Logic as rectification of thought*

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That philosophy is conditioned by its method, and that the development of philosophy is dependent upon the development of the logical method, are facts which find abundant illustrations in the history of philosophy both of the West and of the East.

Modern philosophy in Continental Europe and in England began with a *Discourse on Method* and a *Novum Organum*. But the history of modern philosophy in China furnishes a still more instructive illustration.

When the philosophers of the Sung dynasty (960-1277 AD), especially Cheng Hao (1032-1085) and his brother Cheng Yi (1033-1108), sought to revive the Confucian philosophy, they discovered a little book entitled *Ta Hsueh*, or *The Great Learning*, which had for over a thousand years remained one of the forty odd books in the collection known as the *Li Ki*. This little book, of about 1,750 words and unknown authorship, was then singled out from the *Li Ki* and later exalted to the enviable position of one of the "Four Books" of Confucianism.

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Synkrētic

The reason for this interesting incident lies in the fact that these philosophers were looking for a *Discourse on Method*, and found in this little book the only work of the Confucian school which furnished what they considered a workable logical method. The main thesis in this book is summed up in the following passage:

When things are thoroughly investigated, knowledge will be extended to the utmost. When knowledge is extended to the utmost, our ideas will be made true. When our ideas are made true, our minds will be rectified. When our minds are rectified, our individual character will be improved. When our individual character is improved, our family will be well ordered. When the families are well ordered, the state will be well governed. When the states are well governed, the whole world will be at peace.

The most important part of this statement consists of the three opening sentences. The school of Sung, represented chiefly by the Cheng brothers and Chu Hsi (1129-1200), maintained that everything has a reason (理) and that "to investigate into things" means to find out the reason in the particular things. As Chu Hsi writes: 'The saying (in the Ta Hsueh) that the extension of knowledge depends on the investigation of things, means that in order to extend our knowledge we must study everything and find out exhaustively its reason. For in every human soul there is knowledge, and in every thing there is a reason. It is only because we have not sufficiently investigated into the reason of things that our knowledge is so incomplete. Therefore, in the scheme of The Great Learning (which was taken by the Sung philosophers to mean 'learning for adults') the student is asked first to study all the things under heaven, beginning with the known principles (reason) and seeking to reach the utmost. After sufficient labour has been devoted to it, the day will come when all things will suddenly become clear and intelligible. When that time has arrived, then we shall have penetrated into the interior and the exterior, the apparent and the hidden principles of all things, and understood the whole nature and function of our minds.'1

This method of beginning with accumulative learning and leading to the final stage of sudden enlightenment continued to be the logical method of Neo-Confucianism until the Ming dynasty (1368-1644) when Wang Yang-ming (1472-1529) revolted against Said Wang Yang-ming: 'In former years, I said to my friend Chien, "If to be a sage or a virtuous man one must investigate everything under heaven, how can at present any man possess such tremendous power?" Pointing to the bamboos in front of the pavilion, I asked him to investigate them. Day and night, Chien entered into an investigation of the reasons in the bamboo. Having exhausted his mind and thought on it, he fell sick at the end of three days. At that time, I thought it was because his energy and strength were not equal to the task. So, I myself undertook to carry on the investigation. Day and night I failed to understand the reason in the bamboo. I was so tired that I fell sick after seven days. In consequence, we both confessed with a sigh that, without the great power and ability required to carry on the investigation of things, we were disqualified to become sages or virtuous men."²

Accordingly, Wang Yang-ming rejected the method of the Sung school and founded a new school on what he considered to be the original text of the *Ta Hsueb*. The new school holds that 'the objects under heaven need not be investigated and the task of "investigating things" can only be carried out in and with reference to the individual's character and mind.³

Apart from the mind, there is neither reason nor thing. 'The ruler of the body is the mind. That which proceeds from the mind is the idea. The nature (本體) of the idea is knowledge. That on which the idea rests is the thing. For instance, when the idea rests on serving one's parents, then serving one's parents is the thing.'⁴ Therefore, Wang Yang-ming holds that the word *kueh* (格) in the phrase *kueh wuh* (格物) does not mean "to investigate into" as the Sung philosophers had maintained. It means "to rectify" as in Mencius' saying, "The great man rectifies (格) the mind of his prince.' The doctrine of *kueh wuh*, therefore, does not mean "to investigate into things" but "to remove from the mind that which is not right and to restore its original nature of rightness."⁵ It is, in short, to bring forth the 'intuitive knowledge' (良知) of the mind. 'Knowledge is the nature of the mind. The mind is naturally capable of knowing,' Wang Yang-ming writes. 'Conquer the selfish passions and reinstate reason, and the intuitive knowledge of the mind will be freed from its impediments and will function to its full capacity. That is what is meant by the extension of knowledge to the utmost. When knowledge is extended to the utmost, the ideas will be rectified.'⁶

