 19 units in which leading groups are basically well put together and for the most part are able to meet the demands of production. They constitute 54.26 percent of the total number of enterprises. The major key core of personnel was well chosen but understaffed. Eight enterprises, or 22.86 percent, are still incomplete. At the same time, the county also handed over the management of level one cadres in plants, mines, workshops and classrooms who were originally under the uniform administration of the county to enterprises. In the last year or so, 9 enterprises in the party committee system run by the Economic Commission appointed 162 mid-level cadres. This has played a significant role in arousing the enthusiasm of enterprises and strengthening the establishment of the basic level.

As for cadres' origins, Sheng County upheld having one's eyes looking inward and following the mass line. They have promoted cadres with both ability and political integrity to leading positions. In the past, the restructuring of leading groups often only involved shuttling and transferring certain familiar veteran cadres, or reassigning from upper levels to external units. The result was that no qualified personnel were discovered and problems could not

be resolved. They broke with tradition and supported developing a democratic style. They turned over the requirements for selecting cadres to the masses and mobilized the masses to select the worthy and appoint the capable. They combined the recommendations of the masses, the investigations of organizations and the examination and approval of the party committee. Furthermore, they adopted different methods in accordance with the differing circumstances in each enterprise. They strengthened unity in leading groups and in units in which there was a fairly solid base of staff and workers. They also implemented democratic leadership elections. Among the enterprises run by the Economic Commission, there were 19 units in which leading members of the party committee and the party branch were elected through the democratic process. In some plants, plant level leaders were democratically recommended by the congress of delegates of staff and workers. The conference of key leaders, the staff and workers congress and the all-plant staff and workers congress conducted a public opinion poll of units in which work was relatively normal and in which there was little factionalism among the staff and workers. At present 12 units have already adopted this method and have discovered and elected 14 cadres of whom 11 are middle aged and young cadres. Leading groups that were in poor shape and units in which there were great obstacles to electing personnel were each visited, discussed and investigated. All sides were listened to and comparisons made. Afterward, they carefully considered what decisions should be made. As for the election of cadres, most gave primary consideration to their own units and picked out outstanding middle aged and young cadres who had solid mass support, integrity and political ability as well as certain specialized knowledge to assume positions of leadership. Among newly promoted plant level leading members, there were only 11 who were provincial or county level advanced production workers. In restructuring groups, the county also broke through the cadre's problem of restrictions of the system of ownership. For example, enterprises in the Second Light Industries System originally had a poor base. They reassigned 11 cadres from units of all the people to assume leading positions.

Sheng County still pays much attention to the training and discipline of new cadres as well as going all out to employ them so that they can enhance their abilities through actual experience. They place those who are being trained in specific posts and train them through actual work. Those who do well are further entrusted with important tasks.

Search for Qualified Leaders

Hangzhou ZHEJIANG RIBAO in Chinese 7 May 82 p 1

[Article: "Commentary on Cadre Expertise"]

[Text] Establishing leading groups in industrial and mining enterprises according to the demand for revolutionary, younger, better educated and more

specialized members is an important task in successfully carrying out the establishment of the four modernizations. It is also an objective requirement for changing the circumstances of leading groups that have overaged, under-educated members and too few specialized personnel. How can progress in this job be accelerated? The experiences of Sheng County indicate that only if we cultivate new views on choosing people for jobs can we open up the way for seeking qualified people.

At present, the progress on establishing leading groups in industrial and mining enterprises based on the requirements of the four modernizations for cadres has not been very rapid. One important reason for this is that some comrades under the ideological influence of the "Left" have many mistaken ideas about selecting cadres. In a nutshell, it is simply that young cadres are ill at ease, technical cadres are not content and nonparty personnel have no faith. If these views are not eradicated, the establishment of fine leading groups will remain idle talk. At present we are in a new period of rapidly changing scientific technology. We are also engaged in modernized construction, and enterprises are once again in the forefront of production. Under such circumstances, if we don't place capable men who are in their prime and have certain levels of scientific and technical skills in leading groups it will be very difficult to follow the requirements of modernized construction and set up enterprises with fairly high standards of administration, technology and production. In our enterprises there are many cadres who are young, vigorous and skilled and who combine both ability and political integrity. We also have many skilled technicians. Among them there are those who are fully qualified to be selected for leading groups. The facts show that all enterprises that have established leading groups according to the demands of the four modernizations of cadres have the following several characteristics in common. The groups are united as one, full of vigor and vitality, they dare to act and manage and they have high combat effectiveness. The cadre management system is as it should be, and problems in production, technology and administration have been correctly assessed and can be resolved. There has been a change in the spirit of staff and workers. They now have confidence in well-run enterprises, and they are more enthusiastic about the four modernizations of cadres. Production has developed fairly rapidly, and there have been good economic benefits. Consequently, anxieties, worries and doubts concerning problems in selecting cadres are groundless.

In order to successfully establish groups according to the requirements of the four modernizations of cadres, it is necessary to follow the mass line. In the past, restructuring groups primarily involved shuttling and transferring a few familiar veteran cadres. In this way it was impossible to discover qualified people. We must break through this old tradition, adopt democratic methods, hand over requirements for selecting cadres to the masses and encourage the people to select and appoint those who are qualified. This method of the mass line is the correct way to seek capable people. While selecting

qualified people, it is necessary to uphold the principle of seeking those with ability and political integrity. First of all we should look at their political character and investigate their behavior during the "Great Cultural Revolution," particularly their behavior since the Third Plenary Session of the 11th Party Central Committee. Those people who followed Lin Biao and Jiang Qing and became prominent through "rebelling," those who have factionalist ideas and those who robbed and looted as well as those who have serious economic problems are all ineligible to enter leading groups. While stressing ability we must also stress political integrity. They must have abundant specialized knowledge, practical experience and leadership ability. Only by upholding the principle of seeking both ability and political integrity can we correctly select cadres.

Responsibilities of Local Cadres

Harbin HARBIN RIBAO in Chinese 12 May 82 p 4

[Article by Zu Zhichu [4371 0037 0443]: "The Party Branch Is the Core of Leadership in Basic Units"]

[Text] According to provisions in the party constitution, basic level party branches are the link from the party to the broad masses. They are the political leadership in basic units and the core for uniting the masses. The party branch is the fighting bastion for implementing party lines, principles and policies, for fulfilling production tasks and for all work in other areas.

The basic task of the party branch is defined in article 8 of the draft of the party constitution. (For details see the Central Committee [1980] 29th document, p 28.) The basic spirit of the duties set forth in article 8 are: to uphold the four fundamental principles, to firmly focus on the establishment of a material civilization and a spiritual civilization, to successfully carry out ideological and political work among staff and workers, to engage in the establishment of party organizations, to implement party line, principles and policies, to continuously improve levels of production, technology and economic management in enterprises, to improve economic benefits and to ensure and supervise production construction and the completion of all tasks.

Provisions in the party constitution concerning the duties of basic level party organizations were proposed in accordance with the requirements and developments of history. They are not rigid and inflexible. The duties outlined in article 8 differ on many points from all previous provisions in the party constitution and they also have some new characteristics. One is that they are very direct. The serious consequences created by the "gang of four's" undermining the establishment of the party made clear the need for having strict party organization life, launching criticism, following the

four obediences, guaranteeing the inviolable rights of party members and other provisions. Second, it has the new characteristics of the new period. In the duties in article 3, in addition to stipulating that organization party members study Marxism, Mao Zedong Thought and basic party knowledge, it is also stipulated that organization party members study science, culture, labor technology and professional knowledge. Furthermore, it is set forth in the duties in article 4 that we "give full play to the initiative and creativity of party members and the masses, encourage and support professional and technological innovations and creations and strive to catch up to and surpass domestic and foreign advanced levels." Third, it stresses the fighting spirit of the party. It is also clearly set forth in the duties in article 8 that we "instruct party members and the people to heighten their revolutionary vigilance, resolutely do battle with the sabotage of class enemies and other criminal elements." What should we be on guard against? On the one hand we must guard against the sabotage and aggression of class enemies from abroad. On the other hand we must guard against the sabotage, disorder and the attack of "sugar-coated bullets" during times of peace by class enemies within China and other criminal elements. The struggle that we are currently engaged in to oppose the trend of bourgeois liberalization and to attack major crimes in the economic sphere is an important part of the class struggle being waged by our socialist society under new historical conditions in the economic sphere. This struggle has a bearing on the success or failure of China's modernized construction as well as on the rise and fall of our party and nation. This is the central task of the entire party for this year, and it is the central task of basic party organizations. We must guide party members and the masses to carry out this struggle through to the end.

Party Rectification Through Education

Harbin HARBIN RIBAO in Chinese 12 May 82 p 4

[Article by Qian Xingmen [6929 5281 7024] "CCP Members Must Preserve the Purity of Communism"]

[Text] At present, the task of rectifying the party by rectifying test units in our city has gradually shifted from the phase of launching ideas to the phase of carrying out systematic instruction of party members. Based on pilot experiences in consolidating the party we must ensure that the instruction of party members penetrates the entire process of consolidating the party, and we must successfully carry out the systematic instruction of party members within a concentrated period of time.

The understanding of the leadership must be clarified. On the one hand it is necessary to recognize that systematic instruction involves the majority of people, it is long-term and it will get to the root of the problem. It is a significant phase in rectifying the party. We must not do a superficial job

and just go through the motions, nor must we carelessly call off the battle or be impatient to move onto the next phase. While analyzing all aspects of the situation among the ranks of party members, we see that there are a certain number of party members who are not qualified or who do not have a suitable base. Even the political quality of party members who are qualified and whose base is up to standard shows a marked decline compared to before the "Great Cultural Revolution." Party rectification must start with study, paying attention to the fundamentals and upgrading the political quality of party members. On the other hand, it is necessary to clarify that other political instruction cannot replace instruction on the basic theories and basic knowledge of the party. The belief that "systematic instruction is the same old stuff, even without study we know it all" is incorrect. Certain party members who are not up to standard have discarded the fine traditions of the party. Each leading comrade must focus on this key phase and concentrate their efforts on the systematic instruction of party members.

The content matter of instruction must be systematic. Recently the provincial CCP committee instructed that regardless of whether we are engaged in rectification of one particular aspect or in overall rectification, it must still be based on instruction. It is necessary to broadly launch three educational movements. One is to begin with study of modern history and the history of the party. It includes instruction on the "three loves," that is, love of country, love of socialism and love of party. The second is to use the comparative method of settling accounts and to conduct instruction on the economic situation. The third is to thoroughly study the "Party Constitution (revised version)," "Guiding Principles," the "Historical Resolution" and the "Decision." We must contrast, examine, compare and assess them. It also includes giving instruction on party character, party style and party discipline. Those involved in rectifying test units should take the lead in arranging their time to conscientiously engage in these three areas of instruction according to the demands of the provincial CCP committee. At the same time, in light of the widespread nature of problems among party members it is also necessary to carry out instruction of the ideals of communism among party members in a planned and organized manner. We must all strive to do this job well. We must carry out instruction on the aims of the party and consciously act as the public servants of the masses by serving the people wholeheartedly. We must carry out instruction on the principles of party organization, uphold the "four obediences" and strengthen organizational discipline. In addition, it is necessary to give instruction on standards for party members, to resolve the problems of relaxed requirements and of mixing with the ordinary people and to support advanced elements in the working class. It is necessary to give instruction on party policies and to consciously implement party line, principles and policies to preserve political unity with the Party Central Committee.

Instruction methods must be flexible. Qualified units may adopt the method of releasing members from work to train in rotation. During concentrated periods of time they may go to class and hold discussions together and then divide up to engage in systematic study. In units where it is difficult to train released workers in rotation, the method of studying for half a day may be adopted. Within a fairly concentrated period of time they may go to class and have discussions, while systematically studying basic theories and basic knowledge of the party. In units where party members are relatively dispersed, the method of splitting up into groups and suiting instruction to the individual may be used. They must guarantee teaching and learning and teach and learn from each other. They must start with instruction in basic knowledge to upgrade the political quality of party members. Whatever method of instruction is employed, sufficient time must be set aside. Based on the pilot experiences of various areas in party rectification, the phase of systematic instruction of party members should take up one-half or one-third of the total time spent on party rectification. At the same time, it is also necessary to adopt various flexible methods such as visiting the hall of revolutionary martyrs, dissecting major examples, explaining the pros and cons of typical cases by using one's own experiences, launching discussions on special topics, setting up spare time study groups, etc. This will create a good atmosphere for learning. In particular, it is necessary to promote self-study among party members. In addition to focusing their studies and discussing the "Party Constitution (revised version)," "Guiding Principles," the "Historical Resolution," the "Decision" and other basic teaching materials, it is also necessary to organize party members to study on their own Chairman Mao's theory on the establishment of the party, Comrade Liu Shaoqi's "On the Cultivation of a Communist," Comrade Deng Xiaoping's "On Party Style," Comrade Chen Yun's "Stress Truth, Not Face" and other articles. While engaging in study and discussion it is necessary to stress saying what is on one's mind, discussing views, clearly defining problems and guiding party members to solve their problems on their own. We must give necessary guidance, integrate ideology and practice while responding to questions posed by party members. The leadership must take the initiative and they must lead the others to follow in their footsteps. We must understand policies, support the doctrine of the "three don'ts" and give full play to democracy within the party while consciously launching criticism and self-criticism.

At present the struggle to attack serious crimes in the economic sphere is one of the major tasks of our party for this year and in the long run. The Central Committee calls on us to "concentrate on dealing with major important cases and to emphasize rectifying party organizations and the work style of cadres in addition to tightening up all areas of administrative systems." This struggle to oppose corruption and degeneration is the most practical and effective way to rectify the party. Consequently, when rectifying pilot units, we must take advantage of this opportune moment to use the "Decision" of the Central Committee of the CCP as one of the significant teaching materials for

instructing party members. We must truly include the struggle to attack serious crimes in the economic sphere among the major tasks in rectifying the party. Furthermore, we must also give thorough and widespread instruction to CCP members on preserving the purity of communism and opposing corruption and deterioration. The basic aim of our party is to instruct each party member to faithfully fulfill his solemn oath taken upon admission to the party and to always remember to serve the people wholeheartedly. Our party's ultimate objective is to always remember to practice the lofty ideals of communism and to fight a lifelong battle for communism.

9864

CSO: 4005/876

PARTY AND STATE

STRENGTHENING SHANDONG PARTY ORGANIZATION

Organizational Reconstruction

Jinan DAZHONG RIBAO in Chinese 1 Jul 82 p 1

[Text] Under the spiritual encouragement of the Sixth Plenary Session of the 11th CCP Central Committee, party organizations at all levels in our province are steadily strengthening their ideology, organization and work style. The party's fine tradition and work style are reassuring themselves and expanding, and the combat strength of its organization is being intensified further, energetically spurring into action the smooth implication of the four modernizations.

During the past year, party organizations at all levels in our province, based on arrangements of the central and provincial committees, and using the party's Sixth Plenary Session's "Resolution" as basic teaching material, have adopted various forms in carrying out the education and training in rotation to the great masses of party members, including enrollment in a party school, setting up of a training class for party members and "three meetings make one class." According to statistics, this province has trained more than 2.5 million party members, representing more than 80 percent of the entire party membership. Through this training, the great masses of party members and cadres have understood a further step in the direction of their advance, intensified their self-awareness in implementing the party's line, principles and policies. Through this training, party members and cadres in the rural areas have overcome all kinds of muddled views on the system of fixed responsibility in agricultural production, understood the socialist nature of the system of fixed responsibility in production, drawn a clear line between certain rights and wrongs, understood that the system of responsibility is not a matter of expediency; that members' undertaking of an obligation field is not "land in repayment of home"; that doing business by separate households is not "going it alone in land distribution"; that encouraging some people to become rich does not mean we do not want common prosperity; that livening up economy does not mean we do not want national uniform plans; that relaxing our policy does not mean tolerating evil gangs and noxious paths; and that doing things according to economic laws must not slacken ideological political work. We must do a better job at handling the relationship between state purchasing and distribution, and the relationship among national, collective and individual interests in order to steadily improve the system of responsibility and promote the development of agricultural production.

Party committees (organizations) at all levels are paying serious attention to their own reconstruction, and the overwhelming majority of the units can convene meetings on party committee (organization) life according to schedule. During such meetings, most of them can combine the various local actual conditions, earnestly sum up their experiences and lessons, launch criticism and self-criticism, thoroughly examine and carry out the party's line, principles and policies, overcome their loose and weak conditions, rectify bad discipline, safeguard the party's unity and solve other problems.

The Huimin Prefecture party committee, while implementing the party's agricultural policy concerning the readjustment of the ratio between foodstuff and cotton, has summed it up belatedly and decided to learn from the adjacent regions, concentrated on policy implementation and taken a big stride forward in readjusting the agricultural internal structure. The Juye County party committee, in its livelihood meeting, has set up four correctional measures to deal with existing problems: (1) to strengthen learning and enliven revolutionary spirit; (2) firmly to maintain principles, daring to uphold righteousness and dispel noxiousness; (3) firmly to uphold collective leadership which shall discuss and decide on major problems; and (4) to crisscross ideas and exchange views, strengthen solidarity, thereby improving the party committee's fighting power.

Fully to play up the role of a combat stronghold of basic-level party organizations and of a pioneering model of party members, the entire province continues in an extensive way to launch activities which would create progressive party branches and model party committees, and it has produced a large batch of progressive units and individuals. After evaluation and selection, the county committees and corresponding committees above the county level have granted the honorary name of "progressive branches" to 8,689 units and "model party members" to 46,497 individuals. Recipients of these honorary titles have been given due recognition in many forms by the party committees at all levels, which has been effective in encouraging the great masses of party members to brace up their spirit, work harder, set a pioneering example in constructing "two civilizations," improve the party-masses relationship and enhance the party's prestige.

Since last winter, prefectural, municipal and county party committees have combined their respective year-end work summing-up reports and, in the spirit of rectification, launched a general educational adjustment to basic-level party organizations. Since this spring, all prefectural and municipal party committees again, on the basis of the party Central Committee's relevant documents, have combined and improved the system of responsibility in agricultural production, overhauled industries, denounced serious criminal acts in the economic field, concentrated on a batch of readjustment experiments made at basic-level party organizations--all getting clear results. As regards educational readjustment, effort was stressed on instilling into the minds of party members and cadres the major objectives of communism, the aids and purposes of the party, wholehearted service to the people, rejection of the corrosive ideology of capitalism and lifestyle of the bourgeoisie; party spirit, work style and discipline. In this manner, basic-level leading groups

and the great masses of party members have improved their party outlook, strengthened their party discipline, tightened their solidarity; rectified their work style and intensified their contacts with the masses. On the basis of readjustment, elections have been held in more than 61,700 party branches. The results of these elections were that the party members' average jobs dropped by 2 to 3 in number, their average ages dropped by 3 to 4 years, their cultural level was clearly improved, making the leading groups more revolutionized, rejuvenated, professional and knowledgeable, a joyous step in the right direction.

During the past year, through repeated learning and practice of the "Guiding Principles for Intraparty Political Life," the great masses of party members and cadres understood one step further that the problem of party work style indeed has a bearing on the big problem of life and death of a ruling party, and that they were determined to strive toward a better turn for the party's work style. Proceeding from reality, most of the party organizations at all levels have drawn up concrete measures to put the "Guiding Principles" and the improvement of work style into practice. Many leading cadres have penetrated basic levels, investigated and studied, and helped solve their practical problems, paid attention to conquering bureaucratic work style, so that the party's practical and realistic style and its close connection with the populace could assert themselves and expand further. The great masses of party members and cadres have strengthened their capability to combat the corrosive ideology of capitalism by keeping firmly in mind their "serve the people" objective, holding on to principles, doing things in a businesslike manner, shunning "connectionology" and daring to break "improper empathy." A batch of good party members and good cadres have emerged in various places who reject playing elitism, selfishness, dinner parties, gifts, temptations, setting a good example for the population and receiving the latter's praise and trust in return.

Party organizations at all levels have concentrated work in the party's development in a systematic manner and based on priority, in line with the party's programs and membership standards. Since last year, more than 45,000 party members have been cultivated, the overwhelming majority of whom were administrative and professional backbones manning the 1st battlefront in all types of business and professions. Progress has also been made in development work among the intellectuals. More than 9,410 professional and technical workers have joined the party, representing 21 percent of the total number involved in the development of party members work. The quality of new party members has been generally improved, of these the backbone are those holding the position of production unit leader, and above shift-and-team leader as well as cadres occupied 36.6 percent. Progressive producers and progressive workers occupied 24.2 percent.

While commemorating the 61st founding anniversary of our party, the great masses of Communist Party members, who are fighting on various battlefronts throughout our province, are determined to perpetuate and develop the party's fine tradition, do a better job at ideological construction, work style construction and organizational construction and struggle correctly and energetically for a greater and more glorious reconstruction of our party.

Strengthen Discipline

Jinan DAZHONG RIBAO in Chinese 1 Jul 82 p 1

[Article: "Strengthening the Shandong Party Organization"]

[Text] The problem of style in a party's internal and external relations is a matter of life and death for a ruling party. Strengthening party spirit, correcting party discipline and striving this year for a further turn for the better in the party's work style--all this constitutes the battle call of the party's Central Committee. While celebrating the 61st founding anniversary of the CCP, each member must go into action more positively in struggling to win a better turn concerning work style.

Our party has gloriously run through a course of struggle for 61 years. Its history has proved that good party work style serves as an important guarantee to thoroughly realize the party's line, principles and policies, as well as carry out the party's central task. Since the party's Third Plenary Session, its Central Committee has adopted a series of measures and energetically carried out rectifications which resulted in a great improvement of its work style. The self-awareness of the great masses of party members and cadres in carrying out the party's line, principles and policies has been enhanced. The excellent style of the party's conscientious work, mass line, and criticism and self-criticism has asserted itself and is expanding; the political life within the party is gradually running on the right track; the leading cadres' mental conditions and work style have undergone a change for the better; the great masses of party members' organizational discipline and party outlook, have been improved further. All over the province on all battlefronts a large number of progressive party branches and model party members have emerged who are strong in party spirit, correct in work style and dedicated to serving the people.

However, we must also know that an abnormal situation still exists widely within the party. At present the main problem is that certain ranks are disorganized and weak in fighting spirit; a number of party members and cadres are nurturing a bureaucratic style, sapping revolutionary spirit and lacking in work dedication and sense of responsibility which is expected of them. In the economic realm, a serious game of playing connections is still rampant, such as going through the back door, throwing dinner parties and offering gifts, as well as showing off extravagance and being wasteful. A small number of party members are disorganized and ill-disciplined, estrange themselves from the masses, indulge in elitism; certain individual party members and cadres even go as far as committing such crimes as embezzlement and theft, speculation and fraud, bribery, smuggling and selling of smuggled goods. These problems have told us that to realize a fundamental turn for the better of our party's work style, we must still make a strenuous effort in our firm struggle against all kinds of ill wind and noxious influence.

To achieve a better result this year in our effort on this matter, we must first of all adopt a practicable measure of systematically instilling party

spirit, party work style and party discipline into the minds of the great masses of party members. Recently, the provincial party committee put forward a request to all party organizations to the effect that by about "1 July" they implement an educational policy aimed principally at opposing the corrosive capitalistic ideology. Party organizations at all levels must do a good job in this education, through which all party members will clearly form certain basic outlooks: first, a firm conviction in communism and a firm determination to devote themselves to a lifelong struggle toward the realization of communism; second, a determination to put into practice the CCP Central Committee's line, principles and policies; third, an outlook fully dedicated to serving the people, sacrificing personal interests for the sake of party interests; fourth, an outlook that class struggle still exists under new circumstances, by intensifying their ability to combat the corrosive influence of capitalism.

Next, to improve intraparty democratic life, we must exercise strict control over our way of life. Every party member must place himself under party supervision. Through intraparty democratic life and closely relating ideology in practical work, we must examine our own circumstances in strengthening party spirit and rectifying party work style. We must make self-examination whether or not we are unrelentingly implementing party line, principles and policies, adhering to the party life's criteria and national laws and policies in an exemplary manner, boldly waging an active struggle against all kinds of bad tendencies which are detrimental to the interests of the party and the people, etc. Through such examination and the unfolding of criticism and self-criticism, we can rectify all existing problems. Leading cadres at all levels should aptly lead a dual organizational life as ordinary party members, take the lead in comparing investigations and strive to become paragons in the eye of ordinary members.

Thirdly, we must relentlessly strengthen the party's organization. Units riddled with numerous problems and improper work style must have their outstanding problems singled out and earnestly resolved through education. We must do a good job in dealing blows to serious criminal acts in the economic field, regarding it as a principal task for the transformation of the party's work style. If we discover party members and cadres engaged in smuggling and selling smuggled goods, bribery, speculation, cheating, theft of government and collectives' property, we must firmly tackle the problems until they are solved. By putting things in order, we can improve further the party's battle strength.

Furthermore, we must persistently expand our work in an extensive way in creating progressive party branches and striving to become model party members. We must publicly commend good models of the party's excellent work style in many ways, widely publicize good people and good deeds for their courage in suppressing an ill wind and bad influence, and establish a dynamic, new direction that can change existing habits and customs. At the same time, we must strengthen our ideological and political work directed at those party members who have violated the party's traditional style and we must stringently take disciplinary action against those who have seriously and repeatedly

violated party discipline, until right and wrong, merit and fault, and reward and punishment are clearly discerned one from the other.

We believe that under the correct leadership of the CCP's Central Committee, and as long as party committees pay serious attention and all comrades in the entire party strive together, we can do a good job in strengthening the party's work style this year.

9300

CSO: 4005/1035

PARTY AND STATE

COMMUNE EXPERIENCE IN STRENGTHENING BASIC-LEVEL PARTY ORGANIZATION REPORTED

Jinan DAZHONG RIBAO in Chinese 2 Jul 82 p 1

[Report by Li Zunli [2621 6690 4539], Tong Zhiyou [4547 1807 0645], and Wu Xiamoeng [0702 2556 1125]: "Change the Lax and Feeble State, Earnestly Strengthen Party Leadership--The Experience of Yandian Commune in Xinxian County in Strengthening Basic-level Party Organization"]

[Text] Editorial Note: Since the Third Plenary Session of the 11th Party Central Committee, the vast countryside of our province, through the implementation of the party's policies, has carried out the production responsibility system in its various forms; our production rapidly developed, the living standards of our commune members became generally improved, and the situation has been fine as a whole. But, because of various reasons, the thinking, work and workstyle of part of our basic-level party organizations and basic-level cadres could not adapt to the changed new situation, and this has hence affected the demonstration of the fighting power of our basic-level party organizations. This problem must be earnestly solved. The Yandian Commune in Xinxian County has provided us with a rather fine experience in educating and strengthening these basic-level organizations, which may be of referential value to our various localities.

From late February to the end of May, the Yandian Commune in Xinxian County, with the help of the investigation teams of the provincial; regional and local party committees, proceeded to educate and strengthen the basic-level party organizations. During the process of this education and strengthening, emphasis was placed on solving the problem of the basic-level party organizations being lax and feeble and effort was made closely around issues such as the perfecting of the production responsibility system in agriculture while the Commune carried out education on party character, party workstyle, and party discipline among the party members, strengthened its leading group, heightened the ideological consciousness of its party members, and enhanced its party branches' fighting strength. This has resulted in its various aspects of work undergoing pleasant changes.

Correctly Analyzing the State of Basic-level Organizations in the Countryside

The Yandian Commune has 43 basic-level party branches; of these 34 are countryside party branches. It has 1,041 party members, and among them 859 are countryside members. Since the Third Plenary Session of the 11th Party Central Committee, the Commune party committee has conscientiously implemented the party's line, principles and policies: the whole Commune has set up an agricultural production responsibility system in the "overall task-completion" form, readjusted the ratio between grain and cotton production, and promoted the development of agricultural production; as a result, the living standards of all Commune members underwent conspicuous improvement, and a happy atmosphere prevailed everywhere.

However, under this generally favorable situation, many new problems and situations appeared in the party's basic-level work. They are manifested mainly in four areas: (1) It slackened the party's ideological construction and organizational construction, and inner-party life therefore became abnormal. During the past few years, no effort was made to carry out systematic education and training among the party members; many party branches lacked the "three meetings and one lecture" system; some units held no party membership meetings at all during the past 2 or 3 years; and some party branches failed to turn in party membership dues as prescribed. (2) It failed to grasp clearly the nature of the agricultural production responsibility system and hence slackened its leadership effort. Some party members and cadres mistook "overall task-completion" to mean "dividing the fields to work on them individually" and the practice of a responsibility system as "retrogression." Hence, what they should have unified they failed to unify, and what they should have managed they failed to manage. (3) Unhealthy practices spread within the party and thereby ruined the party's prestige. A wining and dining tendency, and lavish entertainment prevailed in many branches with no work being accomplished. Some cadres also resorted to corruption and private division of spoils; they borrowed and misappropriated funds and hence their financial affairs turned out to be in quite a mess. (4) Its ideological and political work has been flabby and it failed or dared not to deal with unhealthy practices and tendencies. Some thought that, since the economy was being managed by economic means, there would be no more need for ideological and political work; some were afraid of offending people and hence simply dared not do anything; some worried about their own interests being affected and hence were unwilling to act; whereas some felt that "the old methods they know are inapplicable, but they haven't yet learned the new methods." Because such ideological work could not catch up, various unwholesome phenomena began to multiply and spread. These causes leading to problems have been numerous, but the principal cause was that there was insufficient education of the party members and a lack of necessary work. Practice proves that so long as the leadership pays attention and carry out their work actively, such problems are by no means too hard to solve.

Placing Ideological Strengthening in Position of First Importance

In its educating and strengthening work, this Commune placed in the position of first importance the carrying out education on party character, party work-style, and party discipline among the party members and stuck to that position throughout. Adopting the approaches of positive education and self-education, they carried out at various points education among the party members in seven

aspects: one was the study of the "Resolution" of the Sixth Plenary Session of the 11th Party Central Committee, the unification of thinking and unification of action, so that all could become united together; the second was the study of "Proceedings of the All-China Conference on Countryside Work," serious implementation of the party's line, principles, and policies; the third was adherence to the socialist path and correct handling of the relationship between the three [state-collective-individual] interests; the fourth was the strengthening of one's party character, the rectification of the party's workstyle; the fifth was adherence to the principle of democratic centralism, maintenance of the party's coherence and unity; the sixth was accentuation of the mass concept, practice of the mass line, and the seventh was the establishment of lofty ideals so that everyone could become a qualified Communist. Through such education, party members clarified their thinking on a series of important problems and unified their perception; their vanguard consciousness underwent a conspicuous elevation.

During a certain period, many party members and cadres in this Commune failed to perceive clearly the nature of the responsibility system. Therefore the Commune party committee proceed to take the "REsolution" as an important component of education among the party members and organize the party members and cadres to study it seriously and launch extensive discussions. Following the methods of linking to reality, analysis, and comparison, the vast ranks of the party members clarified their thinking on the basis of uniting theory with practice; everybody proceeded to carry out a comparison between the responsibility system in the form of overall task-completion with the individual work of the past and thereby perceived that there is an essential difference between the responsibility system and the individual work approach; the path of orientation is different, the ownership of basic means of production is different, the principle of distribution is different, and the management mode is different. In the past, the production and management of an individual economy placed emphasis mainly on self-sufficiency, being entirely subject to the constraint of the law of value; today's individual-household management must plant according to state plans and simultaneously look after state, collective and individual interests. In thus comparing today's responsibility system with the past lumping-everything-together and leveling-everything-down, they came to realize clearly that in the past people resorted to principle of equalization, "reciting the sutra of poverty, following the path of poverty, and randomly criticizing and struggling against others in blind confusion." In carrying out a comparison in respect to the relationship between the individual and the collective, [they realized that] the individual management of the past pertained to the type of single-family or single-household small-peasant economy, whereas the case of today is one in which commune members and the collective maintain a relationship of contracted completion of tasks, and the production brigade and the production team maintain a necessary uniformity between them and peasant households must follow the unified leadership of the production brigade and production team by submitting the portion of their retained produce, completing the contracted tasks, and at the same time fixing such proceedings in the form of a contract. After such analysis and comparison, it was made clear that the various forms of this production responsibility system were all socialist in nature; they represent "not the path of retrogression, nor the path of individual work, but the socialist path toward enrichment."

In the process of this education among the party members, they also organized the party members and cadres to study basic knowledge about the party and educate the party members to strengthen their concept about the party. In response to the question of the party members' concept about the party being vague, they took the Party Constitution (Draft) and the "Guiding Principles" as components and compiled teaching materials for lectures on the party and organized party members to study them. In the process of this study, they recalled traditions, examined everybody's fighting will, reminisced the past, looked at the present, launched criticism and self-criticism in conjunction with reality, and thereby heightened everybody's Communist ideological consciousness. In order to better develop the role of party members, the party branches generally set up the systems of "three meetings and a lecture" and the branch committee taking charge of a production team, the designation liaison households for party members; they thereby restored the activities of party cells and made the party's organizational life strict.

Linking Education and Strengthening to the Perfecting of the Production Responsibility System

At present, the salient reflection of the laxity and feebleness of basic-level party organizations in the countryside is their slackening of leadership over the implementation of the production responsibility system or outright forsaking of their responsibility in this regard which affect the exercise by the basic-level organizations of their suzerain functions and economic functions. Therefore, the education and strengthening of basic-level party organizations in the countryside must be linked to the perfecting of the production responsibility system. Otherwise, strengthening would lose its significance and lack its practical, concrete content; correspondingly, if the strengthening of basic-level party organizations is not grasped, the perfecting of the production responsibility system would also not have any organizational guarantee. With regard to the perfecting of the responsibility system, they emphatically grasped the following four points: One was the correct handling of the relationship between unified production and assigning production by contract. We must base ourselves on the principles of a positive attitude, steady steps, willing masses, and flexible application according to conditions of each individual production team in order to be able to unify where unification is called for, to assign by contract where such assigning seems appropriate, so as to overcome the problems in certain units of assigning such production projects too loosely and failing to enforce sufficient unification. In production teams where foundations are better, more unification projects may be undertaken; in production teams where conditions leave much to be desired, fewer unification projects may be contemplated, so that there is no arbitrary change, nor forced promotion of the practice. Thus, through work, production teams in the whole Commune which implemented a unified planting plan, a unified watering procedure, and a unified proportion of retained produce increased from 27 percent to 73 percent; some of them readjusted their excessively loosely assigned responsibility field, improved their methods of maintaining and using large agricultural machines and tools, and thereby further mobilized the enthusiasms of both the collective and the individual. The second was the sorting out of their financial affairs and strengthening of their financial system. In response to the fact that the accounts of most units are rather confused, they generally proceeded to sort

out various accounts of the past 2 years and strengthen their financial management system and thereby improved relations between the cadres and the masses. The third was the strengthening of the leading groups of the production brigades and production teams. In the case of production teams without cadres relevant ones were assigned; in the case of cadres who failed to play their role, relevant strengthening and readjustment were made. In the meantime, the "Ten Duties of Production Brigade and Production Team Cadres" was formulated which provided methods of reward and punishment and mobilized the cadres' enthusiasm. The fourth was unity between the leaders and the masses in the signing of production contracts. The relationship between the state, the collective and the individual was reflected in the form of a contract, and the tendency of looking merely after one party in the past was therefore overcome. Through the aforesaid work, they not only perfected the production responsibility system and mobilized the labor enthusiasm of the Commune members, but also enabled the basic-level party organizations to undergo training in practical work and effectively improve the fighting strength of the branches.