To sum up, the whole history of modern Chinese philosophy from the eleventh century to the present day has centered on the interpretation of a little book of 1,750 words and unknown authorship. Indeed, the whole controversy between the Sung school and the Ming school of Neo-Confucianism may be said to be a controversy over the question whether the two words *kueh wuh* should be interpreted as "to investigate into things" or as "to rectify the mind in order to have intuitive knowledge."

As I now look back on the history of Chinese philosophy of the last 900 years, I cannot but feel profoundly impressed by the conditioning influence of the logical method on the development of philosophy. The most important fact in this long period of controversy is that the philosophers, in their search for a method, have found a little treatise which gives an outline of a method, or what appears to be a method, without a concrete statement of its detailed operations. This enables the philosophers to read into it whatever procedure they were able to conceive of.

It is clear that the interpretation which the Cheng brothers and Chu Hsi gave to the phrase *kueh wuh* comes very near to the inductive method: It begins with seeking the reason in things and aims at the final enlightenment through synthesis. But it is an inductive method without the requisite details of procedure.

The story told above, of Wang Yang-ming's attempt to investigate the principles of the bamboo, is an excellent instance of the barrenness of an inductive method without the necessary inductive procedure. This barrenness and futility have forced Wang Yangming to resort to the theory of intuitive knowledge, which exalts the mind as co-extensive with cosmic reason, thus avoiding the futile efforts to seek the reason in all things under heaven. But both the Sung and the Ming philosophers agreed on one point. Both Chu Hsi and Wang Yang-ming agreed that the word *wuh* (things) meant "affairs" (*sze*).⁷ This humanistic interpretation of one word has determined the whole nature and scope of modern Chinese philosophy. It has limited philosophy to the realm of human "affairs" and relations. Wang maintained that the "investigation of things" can only be carried out in and with reference to the individual's character and mind.

Even the Sung school, which sought to know the reason in everything, did so only in so far as such investigation tends to 'make our ideas true (sincere) and firm' and thereby to 'rectify our minds'.⁸ Not equipped with a scientific method for the investigation of natural objects, they, too, confined themselves to the problems of moral and political philosophy. Thus, neither the one nor the other of the two great epochs of modern Chinese philosophy has made any contribution to the development of the sciences. There may have been many other causes which account for the absence of scientific learning in China, but it is surely no exaggeration to say that the nature of the method of philosophy has been one of the most important causes.

This account of the development of methodology in modern Chinese philosophy, which may seem unnecessarily lengthy, is intended to be my excuse for writing the present essay on the development of the logical method in ancient China. For I believe the great revival of philosophical speculation in the eleventh, twelfth, and sixteenth centuries was, most unfortunately, greatly hampered by the fact that the work which has served as the *Novum Organum* of practically all the schools of modern Chinese philosophy was probably written by some Confucian of the fourth or third century BC who, in setting forth the doctrine of extending one's knowledge to the utmost through the investigation of things, was probably unconsciously influenced by the scientific tendencies of that age.⁹

But because the scientific influence was at most unconsciously felt, because the scientific methods for the investigation of things which were developed by the non-Confucian schools of the era were never explicitly stated, and because the whole spirit of the *Ta Hsueh*, as well as of the other standard Confucian works, was purely rationalistic and moralistic—the development of philosophy and science in modern¹⁰ China has greatly suffered for lack of an adequate logical method.

Now that China has come into contact with the other thoughtsystems of the world, it has seemed to some that the lack of methodology in modern Chinese philosophy can now be supplied by introducing into China the philosophical and scientific methods which have developed in the Western world from the time of Aristotle to this day. This would be sufficient if China were content to regard the problem of methodology as merely a problem of "mental discipline" in the schools or even as one of acquiring a working method for the laboratories. But as I see it, the problem is not really so simple. The problem as I conceive it is only one phase of a still larger and more fundamental problem which New China must face.