Strategically Strengthening the Leading Groups of Party Branches

In carrying out this education and strengthening operations, this Commune consistently grasped the strengthening of the leading groups of the branches as the center of gravity. Every special subject of study served to gather branch committee members to the commune so that leading comrades of the investigation team or commune party committee could directly give them assistance and guidance. Sometimes they were also gathered to the commune by way of short-term study classes in order to do the study; more energy and more time spent on them so that they could learn more and better than the ordinary party members.

(1) Clarifying the tasks and duties of the branches and improving the methods of work. They organized everybody to relate the actual situation at each other's unit and study relevant documents and experience of the advanced branches, analyze the new situation and new characteristics of their present work, so that everybody could clearly understand that, after the responsibility system was put into practice, a branch's tasks and duties were by no means reduced. Assigning undertakings and appraising work, and urging cultivation and urging planting, such as in the past, are now rare, but the tasks of building the two civilizations are becoming even heavier. The party's policies rely on the branches of their implementation; ideological and political work awaits the branches to be carried out; difficulties of the mass in their production and in their life all depend on the assistance of the branches for pertinent solution, basic-level power organizations and mass organizations await the branches for leadership, and the party's own construction need likewise to be strengthened. Many comrades indicate that we must think what the masses think and be eager to meet the needs of the masses; whatever the masses wish to, but cannot, handle or wish to, but cannot, manage, the branches must actively take over such handling and such management. In the case of certain branches of the past, "whose backbones were soft, whose grouping was loose, and whose various projects of work were left unattended, "once their tasks are thus made clear, they tend immediately to dare to handle and dare to manage, and to earnestly strengthen their ideological and

political work; this makes it possible for them to have their production responsibility system strengthened and improved, and all their projects of work are thus taking on a new outlook.

(2) Launching criticism and self-criticism and strengthening the unity of the leading groups. Disunity of the leading groups have constituted an important reason why the branches are lax and feeble. Principal members of the leadership of certain branches do not have a democratic style of work; in the case of some, remnant elements of clan affiliation and factionalism continue to harass them, the new cadres and old cadres of some branches refuse to give in to each other; some calculate meticulously their personal gains and losses and thereby fail to demonstrate well their branches' strength as a fighting castle. In response to such conditions, they carried out education on intra-party unity, guided party members and cadres to discuss the manifestations of disunity, examine their harm, investigate their cause, so as to heighten their consciousness to enhance their unity. With respect to units where problems have become salient, personnel would be dispatched to strike up a relationship with them in order to do the relevant work there by encouraging them to do more self-criticizing respectively, to take the initiative to tear down barriers, fill up ditches, and untie knots. The original 13 not very well united branches all strengthened their unity.

(3) Rectifying unhealthy practices and making relations between leaders and the mass close. The subject on which the masses of commune members have most frequently expressed their opinions is our devious party workstyle. For this reason, they handled the rectification of the party workstyle as a key point for enhancing the fighting strength of the branches, organized the party members to study relevant discourses of Chairman Mao and the central leading comrades, and educated the party members to restore and give scope to the party's fine traditions. At the same time, in conjunction with typical cases of criminal activities in the economic realm, they carried out education on the resistance against corrosion and metamorphosis among the party members and cadres and thus enabled the party members and cadres to clearly understand the importance and urgency of rectifying our party workstyle and thereby profusely indicate their readiness to make strict demands upon themselves in order to become examples in the observation of party discipline and state laws. The various production brigades generally formulated their "miniature legislations" which basically halted the wining and dining trend; some took the initiative to pay back the public funds they had borrowed or misallocated and return the things they had appropriated from the collective; some turned over excessive the homestead space and responsibility fields they had occupied; some proceeded to distribute the pesticides and chemical fertilizers in tight supply to the masses on a priority basis. Thus, they made relations between leaders and the masses closer and enhanced the party's prestige. There are already more than 200 in the Commune who have recently applied for admission to party membership.

(4) Doing a good job in re-electing members of the branches according to the needs of the "four modernizations." Original committee members of these branches generally held too many offices and were too old, and their cultural level was usually too low; they could hardly adapt to the needs of the

construction of the four modernizations. In order to change this situation, they consistently took the equipment of good leading groups, especially the undaunted selection and training of fine middle-aged and young cadres, as a big matter in their handling. They sought to enlighten old cadres to proceed from the interests of the revolution in recommending the virtuous and the talented and in doing a good job in selecting their successors; they educated young cadres to treat old cadres correctly; they put emphasis on correctly treating cadres with zeal and talent, but also with certain defects and mistakes. On the basis of providing a general ideological education, they generally re-elected members of the branches. The average number of their concurrent offices was thus reduced from the original 6.2 now to 4.5, and their average age is now also reduced from the original 47 to the present 41; Those with a senior or junior middle school cultural level have increased from the original proportion of 16.9 percent to the present 30 percent. After the new branches were established, they generally have set up a branch working system, studied and formulated plans for building a new countryside, visited the "five-guarantee households," relatives of martyrs, and households in difficulty, and actively sought to manage things well for the masses. Thus a new atmosphere of exuberance has begun to prevail.

9255

CSO: 4005/1034

PARTY AND STATE

ANTI-INTELLECTUAL FEELING IN A FACTORY DEPLORED

Shanghai WEN HUI BAO in Chinese 19 Jun 82 p 1

[Article by Tao Hongguang [7118 3163 0342]: "An Engineer's Distress. Personnel Considered as Department Property, Stale Bias Inhibiting"]

[Text] While recently gathering material at a research institute of a certain factory affiliated with the municipal bureau of meters, this reporter found out about a situation where engineer Chen Xiangzhen [7115 4382 4394] was being suppressed by his factory director and a few others, making it difficult for Chen to put his talents to use.

This engineer is now 47 years old. He graduated from Zhejiang University in 1958 in the field of optical instrumentation. In 1959, supported by relevant units, he and other comrades spent around half a year in joint research, and they developed our nation's successful first generation electron microscope with 20,000 times magnification. In the second year, under the guidance of Gu Yuquan [7357 3022 8832], advisor to the Shanghai municipal textile industry bureau, and Guo Jingyi [6665 7234 1355], chief engineer of the Shanghai Optical Instrument Factory, Chen was assigned as chief designer, which led to the development of our nation's first electron beam processor for the textile industry. In 1977 he used new methods in trial-producing a particle board testing device that was badly needed by a microscope factory. This filled in a gap within our country. He also successively translated, edited, and published 22 Japanese, Russian, British, and German documents in cooperation with other comrades. After the smashing of the "gang of four" Chen, alone or in cooperation with other comrades, published five papers in national academic publications, some of which have already been quoted in foreign physics journals.

How is it that Chen, an expert in the science and technology of optical instruments, can be held back by the factory director and others? In the factory this engineer is responsible for biomicroscopic and electron microscopic testing work. Frequently, he must inspect optical instruments throughout the nation, and these aforementioned research projects that he is engaged in also serve the national microscope industry. They have little to do with his factory.

In addition, he also tests his own factory's products in accordance with requirements, and can spare no one's feelings. So, the factory director and others criticize him for "not doing honest work" and say that he "lives off one person while secretly helping another." Refusing to take this, Chen reported his condition to the relevant department at a higher level. From then on, he was further resented by the factory director and the others.

Here are a few examples of his being held back. Last October, the Primary State Bureau of Meters twice telegrammed this factory and this engineer requesting that he visit Beijing at the end of the month to test microscopes imported from abroad, but the telegrams were withheld within the factory. When the state bureau did not see him arrive in Beijing, they again sent a cable urging him to go, but because of meddling by upper levels of the telegraph company, it was 10 days before the factory gave him the cable.

Last September, the General Encyclopedia Publishing House of China sent a letter to the factory inviting Chen to write the relevant meter and instrument entries for the Zhongguo Da Baike Quanshu-Jijie Gongcheng [General Encyclopedia of China-Mechanical Engineering] volume. When he inquired as to whether or not this assignment would be approved, the relevant leader did not answer but instead berated him, saying: "Where did this assignment come from?"

Being depressed and feeling that it was quite difficult to be of use in the factory, Chen on many occasions requested that he be transferred. The Shanghai Communications University had been connected with this factory in the past and now wanted him transferred so he could take charge of research work. However, the factory maintained the attitude of "not using and not transferring." Wang Zhijiang [3769 0037 3068], deputy director of the Optical Apparatus Institute, Academia Sinica, and deputy to the N.P.C., was prepared to ask Chen to take charge of overall design for an important task at this institute, but when Chen asked, the answer was: "you can't be borrowed, you'd have to be transferred." Wang Zhijian fully sympathized with Chen's plight and in March of this year sent a letter to a city leader reporting Chen's being held back by the factory. When Chen requested to be transferred to another post, the director criticized him, saying: "Who do you think you are? What you have to say is incredible." He also said: "I can tell you outright that we're not going to let you go. Hereafter, you won't be getting out of here."

It can be seen from the bitter experience of this engineer that to this day leaders of some units are still biased towards intellectuals. This is because the "leftist" influences have not been fully cleaned out. These leaders do not earnestly implement the party's policy for intellectuals and they dampen the intellectuals' enthusiasm. Intellectuals are a part of the working class and are a vital force for the four modernizations construction. Those comrades who are still biased towards intellectuals must correct their thinking, get a deeper understanding, and earnestly implement the party's policy for intellectuals. They must arrange well their work, studies, and lives, and truly should let people perform to the best of their abilities.

PARTY AND STATE

COMMENTARY URGES PROPER TREATMENT OF INTELLECTUALS

Shanghai WEN HUI BAO in Chinese 19 Jun 82 p 1

[Commentary: "Where the Ideological Resistance Lies"]

[Text] The Party Central Committee repeatedly emphasizes that intellectuals must be given free reign in the four modernizations construction. However, there are leaders of some units who let this Central Committee directive go in one ear and out the other. They not only do not take intellectuals seriously, they suppress them, which severely dampens the enthusiasm of those intellectuals. Today, this paper is printing the facts of engineer Chen Xiangzhen's [7115 4382 4393] being suppressed by a certain director and others at a factory affiliated with the municipal bureau of meters. This is one example, and in dissecting this "sparrow," people can see where actually lies the present ideological resistance to implementing the party's policy for intellectuals.

Engineer Chen Xiangzhen is a middle-aged intellectual who grew up and was educated under a socialist system after the founding of the PRC. He is an expert in this field, is conscientious, has achieved truly remarkable success, and is a much-needed talent for the four modernizations construction. At present, we have a large group of intellectuals such as this, and they should be respected and valued.

What does it mean to do what is called respecting and valuing intellectuals? There is no other meaning than that we must respect and value their knowledge and labors, for they use that knowledge and labor in striving to serve the great cause of our nation's socialist modernization, and they give precious riches to the state and the people. It is especially so today, where science and technology advance by leaps and bounds. More and more the development of the forces of production rely on advances made in science and technology, so the labors of the intellectuals must be even more valued and respected. Speaking of Chen Xiangzhen, he is the developer of our nation's first generation electron beam processor for the textile industry, and he also is the one who filled in the gap with his particle board testing device for microscopes. How can it be said that such an intellectual, who makes valuable contributions to

the cause of the nation's modernization construction, does not deserve to be respected and valued?

Yet how did this factory director treat Chen? He berated him, saying: "Who do you think you are? What you have to say is incredible." We can count on our fingers that it has already been 6 years since the "gang of four" was smashed and 4 odd years since the Party Central Committee declared that intellectuals are a part of the working class, but in the eyes of this director they still have the audacity to be "something." Does this mean that "thinking lags behind reality" can merely be used as an explanation? To say that the pernicious influence of the "left" has yet to be let out of his mind and soul would not be an overstatement! At present, each district, system, department, and unit is investigating the use of intellectuals in accordance with the directive of the Party Central Committee. Doesn't it seem that they should investigate as to whether or not the pernicious influence of the "left" is still spreading? If this kind of factory director harbors stale bias toward that kind of intellectual, then how can we speak of "equality in politics, having a free hand in work, and showing concern for our lives?" And how can we speak of fully arousing the enthusiasm of the intellectuals? Obviously, cleaning out the ideological influence of the "left" is still a problem that needs to be solved in the work of implementing the party's policy for intellectuals.

An argument for this factory director's and the others' discrimination against Chen Xiangzhen is called "not doing honest work." This is also a specious point of view. Without doubt, comrades at every front, including intellectuals in all trades and professions, must be loyal to their work, stand fast at their posts, and make great efforts in using their knowledge and labor to make contributions to those trades and professions in accordance with the needs of the state. However, we cannot be too narrow in our understanding of the concept of "honest work." Referring to Chen Xiangzhen, he originally studied the field of optical instruments. While simultaneously doing his work at his job, he used his own special talents to serve the national microscope industry. Moreover, he repeatedly made breakthroughs and constantly came up with new ideas, so how can it be said that he "does not do honest work"? The Primary State Bureau of Meters, the General Encyclopedia Publishing House of China, the Shanghai Communications University, the Optical Apparatus Institute of the Academia Sinica, and other units and departments have repeatedly asked him to do testing, research, designing, and compilation work, work that precisely brings into play his special skills that will make even more contributions to the great cause of the four modernizations. So, how can it be said that this is not "doing honest work"? Ours is a socialist country. Whatever the needs of the state and whatever the causes that benefit the national construction, all units should regard them as their own causes and support them with all their strength. If there are qualifications and intelligence problems, such as the

practices of departmentalism and department ownership, not applying oneself, and not letting people be put to good use, then this not only suppresses the enthusiasm of the intellectuals, but can also bring harm to the socialist modernization construction. At present, these cases are certainly not isolated. We howl that we are lacking qualified personnel, while there is an overabundance of them. Admittedly, there are many causes, but undoubtedly one major cause is this kind of factory director regarding that kind of qualified personnel as department property and maintaining the attitude of "not using and not transferring." We can no longer ignore irrational phenomena such as this. We propose that departments at higher levels take it upon themselves to intervene and let the intelligence and wisdom of intellectuals such as Chen Xiangzhen be given free play on the stage of the socialist modernization construction.

9926

CSO: 4005/994

PARTY AND STATE

SHANGHAI INTELLECTUALS GIVEN PRIORITY ATTENTION

Shanghai WEN HUI BAO in Chinese 25 June 82 p 1

[Article: "Vast Intellectuals Incouraged. Shanghai Party Committee at All Levels Has Placed Investigation of Use of Intellectuals on Important Agenda"]

[Text] In accordance with the directives of the Party Central Committee and the unified arrangements of the municipal CCP committee, this city's party committee at all levels has listed on the important order of the day the investigation into the implementation of the policy for intellectuals. It has set up special work teams to both investigate and solve some problems.

Shanghai is a city where intellectuals amass. There are 350,000 of them here, and these intellectuals play a vital role in the four modernizations construction. Because the influence of the "left" has not yet been cleaned out, however, some departments and units do not pay enough attention to implementing the policy for intellectuals, and they also lack powerful specific measures. In this understanding and investigating the use of intellectuals, the party committee at all levels has conscientiously organized everyone to study the spirit of Central Committee documents, which will enable many comrades to understand the difficulties of the intellectuals' mental labors and the value of their creative efforts. This will show as well that from the bottoms of their hearts they truly must regard the intellectuals as a part of the working class and regard them as a vital force to be depended upon.

In order to listen directly to the complaints and demands of the intellectuals, leading comrades of the municipal CCP committee held five forums successively on intellectuals and the organizational department of the municipal CCP committee, the united front department, the Shanghai branch, Academia Sinica, and the municipal health and education office, and leading cadres from various bureaus also attended the forums concerned with intellectuals in order to become aware of the policy implementation situation. Many leading cadres from the party committee at the grass-roots level also had heart-to-heart talks with intellectuals to foster closer relationships.

The municipal CPPCC and eight democratic parties and groups also promoted activities. They conducted extensive home visits and convened forums to learn of instances where members of respective organizations and their units have been devoted to the party committee and also to learn of certain instances where some units have not valued the work of intellectuals and where there was political unrest, no free hand in their work, and no concern for their lives. Reports were made to the parties concerned to spur on the resolution of these problems.

The party committee at all levels, municipal scientific associations, and other units have investigated the status of intellectuals in order to find out whether or not their studies are for the purpose of application, whether or not they are trusted, as well as the redressing of misjudged cases from the "cultural revolution," what historical problems that were passed down need to be resolved, whether or not confidential policies are being implemented, if confiscated property has been returned, the present housing problem, and so on.

In keeping with the spirit of investigating and solving problems, many units have made factual checks of the problem of "tails" in records. For example, there was a comrade at the Electromechanical Design Institute who objected to the improper original verdict in his records and demanded that it be amended. The party committee believes that regardless of whether or not someone complains, all non-factual wording in verdicts must be corrected. Within a few days this institute corrected 11 verdicts, and those concerned were thankful for the party committee's solicitude. The Shanghai branch, Academia Sinica, and the Shanghai Science Academy have rechecked hundreds of files and have made suggestions for revision for 13 verdicts. The party committee of the No 3 Navigational Engineering Bureau has in its investigation allotted new housing for three high-level engineers and two other engineers (relatives of nationals living abroad). In regard to the housing and other problems that temporarily cannot be solved, many units have made plans and arrangements and are striving to create the conditions for their gradual resolution, and they have made explanations to the comrades concerned. Some units have worked out education plans aimed at the former situation where the middle-aged mainstay of science and technology were overused and undertrained. The logistics department of the Shanghai No 1 Hospital has set up a sewing team to ease intellectuals' household duties and is making preparations for a laundry room.

The investigation of the use of intellectuals has generally encouraged this group. They have said: "The Party Central Committee's appreciation of us is putting the finger on the right spot. Even more so now, we want to make contributions that will make China prosper."

9926

CSO: 4005/994

PARTY AND STATE

USE OF INTELLECTUALS INVESTIGATED, PROMOTED

Shanghai WEN HUI BAO in Chinese 18 Jun 82 p 1

[Article: "Assist the Party in Its Investigation of the Use of Intellectuals. Shanghai Municipal CCP Committee of the Democratic League Thoroughly Investigates Membership. Undergo Investigation and Actively Make Suggestions To Promote Policy Implementation"]

[Text] The Shanghai Municipal CCP Committee of the China Democratic League has actively assisted CCP party organizations at all levels in launching an investigation into the implementation of the policy for intellectuals. It has done thorough and painstaking work, has already become basically aware of the situations of the intellectuals among the league membership, and has enthusiastically reported and made suggestions to the relevant units of the party organizations.

Most of the league members are high- and mid-level intellectuals. In March of this year the league's Shanghai Municipal CCP Committee set up research groups to investigate the use of intellectuals, and launched an investigation into the implementation of the policy for intellectuals in accordance with the circular of the league's central committee. They extensively convened conferences, held individual interviews, filled out forms, etc., while also suing the league organizations at Huadong Normal University, the Dictionary Publishing House, and the Shanghai branch, Academia Sinica, as a rallying point in conducting this thorough investigation. The university party branch of the league conducted individual interviews with 30 league members and convened 6 small-scale forums. Group members of the league's Shanghai Literature and Art Publishing House are rather scattered, so the team leader braved the rain and went to interview them to become familiar with their ideological, work, and life situations.

League members have generally been encouraged, but there are also some members lacking in conviction with regard to implementing the policy for intellectuals, and there are still some comrades who are unwilling to speak their minds

because of lingering fear. In regard to this, league organizations at all levels, in their work investigating policy implementation, have at first carried out ideological mobilization by organizing everyone to read the relevant commentaries in the PEOPLE'S DAILY that make clear the major significance of this investigation. In order to dispel misgivings of league members and build their confidence, they have simultaneously listed the huge amount of work done by the party since the Third Plenary Session of the 11th Party Central Committee in the areas of correcting past mistakes and implementing the party policy for intellectuals. When many units and systems held forums, the high attendance rate was unprecedented. There were some members who had not partaken in regular league activities for some time, but who on this occasion did fill out questionnaires.

The investigation work of the league organizations at all levels was conducted under the guidance and support of all levels of the CCP. Many united front departments of party committee units have held joint discussions with league organizations about investigation plans and together have done analysis and research. While reporting to the party committee about its investigation, the entire standing committee of the party branch of the league's Aquatic Products Institute was in attendance, and the departmental organization leader said: "I will set about solving immediately all problems in regard to implementing the policy for intellectuals that are within my power to solve." A professor at Huadong Normal University was mistakenly labeled as being a rightist. Although the problem was corrected, on the amended verdict was written: "cannot be labeled a rightist." The implication was that he "can still be labeled a rightist." He objected to this method of leaving a "tail," so after reporting to the university's party committee, the committee displayed a realistic attitude and immediately changed the conclusion to "must not be labeled a rightist." The changing of one word lifted a burden from the old professor's mind. There were also some comrades who were investigated during past movements. After their files were corrected, they were still concerned as to whether or not the file material had been thoroughly put in order. At once, the relevant party organizations looked up the files and notified these comrades, much to their relief, that their file data had indeed already been put in order.

The municipal CCP committee of the league believes that various existing problems in regard to implementing the policy for intellectuals can and should be solved at once. Matters of overall importance or problems that should but cannot be solved due to a temporary lack of proper conditions must be actively reported to higher levels, and suggestions should be made for creating the conditions for their resolution. All should actively make appropriate explanations for some of the problems that have much higher demands or that policies have clearly determined that they cannot be resolved.

PARTY AND STATE

PARTY MEMBERS CAUTIONED AGAINST BRIBERY

Taiyuan SHANXI RIBAO in Chinese 13 Jun 82 p 1

[Commentary by staff commentator: "All the Time Guard Against Bribery"]

[Text] At present, the unfolding struggle against economic crimes in an important struggle of the proletariat against corrupt capitalist thoughts. This struggle has an objective existence, unaffected by people's subjective will, that is not at all unusual. The thought-provoking question is why some communist party members and state cadres can withstand the severe test of this struggle, succeed in resisting corruption and remain untainted, while some succumb to the temptation of capitalist briberies. In today's paper, there are two reports on the party committee members of Yangjian coal mine at Shuo County resisting corruption and the party committee members of Erpu coal mine of Pingly county succumbing to corruption respectively. As a positive lesson and a negative lesson in striking contrast, these two cases correctly and meaningfully answered the question and give us three remainders.

First, keep the integrity of communist party members; never forsake principle for personal gains. The party committee members of the Yangjian coal mine, facing the bribery temptation, could resist corruption and remain untainted because they kept in mind that "I am a communist party cadre" and that the party is an important enterprise. Members of the party committee at Erpu coal mine, because of their eagerness for gains, forsook principle for profit and consequently slipped and fell into the abyss. Stern reality constantly reminds us that the office-holders who easily succumb to temptations are the major target for bribery. The "Zuo Commentary" [of the "Annual of Spring and Autumn"] records such a story. Someone from the kingdom of Song presented Zihan, the minister of the kingdom of Qi, a piece of precious jade, which was turned down. The man from Song said, "This piece of precious jade is specially presented to you." Zihan answered, "My treasure is uncovetousness and integrity. In accepting your treasure, I lose my treasure." Zihan kept his integrity through his incorruptibility. For us communist party members, our great principle is our life-long dedication to the struggle for the communist enterprise. As long as we keep in mind this great principle, we will remain loyal to the party and to the purity of communism. Therefore, every party member must strengthen his sense of party discipline, strive to conform his conduct to party principle, resolutely struggle against all the evil trends and conduct himself as a real communist party member.

Second, beware of the evil intent disguised in "great courtesy." Do not fall captive to capitalist favors. The fall of the party committee members of Erpu coal mine began with the acceptance of 30 catties of rice which were presented in the name of "trying a new crop" and with irresistible courtesy by the head contractor. Although 30 catties of rice were a pittance, they were used by the head contractor to open up a crack on the party members of Erpu coal mine and eventually succeeded in bribing for power. According to Marxism, in the class society "courtesy" always carries the stamp mark of class. Today, although the exploitative class is eliminated in our country, the ideology, including the capitalist idea of human relationship, is still plaguing people's souls like germs. Seen from recently exposed facts, some economic criminals, in implicating others and in passing bribes, always used "human relationship" as a disguise to corrupt and to draw close. Some evoked native ties, some clan sentiment. Even without any relations, some conjured up brotherliness to the extent of elaborating on the common surname, such as "Your name is Chen, so is mine; we have been in the same family since the ancient time." "Human relations" became a smoke screen for the unlawful elements in besieging us. Some comrades could not hold on to themselves precisely on this point; ideologically disarmed, they unwittingly became supporter or accomplice of the criminals.

Third, cultivate "self-discipline." Never let one's control slide. "Self-discipline" means being incorruptible and not trespassing the limit even when no one is watching. This is a test under a special circumstance. Some communist party members perhaps could behave "dignified in exalted position" in public, but once by themselves, they would allow their greed to run wild and accept the proffered "bait." The party committee member of Erpu coal mine in the beginning felt somewhat uneasy in accepting the bribe. But when the head contractor presented gifts to his door "with no eye-witness" and told him "Only heaven above and earth below, you and I have knowledge of this event; be assured that there is absolutely no problem," the gifts were gladly accepted. "Needles stick out like shoots, vapor pours out in baskets full." The giver and receiver of a bribe will not remain unexposed. Comrade Liu Shaoqi said, "Even in performing an independent task, unsupervised and free to backslide, one must be able to impose a self-discipline without giving oneself to wantonness." This is a motto for every communist party member to know by heart.

The experience of the party committee member of Yangqian coal mine and the lesson of the party committee member of Erpu are very instructive. It is hoped that everyone will read these two reports to learn the experience and lessons to strengthen our immunity and to become a real tough person in the present struggle against corruption.

9507

CSO: 4005/1005

PARTY AND STATE

CLASS STRUGGLE REFLECTION AMONG MASSES NOTED

Shanghai SHEHUI KEXUE (SOCIAL SCIENCES) in Chinese No 6, 1982 pp 20-22

[Article by Fan Jiyu [5400 0679 7183], Party School of the Shanghai Municipal Party Committee: "The Class Struggle and Its Reflection Among the Masses"]

[Text] Two viewpoints regarding the problem of unlawful and criminal acts in the economic sector call for discussion at the present time. One viewpoint has it that our struggle against the various criminal elements who do serious damage to the socialist economy has nothing to do with the class struggle. The other viewpoint holds that all the unlawful and criminal acts in the economic sector are part and parcel of the class struggle and that there does exist a class struggle among the people themselves. It is my opinion that the situation regarding unlawful and criminal acts in the economic sector is a most complicated one. It is replete with elements of a class struggle between the enemy and ourselves and one in which the class struggle is reflected on the people. Although the phenomena bear certain similarities, they are different in nature. The achievement of an understanding of the nature and the differentiation of the two, serves to clarify "the limited scope" of the class struggle within the economic sector, correctly to identify and deal with the contradictions which have to do with the classes and those which have nothing to do with the classes, to prevent the enlargement of the scope of the class struggle. To avoid treating the class struggle as a dead issue so that we may unite the people and deal a blow against the enemy in order to safeguard the open door policy, to ensure the progress of our economic construction, and to establish a material civilization.

1

Some comrades hold the view that the class struggle according to Marxism-Leninism is a contradiction and a struggle among opposing classes. Since the exploiting class as a class has long ceased to exist in our country, why is there still a class struggle? Our answer is that the struggle presently waged against serious criminal elements in the economic sector is not within the scope of the class struggle.

It is our view that the class struggle in its original sense refers to the contradictions and struggle resulting from the basic conflict of interests between opposing classes as represented by the exploiters and the exploited. However,

what some comrades seem to have overlooked is that the class struggle presently waged in our country, aside from being a struggle against the infiltration and corruption of the capitalist class in Hong Kong, Macao and Taiwan, is also a struggle between the legitimate and illegitimate classes and that, to a certain extent, there still exists on the mainland a class struggle of a special kind. This struggle is one between the people and the masses on the one hand and the various antagonistic elements who are opposed to and who seek to sabotage the socialist system on the other. In other words, it is a class struggle waged by socialist workers, peasants, the intellectuals and other patriots against counterrevolutionaries, enemy agents, degenerate and backsliding elements, the new exploiting elements, the "gang of four," certain remnants of the exploiting class, and criminal elements who do serious damage to the socialist system. The present offensive waged against serious smugglers and dealers in smuggled goods, those who are guilty of corruption and the acceptance of bribes, speculators and swindlers represents a course of action against activities which do serious damage to the socialist economy. For this reason, the struggle against criminal activities which do serious damage to the economy is in a way a class struggle in the economic sector under the new historical setting.

In our socialist society, all those who are antagonistic to, who oppose and who sabotage the socialist system represent the vested interests of the exploiting class which has been brought to heel, destroyed and basically decimated. Their basic conflict of interest with the people in a socialist state is a class struggle in that it is a conflict between antagonistic classes. There is a basic similarity between this conflict and struggle and that waged by the people and the masses under the leadership of the proletariat against imperialism, feudalism and bureaucratic capitalism in that they are both class struggles in different forms. At one time, the exploiting class oppressed, exploited and waged war against the people who in turn rebelled against oppression and exploitation and finally resorted to force in wresting power from members of the exploiting class and confiscated their properties. Since the exploiters have been completely routed and what is left of the exploiting class has been rendered incapable of exercising oppression and exploitation, they have no recourse but to adopt various unlawful means to create havoc in the political, economic and cultural fields. That is why such serious criminal activities as smuggling, bribery, swindling, speculating and stealing represent efforts on their part to undermine the socialist economy and to wage a class struggle in the economic sector.

Those comrades who do not share the view that the struggle against serious criminal elements in the economic sector is a class struggle question the propriety of classifying it as such in view of the fact that such economic crimes as corruption, the acceptance of bribes, speculation, unscrupulous practices and the stealing of public property occur not only in socialist societies, but in capitalist and feudalistic societies as well. It is true that such economic crimes are prevalent in class societies. However, it is also true that in such societies, many of the economic crimes are not related to the class struggle. For instance, such criminal activities as the offering and acceptance of bribes, speculation and swindling indulged in by members of the capitalist class against other members of the same class obviously have nothing to do with the class struggle. However, that does not rule out the fact that our struggle

against the criminal elements who cause serious damage to the economy is in fact a class struggle because there are, among the criminal elements who cause serious damage to the economy, remnants of the "gang of four," sybaritic parasites who have an aversion to work, reincarnations of elements of the exploiting class and degenerate and backsliding elements from alien classes who turn their backs on the people. It is these people who represent the interests of the remnants of the exploiting caste of the capitalist class in our country and who are antagonistic to and seriously damage the socialist system. It is for this reason that the struggle between the people and the masses on one hand and such elements on the other should be viewed as a clear manifestation of the ongoing class struggle in the economic sector in our country. This struggle is in essence a struggle between corruption-ridden capitalism and anticorruption socialism and a struggle between the proletariat class and the capitalist class. More important to bear in mind is the fact that such acts of sabotage cannot be divorced from international monopolistic capitalism. It is this link which enables the unlawful elements to hang on to the coattail of the international capitalist class and to serve as very tangible troops under its banner. Socialism in our country was established while it was hemmed in by imperialism and capitalism. Conflicts and struggles will continue to exist between the two systems over a long period of time. In the process of doing business with us, the foreign capitalists were able not only to wage a struggle with us while making legitimate profits and extorting from us all that they could lay their hands on, but also a struggle to corrupt us by resorting to such illegitimate means as bribery, smuggling and swindling. Members of the capitalist class in our province of Taiwan, Hong Kong and Macao are also waging a struggle with us by resorting to the legitimate channel of normal trade. Many of them are also waging a struggle with us by using such illegitimate means as bribery, smuggling and swindling. Smitten by capitalists' sugar-coated bullets, some of the criminal elements who are responsible for causing great damage to the economy have become degenerates and backsliders and have set themselves up as enemies of socialism. This type of struggle is nothing short of a class struggle.

It can be seen, therefore, that it would be theoretically erroneous not to regard our struggle against the various types of criminal elements who do great damage to the economy as a class struggle. It would also be damaging to use the theory that this struggle is not a class struggle, as a guide for our action. It is imperative that we should recognize the serious, dangerous and long-term nature of criminal activities which cause serious damage to the economy not only sabotage socialist modernization construction in the economic field, but, in the ideological and political fields; they also corrupt our rank-and-file cadres, damage the body politic of the party, the government and the armed forces, poison the people's minds, pollute the social climate and undermine social stability. If allowed to continue to flourish, these elements are certain to prove extremely prejudicial to our socialist enterprises in the days to come.

2

The class struggle waged between the Chinese people on the one hand, and the hostile forces and elements in and out of the country who oppose and sabotage the socialist system on the other, would obviously be reflected among the

people. The class struggle waged by the people and the masses against criminal elements who cause serious damage to the socialist economy would also be reflected among the people. In principle, however, the reflection of this type of class struggle differs from the class struggle itself. The former is a manifestation of the conflict among the people while the latter is a manifestation of the conflict among opposing classes. Some comrades tend to lump the two together as a class struggle, failing to appreciate the fact that the former is a class struggle among the people themselves while the latter is a class struggle arising out of the conflict between the enemy and ourselves. They even use quotations from Marx and Lenin to support the correctness of their view that a class struggle exists among the people.

As a matter of fact, nothing that was said by Marx or Lenin serves to prove that a class struggle continues to exist among the people in our country at the present time. True enough, in citing what was said by Marx, the word "people" used by Lenin in his "Two Strategies of the Socialist Democratic Party in the Democratic Revolution" referred to "people" engaged in the democratic revolution against the feudalistic aristocratic class, including "people" from the proletarian and capitalist classes. "Marx had always been resolutely opposed to the illusion entertained by the petite bourgeoisie that the 'people' are as one and that there is no such thing as a class struggle among the people themselves. When using the term 'people,' Marx used it not to deny the existence of differences among the various classes, but merely as an entity which could be counted on to pursue the revolution to its conclusion." ("Selected Works of Lenin, Vol I, pp 620-621). What was said by Lenin and Marx not only does not support the view that a class struggle continues to exist among the people in our country today, but, on the contrary, lends support to the view that a class struggle no longer exists among the people. The reason is that we have wiped out the exploiting class as a class and the capitalist class therefore no longer exists. The working class, too, which used to be exploited by the capitalist class, has long ceased to exist as a class. Since there are no longer the exploiters and the exploited among our people, the contradictions among the people can no longer be regarded as a class struggle.

Why is it possible for the class struggle to reflect among the people? The reason is that among the rank-and-file, there are still some remnants of those who favor private ownership and who hold on to the ideas espoused by the petite bourgeoisie. Influenced and eroded by the corrupt capitalists and lingering feudalistic ideas, these people would stray from the socialist line and the line of the working people and commit economic offenses by engaging in petty criminal activities and unscrupulous practices. Their contradictions and struggle with the entire people are a reflection of the class struggle among the people. Their actions represent an encroachment on what rightfully belongs to the state and the people collectively and individually. Because of the petty nature of and the limited damage done by such actions, they may not be classified as crimes. Some people, for instance, would take for themselves what belongs to the public, profit themselves at the expense of others, and take small advantages whenever the opportunity presents itself, while the commune and production brigade enterprises in the rural areas are not above engaging in unscrupulous practices in their business dealings. That is the bad side of the picture. The good side is that they have done creditable service to the cause of social-

ism. Although influenced in their thinking by the exploiting class, they are mainly attuned to the thinking of the socialist working people. The predominant features of the contradictions between the thinking of the working people and those who work for the socialist cause substantiates the fact that the contradictions are of an internal nature and that they are not class contradictions. These people are, in other words, members of the rank-and-file of the masses and not dissident members of a different class. Although these contradictions in thought and action bear the stamp of a class struggle, their dominant features are not those of a class struggle. That is why the class struggle as reflected among the people cannot be considered a class struggle.