This larger problem is: How can we Chinese feel at ease in this new world which at first sight appears to be so much at variance with what we have long regarded as our own civilisation?

For it is perfectly natural and justifiable that a nation with a glorious past and with a distinctive civilisation of its own making should never feel quite at home in a new civilisation, if that new civilisation is looked upon as imported from alien lands and forced upon it by external necessities of national existence. And it would surely be a great loss to mankind at large if the acceptance of this new civilisation should take the form of abrupt displacement instead of organic assimilation, thereby causing the disappearance of the old civilisation. The real problem, therefore, may be restated thus: How can we best assimilate modern civilisation in such a manner as to make it congenial and congruous and continuous with the civilisation of our own making?

This larger problem presents itself in every phase of the great conflict between the old civilisation and the new. In art, in literature, in politics, and in social life in general, the underlying problem is fundamentally the same. The solution of this great problem, as far as I can see, will depend solely on the foresight and the sense of historical continuity of the intellectual leaders of New China, and on the tact and skill with which they can successfully connect the best in modern civilisation with the best in our own civilisation.

For our present purpose, the more specific problem is: Where can we find a congenial stock with which we may organically link the thought-systems of modern Europe and America, so that we may further build up our own science and philosophy on the new foundation of an internal assimilation of the old and the new? It is, therefore, no mere task of introducing a few school textbooks on logic.

My own surmise goes somewhat like this. Confucianism has long outlived its vitality. The new schools of Sung and Ming rejuvenated the long-dead Confucianism by reading into it two logical methods which never belonged to it. These two methods are: the theory of investigating into the reason in everything for the purpose of extending one's knowledge to the utmost, which is the method of the Sung school; and the theory of intuitive knowledge, which is the method of the school of Wang Yang-ming.

While fully recognising the merits of the philosophy of Wang Yang-ming, I cannot but think that his logical theory is wholly incompatible with the spirit and procedure of science. The Sung philosophers were right in their interpretation of the doctrine of "investigating into things." But their logical method was rendered fruitless by: (1) the lack of an experimental procedure; (2) its failure to recognise the active and directing role played by the mind in the investigating of things; and most unfortunately of all, (3) its construing of "things" to mean "affairs."

Aside from these two schools, Confucianism is long dead. I am firmly of the opinion that the future of Chinese philosophy depends upon its emancipation from the moralistic and rationalistic fetters of Confucianism. This emancipation cannot be accomplished by any wholesale importation of Western philosophies alone. It can be achieved only by putting Confucianism back in its proper place; that is, by restoring it to its historical background. Confucianism was once only one of the many rival systems flourishing in ancient China. The dethronement of Confucianism, therefore, will be assured when it is regarded not as the solitary source of spiritual, moral, and philosophical authority, but merely as one star in a great galaxy of philosophical luminaries.

In other words, the future of Chinese philosophy would seem to depend much on the revival of those great philosophical schools which once flourished side by side with the school of Confucius in ancient China. That this need is dimly and semiconsciously perceived by our thinking people may be seen in the fact that, while the reactionary movement to constitutionally establish Confucianism either as the national religion or as the national system of moral education is vigorously opposed by all the more thoughtful leaders both in and out of parliament, there is hardly a single periodical of any intellectual influence which has not printed in the last several years articles on the philosophical systems of the non-Confucian schools.

For my own part, I believe that the revival of the non-Confucian schools is absolutely necessary because it is in these schools that we may hope to find the congenial soil in which to transplant the best products of Western philosophy and science. This is especially true with regard to the problem of methodology.

The emphasis on experience as against dogmatism and rationalism, the highly developed scientific method in all its phases of operation, and the historical or evolutionary view of truth and morality, these—which I consider to be the most important contributions of modern philosophy in the Western world—can all find their remote but highly developed precursors in those great non-Confucian schools of the fifth, fourth, and third centuries BC.