Some comrades are of the view that a class struggle does exist among the people since the serious criminal, degenerate and backsliding elements who turn their backs on the people were at one time part of the people. This view is obviously incorrect, because the status of the criminal elements before the commission of crimes is not the same as that after they have committed serious crimes. Just because Zhang Guodao [1728 0948 3614], Wang Ming [3769 2494] and Lin Biao were party members before their rebellion and escape, it cannot be said that the contradictions and the struggle against them are contradictions and a struggle within the party. The reason is clear and simple. After engaging in serious criminal activities, they have degenerated into hostile antisocialist elements and can no longer to be considered as belonging to the masses. The struggle against them waged by the people is therefore not a class struggle among the people, but a class struggle arising out of contradictions between hostile elements and ourselves.

Once we have made a distinction between the class struggle and the reflection of the class struggle among the people in the economic sector, we would be able to deal a sure, well-aimed and merciless blow against the criminal elements who do serious damage to the economy, to rescue those who have fallen on evil ways, to put an end to unscrupulous practices and to avoid repeating the error of widening the scope of the class struggle.

3

The line between the class struggle and the class struggle as it is reflected among the people may be said to be well-defined as well as ill-defined. It can be said to be well-defined because the class struggle and the class struggle as it is reflected among the people have their own definitions and reflections of social contradictions. That being the case, at certain times and places and under certain circumstances, the class struggle is a class struggle and the reflection of the class struggle among the people is a reflection and the two cannot be lumped together.

However, it can also be said that the line between the class struggle and its reflection among the people is ill-defined. Under certain conditions, each is capable of taking the form of the other. This transformation is accompanied by a process of change in their character.

First, contradictions among the people can be transformed into contradictions between the enemy and ourselves and the reflection of a class struggle among

the people can also be transformed into a class struggle. This transformation is predicated upon the transformation that takes place in the criminal elements themselves. Certain people among the masses, eroded by the decadent thinking of the exploiting class, may commit an error or even launch into a career of crime. If they are criticized, educated or disciplined in time, so that they may learn their lesson, mend their ways and desist from criminal activities; they may still be considered as members of the masses and the contradictions and struggle between them and the people may still be considered a reflection of the class struggle among the people. However, if they should resist criticism and education and continue in their criminal activities, or if their criminal activities went undetected during the transition period, they would get so deeply involved in crimes that they would eventually undergo a change in character and become hostile elements opposed to the cause of socialism. When that comes to pass, the struggle between them and the people may well turn into a class struggle.

Furthermore, the contradictions between the enemy and ourselves may change into contradictions among the people and the class struggle may change into a reflection of the class struggle among the people. The key to the change rests with the conditions. Most of the criminal elements who do serious damage to the economy are those who have embezzled large amounts of public funds or who are ringleaders of criminal gangs. All these are hostile elements who constitute the key targets of our attack. If, however, they were to give themselves up, admit their crimes and take the initiative in returning their stolen money and goods under the threat of legal reprisals, they would be entitled to be treated with leniency or even spared criminal proceedings. This magnanimous dispensation is conditional upon the candid confession of their crimes, the surrender of their stolen property and their determination to desist from further criminal activities. That is the basis and the conditions for changing the contradictions between the enemy and ourselves into contradictions among the people and for changing the class struggle into contradictions among the people as a result of the class struggle. On this subject, there are people who hold different views. Would this dialectic line, they ask, not be tantamount to a slight of hand? How can they accept the idea that the day before their confession, the acts of the criminal elements are considered a contradiction between the enemy and ourselves and that the day after their confession, the contradictions are considered contradictions among the people? This is a one-sided point of view. The fact should be obvious that, subjected to the awesome power of the policies and the laws of the party and the nation and following an intensive period of ideological struggle or with the help of their relatives and friends, they are able to decide to give themselves up, to surrender their stolen goods and to repent, is a signal that a change has taken place in the hostile relationship between themselves and the people. The moment they have made a clean breast of their criminal activities, they have completed the transformation process of the character of their relationship with the people. Actually, this phenomenon is not of recent vintage. In the battlefields in the past, the contradictions between enemy military officers and the people were contradictions between the enemy and ourselves. However, once the enemy military officers have decided to surrender themselves and to renounce their past wrong doings, the bygones are considered bygones and they have earned themselves the right to be treated with leniency. The contradictions are resolved the moment the enemy military officers have forsaken their ill-guided cause. They can

even become leaders and eventually military officers in the people's army. If reactionary military officers on the battlefield can turn over a new leaf, so can criminal elements who cause serious damage to the economy. It is important to appreciate the significance of this change. Once we have a firm grasp of this line of reasoning, it will be possible for us to make conscious use of the law and policies to divide and break up the enemy and to deal a merciless blow against the major criminals who, with their backs against the wall, continue to offer stubborn resistance. The laws and policies formulated by the party and the state against criminal elements who cause serious damage to the economy have already created a powerful impact. According to incomplete statistics furnished by 20 provinces, municipalities and autonomous regions, over 2,900 people have, of their own accord, given themselves up to the concerned departments, confessed their crimes and surrendered their stolen money and goods from 9 March when the Standing Committee of the National People's Congress announced its decision to deal severely with criminals who have caused serious damage to the economy to 16 April. Although many of them are petty criminals, there must be more than a few who belong to the category of serious criminals. This goes to support the view regarding the possible transformation of contradictions.

9621

CSO: 4005/1057

PARTY AND STATE

A REAPPRAISAL OF PATTERN OF QUALITATIVE CHANGES

Beijing ZHONGGUO SHEHUI KEXUE [SOCIAL SCIENCES IN CHINA] in Chinese, No 1, 1982, Jan 82, pp 59-78

[Article by Jin Guantao [6855 6034 3447] and Hua Guofan [5478 0948 0416]:
"Reappraisal of the Pattern of Qualitative Change"]

[Text] Must qualitative change be accomplished by a jump? This article proposes a new view regarding the pattern of qualitative change by reviewing the progress in natural sciences and in the study of catastrophe theory recently developed by foreign mathematical circles. It is believed that qualitative change can be realized by jumps and it can also be realized through gradual change. This article proposes a principle for use in deciding whether a natural phenomenon is a jump or a gradual change. It also studies the regularity of control points and the phenomena of overcorrection and the coexistence of extremes during the course of qualitative change.

Author Jin Guangtao, born in 1947 and graduated from the Department of Chemistry of Beijing University in 1970, is currently assistant researcher for the magazine NEWSLETTER ON NATURAL DIALECTICS of the Chinese Academy of Sciences. Hua Guofan, born 1946 and graduated from the Department of Chemistry of Beijing University in 1969, is currently instructor in the Department of Philosophy at Hangzhou University.

I. Difficulties in Studying the Patterns of Qualitative Change

For a long time, the study of qualitative change has focused on one point: How is qualitative change realized? There are many answers to this question, but they can be basically summarized into three main views.

The first can be called "the jump theory." They believe the conversion from one qualitative state to another qualitative state must be a jump. The course of gradual progression of quantitative change must discontinue and a control point that separates the two types of qualitative states emerges. The transition from the old qualitative state towards the new qualitative state is accomplished in a discontinuous way. The most frequently cited examples are violent

revolution, the breaking of materials, nuclear reaction beyond critical mass, the outbreak of economic crisis and boiling of water under constant pressure, etc.

The second can be called "the theory of gradual change." They believe that absolutely clear-cut, fixed and unchanging boundaries do not exist between any two qualitative states. The absolute efficiency of "either this or that" does not exist. All opposites and all differences merge in the intermediate stages. Therefore, the conversion between different qualitative states, is basically gradual and continuous. Their arguments include economic recovery, gradual oxidation of fuel, evaporation of water, social reform, changing social customs and biological evolution, etc. In these types of changes, it is very difficult to find a control point that clearly separates two qualitative states. Things gradually and continuously accomplish the transition from the old qualitative state to the new qualitative state. Darwin who held this view even inclined towards supporting the old saying that "there are no jumps in nature." Some metaphysical philosophers even denied qualitative change on this basis and believed that all changes in the world are quantitative changes.

For a very long time, the jump theory was explained as the only correct viewpoint on dialectic conversion. But when the great debate on linguistic questions broke out in the Soviet academic circles, the jump theory represented by K.R. Meyer's school of thought exposed its weaknesses. The evolution of language and violent revolution are completely different. Language has not evolved in sudden jumps. It has not evolved by a sudden disappearance of the current language and the sudden creation of a new language. It has evolved through the gradual accumulation of new qualitative elements and the gradual loss of the old qualitative elements. Thus, a conflict emerges in the theory. On the one hand, it cannot abandon the principle that qualitative change is a jump, and on the other hand it has to recognize that objectively, qualitative change progresses in different ways. To make up for this loophole in the theory, Soviet academic circles, while criticizing Meyer's school of thought, proposed a theory of "an explosive jump and a nonexplosive jump." This theory continues to recognize that qualitative change is a jump on the one hand, and on the other hand, divides jumps into an explosive type and a nonexplosive type. They classify the pattern of qualitative change like violent revolution cited by the theory of jumps as an explosive jump, and they classify the pattern of qualitative change like the evolution of language cited by the theory of gradual change as a nonexplosive jump.

The theory of "explosive jumps and nonexplosive jumps" represented the third view on the pattern of conversion in qualitative change. We can call it "the theory of two types of jumps." This theory has greatly influenced our nation's philosophical circles. It seems to have solved the question concerning the paths of qualitative change. But actually things are not so simple.

We believe that the "theory of two types of jumps" faces two difficulties. First, theoretically, we must clearly understand whether a jump is a qualitative change or a method of qualitative change? The theory of two types of jumps believes: "A jump is the conversion from one type of quality to another type of quality."¹ This means, a jump and a qualitative change are equivalent concepts.

Then what significance is there in discussing whether a qualitative change has to be realized by a jump? Since qualitative change is defined as a jump, the subsequent discussion would be equivalent to proving whether a jump must be carried out by a jump. Therefore, if a jump is not defined as the method of qualitative change, and if qualitative change and the method of qualitative change are not clearly separated, then in logic, this would amount to a tautology, and this will bring about confusion and difficulties in theory and thought.

Second, the "theory of two types of jumps" insists that all qualitative changes are jumps, the difference is only in the different methods of accomplishing jumps. Although it has explained the multiplicity of qualitative change from a certain angle, there are still many processes of qualitative change in nature that cannot be explained by the methods of jumps summarized by them. By definition,^{2,3} a jump should be "the discontinuity of gradual accumulation of quantitative changes in the process of development." This means, whether they are explosive jumps or nonexplosive jumps, qualitative changes are all jumps. Since they are jumps, there will be a discontinuation of the process of accumulation of quantitative changes, and by necessity, a critical point can be found. But as natural sciences develop and as man's understanding of qualitative changes become more profound, it has been discovered that discontinuation of quantitative changes does not occur in many processes of qualitative change. A critical point that clearly separates the old and the new qualitative states does not exist. Even in some changes in qualitative states that people have long become familiar with (such as the vaporization of water), as long as the condition of qualitative change is changed (for example, under high pressure, at critical temperature), entirely different ways of qualitative change can emerge. Under certain conditions, the accumulation of quantitative changes discontinues, and under certain other conditions, accumulation of quantitative changes does not discontinue. Quantitative change and qualitative change in things progress gradually and continuously. Under certain conditions, a critical point can be found in qualitative change while under a given condition, critical points cannot be found (for example, water can vaporize under critical conditions). This also shows that the question of methods of qualitative change is much more complex than originally believed. On the one hand, qualitative change was denied in the past. The criticism of the metaphysical viewpoint regarding all changes as quantitative changes was entirely correct. On the other hand, as science develops, more and more facts show that this is a wealth of methods of qualitative change that is far from being exhausted by the "jump theory" and the "theory of two types of jumps" alone. Studying the method of qualitative change, especially, studying how the methods of qualitative change vary according to the different conditions of qualitative change, is still a difficult problem in philosophy that awaits continued discussion.

We have discovered that as science develops, people have gained a richer and more profound understanding of the methods and conditions of qualitative change. Especially after the 1960's, a new branch of mathematics called "catastrophe theory" has emerged. Catastrophe theory uses mathematical models to grasp the various processes of jumps in nature and studies conditions of catastrophes and gradual change. It has been a beneficial inspiration in exploring the methods of qualitative change.

This article attempts to further explore the question of the methods of qualitative change starting out from certain scientific facts and utilizing the mathematical achievements of catastrophe theory to elevate the fundamental ideas of catastrophe theory in mathematics to the realm of philosophy. This attempt will help develop the theory of multiple methods of qualitative change in materialist dialectics. We have formed a fourth opinion concerning the methods of qualitative change on the basis of studying catastrophe theory in mathematics. We believe a jump is not equal to qualitative change. It is only a method of qualitative change. Qualitative change can be accomplished by a jump (or catastrophe⁴), and it can be accomplished by gradual change. The key to the different methods of qualitative change is determined by the conditions under which qualitative change is realized. These conditions can be strictly and clearly grasped by analysis using catastrophe theory. Catastrophe theory can clearly show that under certain conditions, discontinuation of the accumulation of quantitative change will occur in the course of qualitative change and control points will emerge. Under some other conditions, discontinuation of quantitative changes will not occur in the course of qualitative change and critical points will not emerge. We shall expound on this in the following.

II. Qualitative Change Can Be Realized in Two Ways, By Jumps and By Gradual Change

First let us analyze an example. Phase change of materials is more familiar to everyone. Since ancient times, the phenomena of boiling and condensation have always attracted people's interest. Many philosophers like to use these as examples when discussing the question of qualitative change. Hegel cited the example of water becoming ice when he explained the patterns of qualitative and quantitative changes. He believed, "water does not become hard gradually through cooling, it does not first become colloidal and then gradually harden to the hardness of ice, rather, it hardens immediately."⁵ He also said: "When the temperature of water changes, not only does the amount of heat drop, water also changes through the solid, liquid and vapor states. These different states do not occur gradually. Rather, they are at the points of intersection. The simple progress of change in temperature suddenly discontinues and terminates, and water jumps into another state. The emergence of another state is a jump. All life and death cannot progress gradually and continuously. They are the discontinuation of gradual progress. They are jumps from quantitative changes to a qualitative change."⁶ It can be seen from this example cited by Hegel that what he called a jump was actually the way in which qualitative change occurred. Water that "suddenly hardens" at the freezing point is indeed a very good example. It shows that qualitative change of matter can be accomplished by jumps. This was a very forceful rebuttal of the popular view of the time that "jumps do not occur in nature."

But the fact that qualitative change can be accomplished by jumps does not equal to the saying that qualitative change must be accomplished by jumps. Hegel cited only the example of water at the freezing point. In fact, there are many noncrystalline materials in nature, such as glass, paraffin wax, asphalt and such materials that gradually harden from a liquid state during the cooling process. They first become colloids and then gradually harden until a definite hardness is reached. A jump of sudden hardening does not exist.

We can conveniently use the phase change of water as an example. We frequently say that the boiling of water is a jump, but the occurrence of boiling is conditioned. Boiling, condensation, and the boiling point are only valid under ordinary conditions of one atmospheric pressure. In particular, the phenomenon of water jumping to a vapor state through boiling occurs only under certain temperature and pressure conditions. Under other temperature and pressure conditions, the boiling phenomenon no longer exists, and water undergoes a series of continuous intermediate states to reach a vapor state.

According to catastrophe theory in mathematics, the course of change between the vapor and liquid phases of water can be represented by the curved surface shown in Figure 1. This curved surface has been called the cusp catastrophe model. Every point on the curved surface represents the density state of water under particular temperature and pressure conditions. The general trend of the curved surface is to slide from the high point to the low point indicating that as the temperature rises and the pressure drops, water changes from a high density liquid state to a low density vapor state. The unique point on this curved surface is that it has a smooth fold. The fold becomes narrower towards the back and finally disappears at the point Q where the three layers meet. Q represents the density corresponding to the critical point. With the exception of the center sheet of the fold, the entire curved surface represents states of density stable. The center sheet of the fold is the unstable states of density.⁷

What philosophical insights can we obtain from this catastrophe model? We discover that from the viewpoint of the method of qualitative change, this model shows that the course of change of water from a liquid state to a vapor state can be accomplished in two entirely different ways according to the different ways of change in temperature and pressure. The first is when the conditions of temperature and pressure change in the AFB direction and before water is heated to 100°C under constant pressure. Although the density drops, water still maintains a liquid state. But when the edge of the fold is reached, the upper sheet of the curved surface that reflects the stable dropping process suddenly discontinues, and the density suddenly drops to the area of the vapor state represented by the lower sheet of the curved surface, and a drastic and discontinuous change occurs. This is equivalent to the phenomenon of boiling that occurs when water is heated to 100°C under constant pressure. It is a jump.

Besides the jump in boiling, water can change gradually from a liquid state to a vapor state via a second method. This situation occurs when the conditions change in the CD direction, i.e., the temperature and pressure are strictly controlled, and pressure is added according to the numerical values indicated on line CD while raising the temperature at the same time. It can be seen from Figure 1 that when the temperature and pressure pass the critical point along the direction of CD and change along the slope in the back of the fold of the curved surface, the change in water density is continuous and smooth. The density of water gradually drops and undergoes an intermediate and smooth change from being like water but not water and being vapor but not vapor to becoming a vapor. Jumps do not occur throughout the entire process of conversion from liquid to vapor and boiling does not occur. Under these conditions a critical point which intersects the path on the surface, that can be called a boiling point, and which separates the liquid state and vapor states of water, cannot be found.

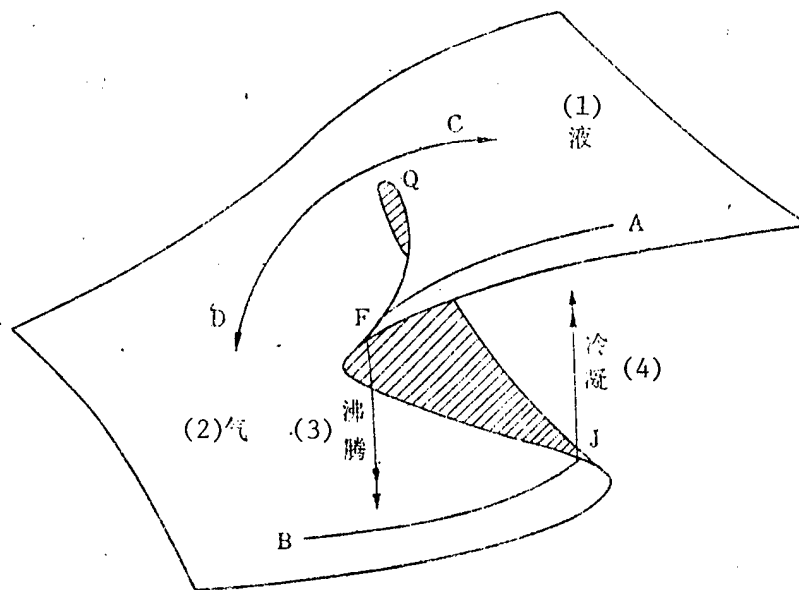


Figure 1. Phase Change of Water

Key:

(1) Liquid
(2) Vapor

(3) Boiling
(4) Condensation

The same two methods can be suitably used to describe the process of change from a vapor state to a liquid state. It can be seen from Figure 1 that the change of the vapor state to the liquid state can be accomplished separately by passing through the jump indicated by BJA or by a gradual change indicated by DC. But, when changing via the jump, the control point is not F but J. The density suddenly rises from J in the region of the vapor state to the region of the liquid state. This is the phenomenon of condensation.

The angle from which catastrophe theory in mathematics considers a problem is different from some theories of the past. It not only takes into consideration the method of qualitative change of the subject matter under certain specific conditions, it also emphasizes the study of the changes in the ways of qualitative change of matter when conditions change. It can be said that the nature of catastrophe theory is to uncover how the way of qualitative change of matter depends on changes in conditions.

Theoretically speaking, the course of qualitative change of all things that possess two mutually reversible stable states can all be described by the cusp model. Zeeman used the cusp model to describe the behavior of a dog.⁸ A dog has two reactions towards an external stimulus, attack and escape. They are two stable states in the dog's behavior equivalent to the liquid state and the vapor state in the example of phase change. These two behaviors of the dog are controlled by the two variables of anger and fear. When the element of anger grows and the element of fear weakens, the escape behavior of the dog will change to attack. When the element of anger weakens and fear increases, the

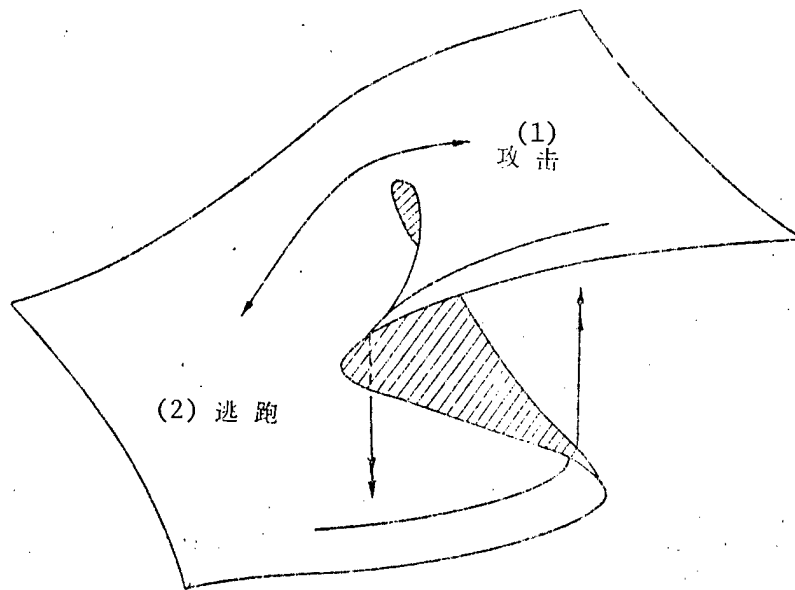


Figure 2. The Behavior of a Dog

Key: (1) Attack (2) Escape

dog will change its behavior from attack to escape. As the conditions change in different ways, the mutual qualitative change between the two behaviors of attack and escape by the dog in two different ways, a jump or gradual change. (Figure 2) The dog can gradually change its attack behavior to escape, and it can also suddenly change from attack to escape.

We have proposed that qualitative change can be accomplished via two ways, a jump or gradual change. Of course, this does not mean every concrete process of qualitative change can be realized in these two ways. Because of the limitations of the types of qualitative change (we will discuss this point in section 4) and the control conditions, a specific process of qualitative change may be accomplished in only one way. But it must be pointed out that in the past when people analyzed the process of qualitative change, they frequently considered only the changes that occurred under a specific condition and neglected the possibility of other changes that occurred when the conditions changed, thus hindering people's understanding of the multiplicity of the methods of qualitative change. People have a fuller understanding of accomplishing qualitative change via jumps but frequently neglect the fact that qualitative changes can also be accomplished by gradual change. Let us cite an example that is familiar to everyone:

Comrade Ai Siqi [5337 1835 1142] once cited an example of the collapse of Leifeng Tower in "Popular Philosophy" to explain in layman's terms the law of mutual change between quality and quantity. He said, the collapse of the tower undergoes two stages. In the first stage, the peasants steal one brick at a time. The supporting strength of the tower gradually weakens but the tower remains a tower and superficially no change can be seen. This is a

period of quantitative change and gradual change. In the second stage is the change at the time of collapse. The removal of the bricks has reached the ultimate limit, the tower cannot support its original shape and thus it collapses in one big thunderous roar. The change at this time is visible. Therefore, the change at this time is qualitative change and is a jump. This example cited by Comrade Ai Siqi represents a typical viewpoint of conversion between quality and quantity. It symbolically explains how the Leifeng Tower "collapses with a thunderous roar" in the stage of qualitative change and jumps to become a pile of ruins. But, besides this method of qualitative change of a jump, are there no other methods? If we imagine those peasants taking away the bricks one by one every day not from the bottom of the tower but beginning from the top of the tower, (we will temporarily assume that they have overcome the various technical difficulties), what would happen? Obviously, by removing the bricks one by one and layer by layer from the top of the tower until all bricks have been stolen, a jump of a "collapse in one thunderous roar" will not occur. The whole tower can be gradually destroyed and quality change is accomplished by gradual progress.

Some people may ask, since you say that quality change can be accomplished by gradual change, then it is the same as partial quality changes in the course of complete quantitative change? This question is a good one and it is necessary to make differentiations. The view of partial qualitative change (abbreviated partial qualitative change in the following) in the course of complete quantitative change is a supplementary viewpoint of the "theory of two types of jumps." It means that changes in matter can be divided into two types, gradual quantitative change and qualitative change in a jump. But, the course of quantitative change includes partial qualitative change. A partial qualitative change may manifest itself as a change occurring in secondary properties while the basic property has not changed, or it may manifest itself as a property change of individual parts while the overall property has not changed. This kind of partial qualitative change is a jump of a small scope or a small scale⁹ in the overall qualitative change of matter. Obviously, the viewpoint of partial qualitative change is different from our view that qualitative change can be accomplished by gradual change. The difference is manifested in the following two aspects:

First, a partial qualitative change refers to the change in secondary properties and partial properties of matter in the course of complete quantitative change. It is the preparatory stage for complete qualitative change, but to the partial qualitative change itself and to local properties, it is still a jump. For example, an example of partial qualitative change frequently cited is water being heated from 0°C to 100°C under constant pressure. Before the temperature reaches 100°C, water is in the stage of general quantitative change, but a part of the water has already vaporized. This is a partial qualitative change in the stage of general quantitative change. The fundamental qualitative change of water occurs at boiling at 100°C. At this time, water converts to steam en masse, rapidly and completely. Very obviously, partial qualitative changes are actually equivalent to a qualitative change via a jump observed statistically. When we view the entire body of water as consisting of individual parts, a part of the water first vaporizes before other parts of water become steam. The overall body of water does not undergo a qualitative change but to partially vaporized water, the change is a jump. The total qualitative change is

accomplished via partial qualitative changes. Actually, this is the same as regarding the total qualitative change as composing of small jumps of individual parts. But regardless of how partial qualitative changes occur, they are still accomplished via jumps. This is completely different from the qualitative change accomplished via gradual change that we have discussed. Scientific experiments have already proven that when the control temperature and pressure surpass the critical point, water vaporizes through the critical state and does not undergo partial vaporization that decomposes the change into small jumps. At this time, the entire body of water simultaneously passes through a series of intermediate states of not being water nor vapor and changes to steam continuously and smoothly. It is not a process of some water molecules changing first and not a process of change of certain secondary properties of water. This type of qualitative change by gradual progression is a new method of qualitative change. Actually, as long as conditions are strictly controlled, the condensation of liquid steel, melting of glass and paraffin wax is a process of qualitative change of the whole smoothly through a colloidal state and nonsolid and nonliquid states. It is not a process of a certain part hardening first to complete the transition of the qualitative stages.

Second, although partial qualitative changes occur in the stage of quantitative change, locally they are still jumps, therefore they are still defined by critical points. As for jumps of partial qualitative change, we can always find a critical point. The catastrophe theory in mathematics has proven that vaporization of water before boiling under constant pressure also has a corresponding critical point as regards the vaporized portion. This critical point is similarly located in the fold shown in Figure 1. On the other hand, the critical point of total qualitative change of the system is the statistical average of the critical points of such partial qualitative changes. But in the course of gradual qualitative change as we mentioned, critical points absolutely do not exist. Take the collapse of Leifeng Tower as an example, when the peasants begin stealing bricks from the bottom of the tower, the collapse of the tower is a critical point. Before collapsing, the peasants had stolen the bricks one by one. This is quantitative change. If we say that at this time, partial qualitative changes are present in overall quantitative change, then this partial change is also limited by the critical points, and a critical point must exist in the course of total qualitative change. But, qualitative change accomplished by gradual change is not so. The peasants begin stealing bricks from the top of the tower. The whole conversion of the qualitative states from being a tower to not being a tower starting from stealing the first brick to the end when all bricks have been stolen is accomplished continuously and via gradual change. What degree of destruction due to stealing bricks from Leifeng Tower should be the mark of its disappearance? Should it be when the top of the tower has been stolen or should it be when the body of the tower has disappeared? Should it be when the base of the tower has been completely stolen? Or should it be the time when all of the bricks have been stolen with nothing left? It is difficult to say. At this time, a critical point that can clearly differentiate between being a tower and not being a tower does not exist in the course of qualitative change. We can only say that the tower progresses one step further towards not being a tower for each brick that is stolen. The entire process of this qualitative change accomplished via gradual change is continuous and smooth and there are no critical points. Readers may disagree by saying that we can always establish a definition to differentiate a tower from not

being a tower and regard this as the critical point to differentiate between the two qualitative states. Obviously, such an artificially established critical point to differentiate between the two quality states is not the critical point that emerges when a jump occurs in matter as we have discussed above. The critical point in material phase changes (such as the boiling point and freezing point) and the critical point in the collapse of Leifeng Tower are not established when we define the differences between the qualitative states but exist objectively in matter during the course of qualitative change and they are points of demarcation that clearly differentiate between the two qualitative states. Therefore, the critical point discussed in this article has a clear meaning. It does not refer to the boundary limits between two types of qualities artificially defined by man when we establish the difference between two qualitative states. In gradual qualitative change, the critical point that we have already clearly defined does not exist.

Therefore, a gradual qualitative change is accomplished by the gradual accumulation of the elements of new qualities and the gradual dying out of the elements of old qualities. In the course of qualitative change, a critical point that separates the old quality and the new quality cannot be found. Then readers will naturally have another question, that is: is the idea of gradual qualitative change confusing qualitative change and quantitative change and are there no differences between quality and quantity? If so, is it not providing an argument for the metaphysical philosophers to negate qualitative change and to conclude that qualitative change is quantitative change? Actually, the reason that this question has been mentioned is because qualitative change and the method of qualitative change have not been strictly separated. Matter possesses a qualitative regularity and a quantitative regularity. Quality and quantity cannot be equated. The qualitative change accomplished by gradual change we are talking about refers to the change in the regularity of quality, therefore it will not be confused with quantitative change. Take the phase change of water as an example. Here, the regularity representing the quality of water is the physical state of water such as density while the regularities of quantity are temperature and pressure. The phase change accomplished by gradual change refers only to the continuous transition of the physical state of water (condensed state) from the liquid phase to the vapor phase. It refers to the change in the regularity of quality itself, not quantitative change. Perhaps readers still have a further question: isn't density the regularity of quantity? Actually, dialectics has already pointed out, the difference between quality and quantity is not absolute. Both mass without quantity and quantity without mass cannot be imagined. Abstractly considering whether "density" is mass or quantity is meaningless. In the study of the phase changes of water, "density" represents the state of the physical phase and it is a regularity of quality. In some other studies (such as cosmology, geotectonics), material density can be entirely a regularity of quantity. But to any concrete process, the regularity of quality and the regularity of quantity are different and there is a strict difference. This is demonstrated outstandingly in the mathematical models of catastrophe theory. The regularity of quality is generally expressed by variables of states of matter while the regularity of quantity is expressed by controlled variables (or conditional variables). They must be clearly stated and they cannot be confused at the outset when proposing a catastrophe model.

III. How Do We Distinguish Between a Jump and Gradual Change

Advocates of "the theory of gradual change" believe that absolutely clear-cut, fixed and unchanged boundary limits do not exist between any two kinds of qualitative states, and the absolute result of "either this or that" does not exist. All opposites and all differences merge in the intermediate states. A series of intermediate states that connect the two can always be found between any two types of quality states. These intermediate states have to be passed through in any conversion process. Therefore, they believe that regardless of how fast or slow the conversion is, qualitative change is always continuous and gradual. For example, water boils at 100°C under constant pressure to become steam. We say water changes suddenly from a density of a liquid state to a density of a vapor state, this is a jump process. But to advocates of "the theory of gradual change," the change in water density must also pass through those intermediate densities between the density of the liquid state and the density of the vapor state, the only difference is that the time is very short. Therefore they believe that one cannot say that a discontinuous jump occurs. Also, for example, a rectangular piece of wood that is standing on one end will topple and lie horizontally under external force. At the beginning, the block of wood gradually reclines under force until the inclination reaches a certain angle and the wooden block suddenly falls. The angle suddenly becomes 90° . We say this is a jump. But advocates of "the theory of gradual change" believe that regardless of the speed of fall of the block of wood, it must continuously pass through all angles between 0° and 90° ; therefore one cannot say that there is any discontinuous stage of jumping in between. This viewpoint is particularly easily accepted by biologists. This is because when studying biological evolution, as massive amounts of fossils of ancient creatures of intermediate characteristics are discovered, the gaps between animal species are gradually filled, and evolution, in most cases, can only be understood as a process of gradual change over a thousand million years.

This viewpoint does not recognize the traditional distinction between a jump and gradual change based on the speed of development in the progress of qualitative change. In fact, this viewpoint has proposed that differentiation should be based on the continuity or discontinuity of the process of qualitative change. But it also believes that all processes of qualitative change are continuous, thus it concludes that jumps are gradual changes, and it fundamentally denies the existence of the phenomenon of jumps. This shows that further studies are needed to find out how one can distinguish whether a certain method of qualitative change is a jump or gradual change.

We believe that judgment based on the continuity or discontinuity of the process of qualitative change is not valid. This is because every process of qualitative change, whether it is a jump or gradual change, is a transition between two types of quality states. When one quality state passes to another quality state, in principle, it must go through all of the intermediate states. The fundamental difference between a jump and gradual change is in the method of qualitative change. It is related to how matter passes through these intermediate states, not whether matter has passed through the entire course of intermediate states.

The traditional judgment for differentiation based on the speed of change also has its superficiality and onesidedness. Of course, jumps usually occur suddenly while gradual change usually occurs gradually. These two concepts were proposed originally according to a differentiation based on the meaning of speed.

But this is only an external difference. The speed of development of the processes of gradual change of some matter is not slow. We will cite the example of acidic and alkaline titration in the following. The speed of development of jumps in some things and events is not fast, for example, social revolution can last for several years and several dozen years.

How are jumps distinguished? We have discovered in studying catastrophe theory in mathematics that they can be distinguished by observing whether the stability of the progress of qualitative change of things has been destroyed. If things always develop smoothly and stably throughout the course of qualitative change, if all the intermediate states between the two types of qualitative states are stable states, then such a change would be a gradual change. If the internal stability of things is destroyed during the course of qualitative change, if unstable states exist among the intermediate states between two types of qualitative states, then the smooth and continuous course of change will be discontinued, and a jump will occur.

According to this principle of judgment we have proposed, boiling of water at 100°C under constant pressure is a jump because under this condition, all of the intermediate density states between the density of the liquid state and the density of the vapor state are unstable states. The nature of boiling water is a transition from the stable liquid state to the stable vapor state. Water cannot remain in the unstable intermediate density state. Conversely, if we control the conditions according to the CD curve in Figure 1 and surpass the critical point, then, all intermediate density states between the liquid state and the vapor state are stable, and water density can gradually become thin without boiling and water can become a series of stable intermediate states of being like water but not water and being like vapor but not vapor until it reaches the vapor state via gradual change. In the course of change of the block of wood from standing to lying down, we recognize that the block of wood passes through all angles between 0° and 90° , but beginning from a certain angle, the center of gravity of the block of wood surpasses a supporting point, and it goes through an unstable transient stage and topples, therefore it is a jump.

In analytical chemistry, the behavior of pH near the equivalent singularities in the titration of strong acids and strong alkalines has always been regarded by many people as a jump. The titration curve in Figure 3 shows the precipitous change near the equivalent singularity. It shows that when the titration reaches the vicinity of the equivalent singularity, the pH changes rapidly. Actually, the solution under the control of the titrating agent is stable throughout the titration process. Even near the equivalent singularity, the pH value is still controlled by strict titration conditions, i.e., as long as the amount of alkaline added is very small, the change in pH of the solution can always be made sufficiently small, and the curve can always be differentiated. If there is an unstable area in the pH, then it cannot be used for quantitative analysis. Therefore, this is a process of gradual change.