It would therefore seem to be the duty of New China to study these long-neglected native systems in the light and with the aid of modern Western philosophy. When the philosophies of ancient China are reinterpreted in terms of modern philosophy, and when modern philosophy is interpreted in terms of the native systems of China, then, and not until then, can Chinese philosophers and students of philosophy truly feel at ease with the new methods and instrumentalities of speculation and research. I do not wish my advocacy for the revival of the philosophical schools of ancient China to be understood as prompted by a desire to claim for China the honour of *priority* in the discovery of those methods and theories which have hitherto been regarded as exclusively Western in origin. I am the last man to take pride in priority as such.

Mere priority in invention or discovery without subsequent efforts to improve and perfect the original crudities can only be a matter for regret, certainly not for vainglory. When I look at a mariner's compass and think of the marvellous discoveries which the Europeans have made therewith, I cannot but feel a sense of shame to recall the superstitious uses which I myself have seen made of this great invention of ancient Chinese genius.

My interest in the rediscovery of the logical theories and methods of ancient China, as I have repeatedly said above, is primarily pedagogical. I have the strongest desire to make my own people see that these methods of the West are not totally alien to the Chinese mind and that, on the contrary, they are the instruments by means of which and in the light of which much of the lost treasures of Chinese philosophy can be recovered.

More important still, I hope that by this comparative study the Chinese student of philosophy may be enabled to criticise these precursory theories and methods in the light of the more modern and more complete developments, and to understand why the ancient Chinese antecedents have failed to achieve the great results which their modern counterparts have achieved. The reader may come to grasp, for instance, why the theories of natural and social evolution in ancient China have failed to accomplish the revolutionary effect which the Darwinian theory has produced on modern thought.

Furthermore, I hope that such a comparative study may save China from many of the blunders attendant upon an uncritical importation of European philosophy, blunders such as wastefulness in teaching the old-fashioned textbooks of formal logic in Chinese schools, or the acceptance of Herbert Spencer's political philosophy together with the Darwinian theory of evolution. Synkrētic

Such, then, is my excuse in making the present study of the development of logical method in ancient China. May this study, which is the first of its kind in any language not excepting the Chinese, serve to introduce to the Western world the great schools of thought in ancient China!

Notes

- 1 Chu Hsi's commentary on the fifth section of the *Ta Hsueh*. Cf. Sun Chi Fung's *History of Rational Philosophy* (1667), Vol. 2, p. 10 of the 1879 edition.
- 2 Wang Yang-ming, Records of Discourses, translated by F. G. Henke in The Philosophy of Wang Yang-ming, 177-178, which is a translation of the first volume of his selected works, first published by Sze Pong-yao in 1636 and republished by Fang Hsuoh-fu in 1906. I have here and in the following quotations revised Henke's translations.
- 3 Loc. cit. transl. Henke, 178.
- 4 Recorded Instructions for Practice, 9. In Henke, 59.
- 5 Loc. cit.
- 6 Recorded Instructions for Practice, 9. In Henke, 59.
- 7 Chu Hsi, in his commentary on the opening chapter of the *Ta Hsueh*, said: "Things" is equivalent to "affairs". Wang Yang-ming said "Things are affairs." (See his *Inquiry Regarding the Great Learning*, 45, transl. Henke, 213).
- 8 See Huang Chung-hsi, *History of the Philosophical Schools of the Sung and Yuen Dynasties* (written in the seventeenth century, revised by Chuan Chu Wang (1704-1755), first published in 1838, and republished in 1879), Vol. 10, pp. 18 and 46.
- 9 If this assertion needs any proof, note the unconscious influence of a scientific age on such Confucians as Mencius, as is seen, for example, in the following quotations: 'Having thoroughly employed the powers of their eyes, the sages have left behind them the try-square, the compasses, the level and the tape-measure, which may be infinitely used for making squares and circles and for leveling and straightening. Having thoroughly employed the powers of their ears, they have left behind them the six tonal regulators for the infinite use in standardising the five notes. Having thoroughly employed their mental powers, they have left behind them their benevolent policies in government in order that benevolence may extend to the whole empire'' (Mencius, IV, Pt. I, 1). 'High as the heavens are, distant as the stars seem if we only seek their cause (fx), the equinoxes of a thousand years can be calculated while sitting.' (Bk. IV, Pt. II, 26; the equinoxes, of course, are those in a lunar calendar and fall on different dates in different years). Many similar passages could be cited.
- 10 "Modern China", so far as philosophy and literature are concerned, dates back to the Tang dynasty (AD 618-906).