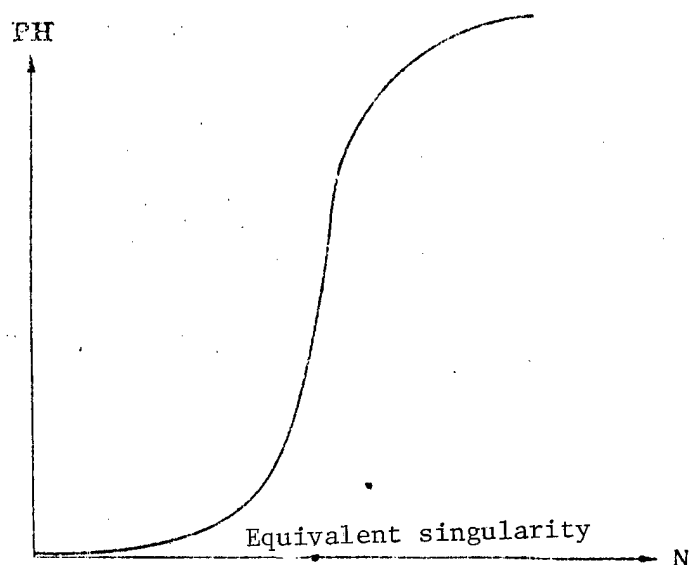


Figure 3. Acidic and Alkaline Titration Curve

The use of stability to distinguish jumps has special meaning in those systems that have complex feedback connections, self-propagating systems and self-organizing systems. Frequently there are many factors that affect these types of systems. Usually, we cannot find a simple catastrophe model to describe them. Their change is not only determined by other controlling conditions, it is also determined by the changes of the system itself. It is very interesting to study the qualitative changes of these types of systems. We know that fuel can release heat via natural oxidation and it can also release heat by explosion. Why is there such a difference? This is because in an explosion, the heat released after a part of the fuel oxidizes cannot be diffused in time and the surrounding temperature rapidly rises. This hastens the oxidation of the surrounding fuel and further raises the temperature. In this way, a positive and negative feedback system is formed. Lighting only a small part of the fuel will cause the whole fuel to immediately enter an unstable state and all of the fuel oxidizes suddenly in an explosion. This is a course of qualitative change accomplished by a jump. Under natural oxidation, the thermal energy can diffuse in time and the oxidation of a part of the fuel will not affect the stability of the whole fuel. The fuel can undergo stable reaction in the course of oxidation and a positive and negative feedback system is not formed. Therefore, this is a process of gradual qualitative change. For the same reason, we can understand without much difficulty that an avalanche is a jump and snowballing is gradual change. The pile of snow in the two situations has a different stability. In his "Science of Logic," Hegel once asked whether pulling out a strand of hair from the head would make a person bald and whether a pile of grain would still remain after removing one grain to explain how quantitative change leads to qualitative change. In order for us to determine whether a qualitative change is accomplished by a jump or by gradual change, we must not only study quantitative change, we must also study the stability of matter when qualitative change occurs. Obviously, the hair remaining after pulling out one strand will

still grow stably on the head. The remaining pile of grain after we have removed one grain still retains its stability. Therefore, the formation of a bald head and the course of removing the entire pile of grains are all realized by gradual change. If we use a set of dominoes, then the situation would be very different. The falling of one piece will affect the stability of the remaining dominoes and they will fall one after the other. This is a jump. Therefore, the question is not how fast the change is but stability. No matter how we hasten the speed of removing the grains or reduce the speed of falling dominoes, we cannot change the nature of being a gradual change or being a jump.

We can also analyze the collapse of Leifeng Tower from this. The peasants steal the bricks one by one from the bottom of the tower and fundamentally disrupt the stability of Leifeng Tower. When a definite control point is reached, the stability of Leifeng Tower is destroyed, and the tower collapses in a thunderous roar. The tower undergoes an unstable stage. Therefore it has been judged to be a jump. If the peasants steal the bricks one by one from the top of the tower until Leifeng Tower is completely dismantled, the transition has always remained stable, and no unstable stages emerge in between. This method of qualitative change is gradual. Therefore, the question is not the speed of stealing the bricks by the peasants nor the speed of collapse of the tower but the method of stealing the bricks because stealing the bricks from the bottom of the tower and stealing bricks from the top of the tower produce different effects upon the stability of the entire tower.

Compared to certain physical and chemical processes, the situation in the biological realm is much more complex. Whether the process of evolution of animal species is gradual change or a jump has been a major debate over the years. The catastrophe theory in mathematics reminds us that if we want to determine whether the evolution among animal species is a gradual change or a jump, we must not only prove whether various transient species and intermediate species exist, we must also study whether the characteristics of these transient species and intermediate species are stable. We cannot conclude from the existence of transient species and intermediate species alone that the process of evolution is gradual change. In addition, the situation of living beings is more complex. There may be many characteristics that mark evolution. Variables of multidimensional states are needed to describe them. According to the above theory, it is possible that certain characteristics have stable intermediate states while certain other characteristics do not possess stability. Take the evolution of the ape to man as an example, the transient characteristics between crawling on four legs and walking upright are unstable in the view of mechanics, but manufacturing tools, language, mobility, etc. can all have stable intermediate states. When we consider the relationship between the various characteristics (related change), it may be very complicated to use mathematical methods to establish a model for evolution with variables of multidimensional states. But this is a new starting point. Developing work in this regard may lead us to a more profound understanding of the nature of evolution.

The use of stability in the course of conversion between qualitative stages of matter to distinguish jumps is similarly suitable for studying problems in social sciences. In the past, we labeled all social change as jumps. This seemingly needs further deliberation. When we analyze a social change to find

out what method it uses to unfold itself, on the one hand, we must see whether this change occurs suddenly, whether the speed of the change is rapid and whether violent means are used, etc. More importantly, we must also see whether society remains basically in a stable state during the course of change, whether politics, economy, military affairs, people's lives of the entire society have experienced an unstable period of massive destruction and big upheavals. Although they were similar transitions from a feudal society towards capitalism, the French Revolution and Japan's Meiji transformation were visibly different. During the Meiji transformation, although the anti-imperialists and the imperialists did clash violently, the series of reforms implemented by the Meiji government was carried out when the whole society and life were basically stable. When the French Revolution developed, the whole society and life underwent violent upheavals.

IV. Conditions To Realize Jumps and Gradual Change

Catastrophe theory in mathematics tells us through models that conversion of qualitative states can be realized by jumps and by gradual change. Even more importantly, it has pointed out under which control conditions is qualitative change a gradual process. It is not difficult to use the language of mathematics to describe the conditions of jumps and gradual change. We already know from Figure 1 and Figure 2 that the control of qualitative change either by a jump or by gradual change is entirely determined by how the control conditions vary. Even though the starting point of change is the same and the results are the same, the change in the direction of AB undergoes a jump while the change in the direction of CD undergoes a gradual change.

Then can we make some general conclusions from the models provided by catastrophe theory in mathematics? According to the catastrophe theory in mathematics, we discover that a rather rough but interesting conclusion can be obtained. During the course of mutual conversion between two qualitative states, there are always two basic elements that are related to the changes in conditions, i.e., the element of maintaining the stability of the old qualitative state and the element of establishing the stability of the new qualitative state. If the new qualitative element strengthens but the old qualitative element does not visibly weaken, qualitative change will either not occur or when it does it will surely be realized in a jump. Conversely, if the new qualitative element strengthens while the old qualitative element visibly weakens, qualitative change will be accomplished in a gradual manner.

People commonly undergo such an experience. When the force that stimulates the occurrence of qualitative change and the force that stops the occurrence of qualitative change are both strong, both sides form a violent opposition and qualitative changes in matter either do not occur or else they will occur as jumps. If the strength of one side gradually increases and the strength of the other side weakens, the opposition will ease and qualitative change, when it occurs, will be gradual. Some materials such as pig iron and rocks will not easily deform but when they are subjected to deformation under a strong force, they will very possibly break suddenly. Some materials like rubber and plastics deform very easily under external force and even if deformation occurs they will not suddenly break. Zeeman used the catastrophe theory in mathematics to study the occurrence of economic crises. The occurrence of an

economic crisis can be seen as a qualitative change of economic behavior from prosperity towards recession. When an economic crisis erupts, generally, the force that leads to recession and the force that stops recession are both strong. The two elements will push economic behavior towards the front of the folded area of the cusp model. Therefore, the crisis always occurs as a jump. Economic behaviors all have an unstable explosive stage. After a period of recession, the prosperity element will begin to gradually strengthen while the recession element will become relatively weak, therefore the course of recovery of qualitative change of the economy from recession towards prosperity always proceeds behind the folded area in a gradual manner, and economic behavior undergoes a stable climbing stage. The process of illness in people is also the same. When illness occurs, many symptoms suddenly deviate from the normal state. During recovery, the patient has to recuperate slowly. In general, when illness is about to occur, pathogenic factors are stronger but resistance of the body is also strong. When illness occurs, the body is in an unstable state and a jump occurs. After illness, the pathogenic factors are gradually weakened by man's resistance and the body undergoes a stage of gradual recovery. A popular saying states that "illness comes like the collapse of a mountain, illness goes away like drawing silk." Catastrophe theory suggests to us that there is a folded area in the model corresponding to the pathological model. During an illness, the various control factors push the symptoms into this folded area. During recovery, the various factors cause such symptoms to go around the folded area and climb along the continuous part of the curved surface.

After studying the dependence of the method of qualitative change upon conditions, it is not difficult for us to understand why jumps can be converted to gradual change and gradual change can be converted to jumps by changing the controlling conditions in certain situations. Zeeman and J. Hevesi used the butterfly catastrophe model to establish a mathematical model for anorexia nervosa.¹⁰ The patients of this disease alternately fast and gorge and their behavior jumps between two extremes. To convert the jumps into the normal state of gradual change in the patients, Zeeman and Hevesi used hypnosis to introduce a controlling variable to calm the patients. The patient's state which is a catastrophic state in which fasting and gorging coexist is guided into a pocket shaped three-value region in the hypnotic state and then smoothly from the center sheet into the normal area of gradual change behind the pocket.

In the catastrophe models of the cusp and butterfly and such catastrophe models of even order functions, the stable states can interchange in a reversible manner, i.e., one qualitative state can change into another qualitative state and the other qualitative state can change back to the first qualitative state. The catastrophe theory in mathematics points out that the method of qualitative change, as a jump or as a gradual change, can be selected in principle by changes in the controlling conditions. In the catastrophe models of the fold, the swallowtail and such catastrophe models of odd order functions, there are some irreversible stable states. Catastrophe theory points out that these types of qualitative changes are not necessarily selectable by changing conditions. This is worth noting.

V. Critical Points

Do qualitative changes in matter always occur at critical points? Can critical points be found for all different qualitative states of matter to distinguish them from each other? Does the position of the critical points vary as conditions change, and how do they vary?

We believe the catastrophe theory in mathematics has strictly and generally studied the dependence of critical points on changes in conditions. Therefore it can more scientifically describe the existence and nature of critical points. According to catastrophe theory in mathematics, we discover that the critical point between two mutually convertible qualitative states is not a fixed point but a region that is spread out in a definite pattern according to changes in conditions. This distribution pattern is illustrated in Figure 4. In the figure, the two variables u and v separately represent two conditions that control the changes in the qualitative states of matter. In the two examples we cited previously, they represent the two basic variables of temperature and pressure, anger and fear, factors causing economic prosperity and recession respectively. Region a and region b respectively represent the range of existence of the two qualitative states a and b . In the examples we have discussed, they respectively represent the liquid state and the vapor state of water, the attack and escape behavior of the dog, economic prosperity and recession. The shaded region in the figure is the range of distribution of control points. Its vertex Q is a cusp, therefore this catastrophe model is called the cusp model. As the control variables increase, the shaded area continues to expand forward. Careful readers may have already realized that Figure 4 is actually the projection of Figure 1 and Figure 2 on the bottom plane. The shaded area of the cusp is actually the projection of the folded regions of Figure 1 and Figure 2.

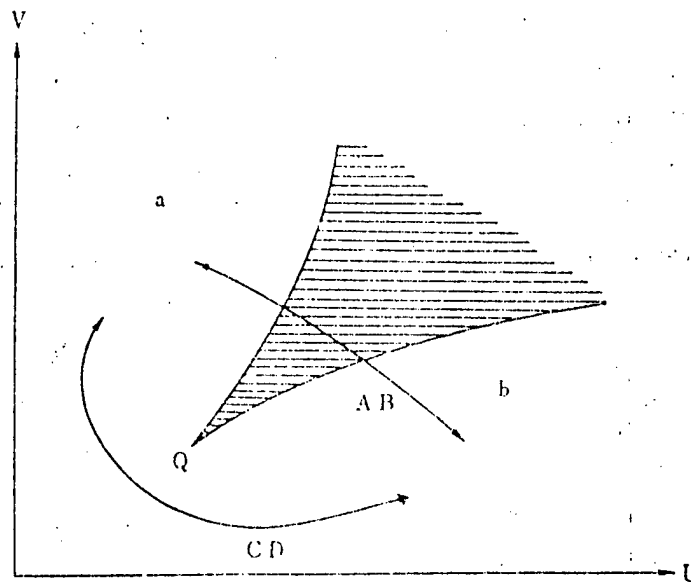


Figure 4. The Area of Distribution of Control Points of the Cusp Model

It can be seen from Figure 4 that the qualitative state a and the qualitative state b can change into each other via many paths but generally speaking, there are only two situations. One is to pass through the shaded area and line AB represents a jump. The other is not passing through the shaded area and line CD represents gradual change.

During the course of conversion from the qualitative states a to b along AB, whenever the change in condition enters the shaded area (folded area), the possibility that the qualitative state a will jump to become the qualitative state b is indicated. Every point inside the shaded area can become a critical point for the jump. Therefore we say that the critical point is not a fixed point but a region that follows a pattern in distribution and that changes with conditions. This region must necessarily be a cusp like the shaded area in Figure 4 when two qualitative states mutually convert into each other. According to catastrophe theory in mathematics, at which concrete point does a jump occur during qualitative change is determined by the size of external interference. The greater the interference, the sooner the occurrence of the jump. The critical point on line AB enters the shaded area. The smaller the interference, the later the occurrence of the jump and the critical point on line AB leaves the shaded area.

If the critical point goes around line CD and passes the vertex, the transition between qualitative state a and qualitative state b will be accomplished by gradual change. We can see from Figure 4 that at the lower left of the shaded area, there is no clear boundary between region a and region b. The corresponding behavior of the curved surface is continuous and stable. Line CD passes through a series of stable intermediate states that are like a but not a and like b but not b. Because the line does not pass through the shaded region, therefore, in such processes of qualitative change, a point that clearly separates state a and state b cannot be found, a point that marks the "conversion from quantity to quality" cannot be found, and a point where a jump will occur cannot be found. In one sentence, the process of this type of qualitative change does not have a critical point. When matter passes from a to b, the proportion of state a gradually lessens and the proportion of state b gradually increases. Every step approaches closer to state b and finally the matter changes completely to state b.

We find that in different catastrophe models, the critical points have different dependent relations with changes in conditions. They each have their own range of distribution. Actually, experts in catastrophe theory in mathematics all use the figures of distribution of critical points in the space composed of conditional variables to express the catastrophe models. We have introduced the cusp catastrophe model previously. It is a relatively simple and basic model. It describes the situation of mutual conversion of two qualitative states. If a matter has three qualitative states, and if they can all be mutually convertible, then the butterfly model catastrophe has to be used to describe it. For example, water actually has three different physical states as a solid, a liquid and a vapor. They are all mutually convertible. The corresponding catastrophe model is the butterfly model. The cusp catastrophe is only a special case of the butterfly model. Figure 5 represents the region of distribution of the critical points of the butterfly catastrophe and a, b and c respectively represent three qualitatively different types of state. This figure is like a flying

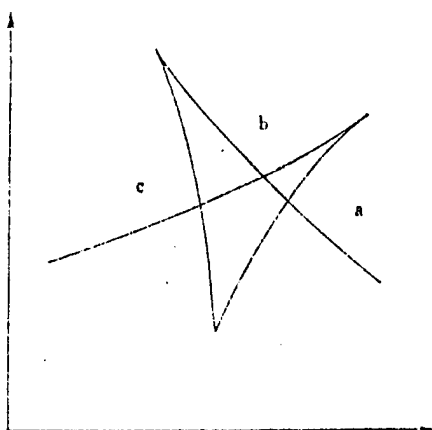


Figure 5. Butterfly

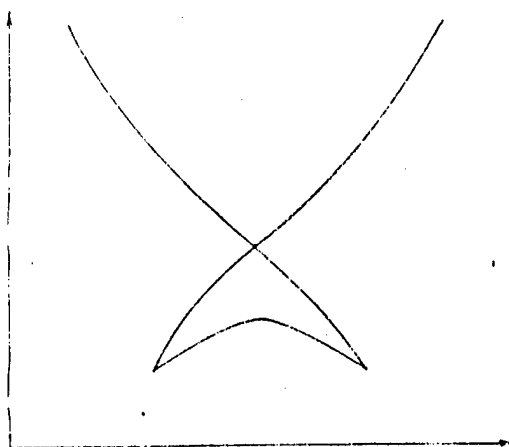


Figure 6. Swallowtail

[Note: Diagram is misleading. Because it represents a multilayered folded surface it is not clear that a, b, and c lie on different regions of this surface.]

butterfly therefore the model is called a butterfly model. Besides using it to explain phase changes of matter, the butterfly model has also been used to study the acidity and alkalinity¹¹ of hydroxides of the various elements in the periodic table, stability of ships,¹² etc.

The cusp and butterfly models are models for matter that can undergo reversible conversions between several qualitative states. Some processes in nature are irreversible. For example, death is a type of qualitative change. The living state of a person qualitatively changes to the state of a dead person but the reverse is not possible. These processes can be described by the fold and the swallowtail models and such models with potential functions of an odd order as the highest. Figure 6 is the distribution diagram of the control points in the swallowtail catastrophe. It looks like a tail of a flying swallow. The swallowtail, cusp, fold and other catastrophes have been used to explain several optical phenomena.

If the number of stable qualitative states is increased to four, the models that describe the changes among them are called the wigwam model (Figure 7) and the star model (Figure 8).¹³ As the number of stable qualitative states of matter increases, the conditional variables also increase, and the distribution of critical points in the catastrophe model becomes more and more complex. It has been proven mathematically that when the control variables that influence qualitative change number more than 5, there will be an infinite number of catastrophe models. We believe this profoundly explains the richness of the forms of qualitative change in nature.

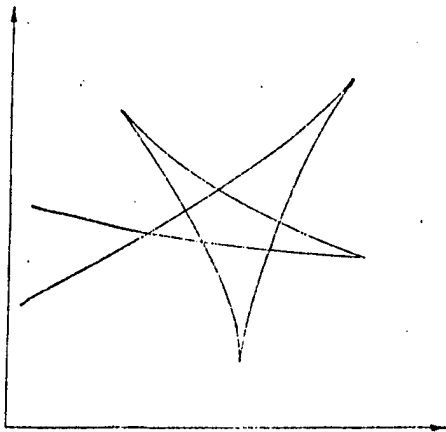


Figure 7. Wigwam

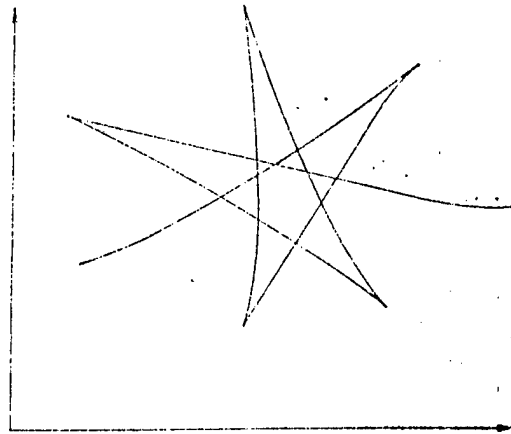


Figure 8. Star

VI. Is Overcorrection Necessary?

"Overcorrection is necessary. Without overcorrection, deviation cannot be corrected." This means that some things produce definite results under definite conditions, but when these conditions disappear, the results do not disappear, and things cannot immediately return to their original shape. We must wait until the conditions change in the opposite direction to a definite degree and a very large reaction emerges before things can return to their original shape. In scientific terms, this phenomenon of overcorrection is called delay. For example, we apply a definite force to a piece of iron wire, and the iron wire will bend. If we remove the force, the iron wire will not immediately straighten. It frequently requires us to apply a counter force to a fair degree before it will straighten again. Whether in natural sciences or in social sciences, this delay phenomenon can be encountered frequently.

Then, is overcorrection a common regularity? Must there be overcorrection in any situation? We believe this is like the regularity of the emergence of critical points. In the past, people could only obtain some ambiguous and general understanding based on experience and they could not use scientific methods to explore it profoundly. Even over a period of time, some people blindly regarded overcorrection as absolute and in actual work, things were overcorrected, creating a lot of unnecessary loss.

We have discovered in our study of catastrophe theory in mathematics that the phenomenon of overcorrection has strict conditions. It occurs only when qualitative change is accomplished by a jump. In the course of phase change of water between the vapor and liquid states, overcorrection frequently occurs, i.e., the phenomenon of overheating of water and the phenomenon of overcooling of steam. The boiling point under constant pressure is 100°C , but everyone knows that if we use pure water for experiment, and if we fully eliminate vibration and such interferences, water often will not boil when heated to 100°C . It will boil and become steam only when heated beyond 100°C . Conversely, steam should theoretically condense under constant pressure at 100°C , but often it

will condense and become water slightly below 100°C . Thus an area of overheating of water and an area of overcondensation of steam are formed near 100°C . This means, the critical point for water to become vapor and the critical point for vapor to become water are not identical and may occur under different conditions. The qualitative change in both must be "overcorrected" before the other condition can occur. We can use Figure 9 to represent this phenomenon. Figure 9 is actually a section of the cusp model. The water density curve in the figure is a double fold. The boiling point at 100°C under constant pressure we usually talk about is only a statistical number under conditions of interference. If changes in temperature and pressure conditions avoid the folded area, water and vapor will not undergo qualitative changes via boiling and condensation, instead, qualitative changes will be accomplished gradually. A control point will not exist and overcorrection will not occur.

The bistable elements widely used in electronics technology store processed information via the mutual conversion between two qualitative states. In their operating principle, the relationship between jumps and overcorrection is very important. For example, the type of bistable element like the magnetic core operates by overcorrection. Therefore it must realize a qualitative change between two stable states by jumps. Figure 10 shows the working principle of the magnetic core. It shows that when the current reaches a definite value, the negative residual magnetic state returns to the negative residual magnetic state, the current in the opposite direction must be increased to near another value. If the magnetic core is not operating in a jump region, a phenomenon of overcorrection will not exist, and a series of intermediate and transitional states that do not have clear differences will emerge between the two qualitative states of the magnetic core, and the magnetic core will not be able to operate normally.

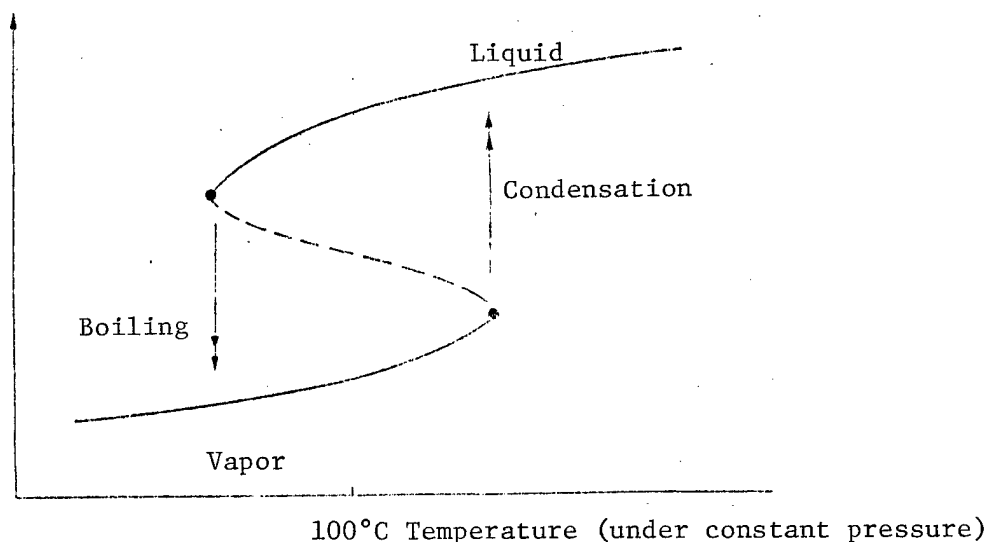


Figure 9. Overcorrection in the Phase Change of Water

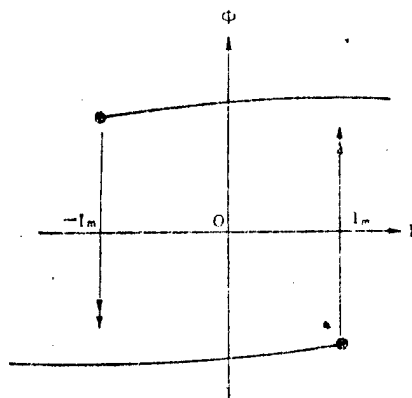


Figure 10. Overcorrection in the Operation of the Magnetic Core

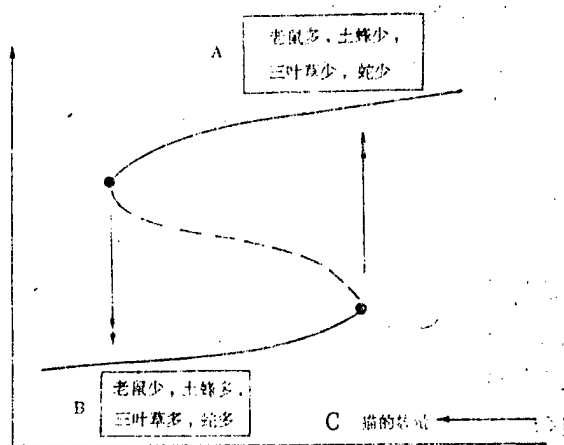


Figure 11. Overcorrection in the Ecological System

Key:

- A. More rats, less discolia fascinata, less trifolium, less snakes
- B. Less rats, more discolia fascinata, more trifolium, more snakes
- C. Number of cats

The phenomenon of overcorrection in ecology was noticed by people only in recent years. An ecological system consisting of rats, discolia fascinata, trifolium and snakes has the following relationships: The rates destroy the hives of the discolia fascinata. The discolia fascinata propagate the pollen of the trifolium. The trifolium nurtures the snakes and the snakes eat the rats. This ecological system has two stable states. The first stable state is: more rats, less discolia fascinata, less trifolium, less snakes. The second stable state is exactly the opposite: less rats, more discolia fascinata, more trifolium, and more snakes. If this ecological system is in the first stable state at the beginning, the residents near the field will gradually acquire the habit of keeping cats and the number of cats will increase. What effect will this externally added condition have on the ecological system? There will not be any change at the beginning, but when the number of cats reach a certain level, the original ecological balance will be broken, and the system will suddenly jump to the second stable state with less rats, more discolia fascinata, more trifolium and more snakes (see Figure 11). At this time, if the number of cats is reduced, will the ecological system quickly return to the first stable state? Obviously, it will not because when there are more snakes, the snakes will effectively limit the population of rats. The number of cats must be reduced to much less than the original number before the opposite jump will occur and the phenomenon of overcorrection is very obvious. In ecology, change in conditions will lead to the extinction of a certain life form and the delay is infinite. Such qualitative changes are irreversible.

The phenomenon of overcorrection we are talking about will occur only when qualitative change proceeds in jumps. Then conversely, do all situations in which jumps occur require overcorrection? Not necessarily so. According to catastrophe theory in mathematics, even in situations in which jumps occur, overcorrection may not be necessary. This is because when qualitative changes proceed, there are always various kinds of interference and when the effect of interference is fairly great, things can often return to their original qualitative state without necessarily applying an overdose of opposite effects. Catastrophe theory points out that the phenomenon of overcorrection can only exist within the area of distribution of critical points given by the catastrophe model. Outside of the areas of distribution of critical points, overcorrection is not needed.

VII. Coexistence of Extremes

Another important phenomenon related to qualitative change is coexistence of extremes. It has also been more thoroughly studied for the first time by catastrophe theory in mathematics.

This type of phenomenon generally occurs in large systems consisting of a large number of subsystems. Under definite conditions, each of the subsystems of the large system may simultaneously be in completely different qualitative states. In layman's terms, certain parts of one thing may exist in one type of qualitative state while at the same time another part of the thing exists in another qualitative state. For example, water is composed of many water molecules. Under ordinary conditions, water will exist entirely as a solid or entirely as a liquid or a vapor. But under definite conditions, an area of coexistence of two states may appear, for example, in the area of coexistence of vapor and liquid. A part of the water exists as vapor and another part of water exists in a liquid state and both coexist simultaneously. Water also has an area of coexistence of three states, i.e., the three states of water as a solid, liquid and vapor can coexist simultaneously. The famous triple phase point of water is the area of coexistence of the three states. Also, for example, in laser resonance, as long as definite conditions are controlled, part of the gas molecules are in a high energy state while the gas molecules of another part are in a low energy state. The high energy molecules can change to a low energy state by emitting light and the molecules in the low energy state can be excited to a high energy state. The numbers of both form a definite balance and coexist.

People have called this phenomenon the coexistence of extremes because under the conditions given in the area of coexistence, the different coexisting qualitative states are not continuous. For example, water in the area of coexistence of vapor and liquid can only be of two different qualitative states, vapor or liquid, and it cannot be in those transient states between the two phases of vapor or liquid. Darwin was the first to discover the phenomenon of coexistence of extremes in the biological world. When he traveled around the world, he discovered that the insects on some groups of islands in the Pacific were very peculiar. These insects either had almost no wings or else they had very strong wings while there were no insects of the continental types which possess medium strength wings that are not strong and not weak. Darwin discovered after research that this was the result of environmental selection by strong winds and torrential rains on the islands. Under conditions of strong

winds and torrential rains, there were only two ways for insects to survive: The wings degenerate completely, and the insect does not fly but hides itself in the grass to avoid the winds. Or the insect grows very strong wings so that it can fly in the strong winds and torrential rain. Insects of the continental type with intermediate characteristics that can fly but are not strong fliers will be blown into the sea and will be eliminated. This means, under such conditions, the two extreme qualitative states are both stable while the intermediate state is unstable.

According to research in catastrophe theory in mathematics, we have discovered that coexistence of extremes has strict conditions. Like overcorrection, the phenomenon of coexistence of extremes can only occur within the region of distribution of control points. Actually, the regions of distribution of control points represented by the catastrophe models are composed of regions of coexistence of two states, regions of coexistence of three states, etc. Extreme states can only coexist in these regions of coexistence. Outside of the regions of coexistence, only single qualitative states can exist or else only intermediate states between these extremes can exist. For example, the contents of carbon and silicon in cast iron are both high and it can form grey pig iron of better graphitization. When the content of both carbon and silicon is low, a lot of Fe_3C appears to form white iron. If grey pig iron and white iron both exist simultaneously, they form tinsplate which is a mixture of the two types of composition. According to catastrophe theory, the region of coexistence in which these two types of qualities emerge in a mixture should be distributed as a cusp in the control plane. A lot of experiments prove that the region of emergence of tinsplate is consistent with the conclusions of catastrophe theory (Figure 12). We can find many phenomena of coexistence of two types of extreme states of things in nature. Catastrophe theory has provided a forceful tool to explore the regularity of these phenomena.

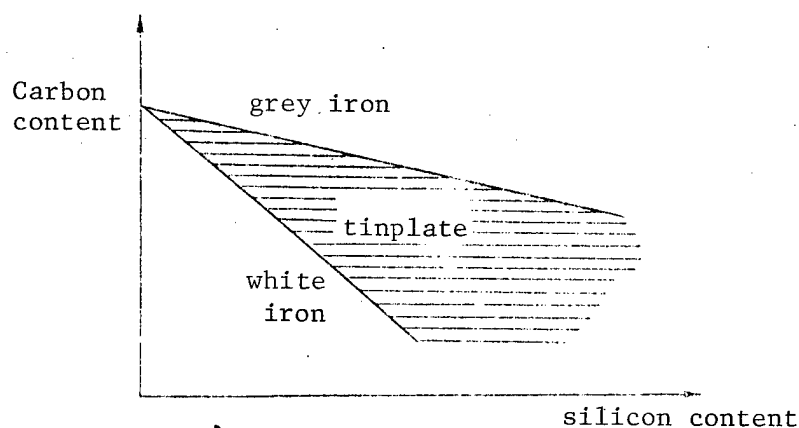


Figure 12. Distribution of the Region of Coexistence of Different Compositions in the Structure of Cast Iron

VIII. Common Task

This complex and kaleidoscopic topic of jumps and gradual change has been noticed in ancient times by philosophers. Recently, along with the rise of the industrial revolution, the continued discovery of various types of substances and new phenomena of changes in energy and continued emergence of various types of new social phenomena require man to theoretically answer the question of the general patterns of conversion of qualitative states. Hegel was the first to dialectically express the conversion of quantity to quality and the conversion of quality to quantity as rules of thought. Engels commented highly on this and raised it to the level of being a common rule of nature and human society and provided a materialistic explanation.

What is the situation today a hundred years later? Science and technology are developing rapidly. The macrocosmic world and the microcosmic world are being more profoundly studied by man. A series of major breakthroughs and development have emerged in the whole of natural sciences including those academic disciplines that study man himself. People urgently need to introduce the ever newer achievements of modern science to enrich and develop materialist dialectics.

In addition, renewing the understanding of the question concerning the method of qualitative change is also a theoretical topic that possesses practical significance and that is important to our philosophy workers. Today, after 10 years of upheaval, there are indeed many problems that are worth our conscientious deliberation and review. After we have obtained political power and under the new historical condition, which method should we use to carry out social reform. Is it still necessary for the reformation of the political system, the economic structure, the cultural form of our entire society to be carried out in jumps like before when earth-shaking movements were launched almost continuously and even violent means were used to carry them out? Why must we emphasize the stable transition of the entire society during this new period of realizing the four modernizations, why can we not unilaterally emphasize overcorrection? How can we understand local and regional coexistence of social structures and social forms of different natures over a long period of history? All of these await our in-depth study and theoretical exploration.

The creation of catastrophe theory in mathematics inspires us to explore in depth those yet to be explored realms in the patterns of qualitative changes and quantitative changes. Of course, it is still in its infantile period and it is developing. It needs further testing in practice. A relationship between mathematical models and the complex and variable social life has yet to be established. In these aspects, science and philosophy both have their own missions.

[Responsible editor of this article: He Zuorong [0149 4373 2827]]

9296

CSO: 8311/1494

TAIWAN

BRIEFS

CHIANG MESSAGE TO URUGUAYAN PRESIDENT--Taipei, 24 Aug (CNA)--President Chiang Ching-kuo Tuesday cabled his felicitations to President Gregorio Alvarez of the Republic of Uruguay on the occasion of its national independence day 25 Aug. Foreign Minister Chu Fu-sung also sent a congratulatory message to his counterpart, Minister Estanislao Valdes Otero, of that South American country during the day. [Text] [OW241419 Taipei CNA in English 1334 GMT 24 Aug 82]

CSO: 4000/179

END