Special Issue

On The Concepts Of Quality, Quantity and Measurement

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1. Quality

Quality is a moment of human thinking. In this moment, humans dispose and classify the objects which around humans, and which include the results of materialization of human thinking, that is, to classify the objective things around us, and to stipulate the characteristics of them. This is the reason for Kant to make the proposition that the humans regulate the nature.

The different concepts express different quality. In other words, the quality is a thinking moment which reflects the results of subjective disposition on the objects around us.

Hegel said in his *Logic* that "quality and quantity are all pure thinking stipulations." (Note 1) His above words are in accord with the historical facts very much.

The result of subjective classification is the concept. Different qualities refer to the different kinds of things or objects, which have got different attributes, or different functions, or different characteristics. The other way round, our thinking stipulates the different kinds of things, or different kinds of objects, which must have got different attributes, or different functions, or different characteristics, or a concept which has got different quantity of existent forms.

Each object in the world has got many qualities or many attributes, because humans can observe each object from many perspectives and strata of abstraction, and humans can make use of each object from many aspects. Each perspective and stratum of abstraction is the criterion or standard for us to stipulate the quality of each object or thing. There are many criteria or standard for us to dispose the same object, because the aim for humans to think and practice may be quite different each time from the other time. Therefore the subjective aim and stratum of the abstraction may be quite different one time from another, and the criteria for humans to observe each object in the world would be quite different. In other words, the process to determine the quality, and quantity as well, of an object is influenced or limited by the aim for humans to practise or think each time. What is more, the process to determine the quality of an object is also influenced or limited by the way of collective thinking and the expressing way of it, because humans' practice and thinking are collective thinking and collective

practice from the beginning of the human history.

I mentioned in the above chapters that humans have to get to know some of the characteristics of their surroundings, that is, have to get to know many objects around humans, to some extent, even to many perspectives and a deep and wide existence, in order to meet the necessities for humans to live and develop, and to increase the absolute living standard. It is because that humans can find at last that the characteristics of their surroundings are different through the processes of their practice and thinking. Humans have to have a classification about the surrounding of their practice and surviving, that is, about the objects and phenomena around humans, in order to make use the characteristics of their surroundings better. The objects and phenomena include the existences and moving of the sun, the moon, the stars, the planets, and the different kinds of metals, trees, water, fire, the soil, etc., which can be perceived directly by the sense organs of humans, and the matters which have to be perceived through the processes of making use of various instruments and meters, etc., and the relationship between different maters and things, which can not be perceived directly by the sense organs of humans, but have to go through the processes of human thinking, that is, the laws of natural and social development. It also includes the process of human thinking itself, the laws of human thinking, and the results of human thinking, e.g. the written works, etc. They also include various social systems, which had or have been established by the humans themselves, and the various organs and functions of human bodies. In short, all the matters or things, which can be perceived and thought out by humans, can be included, except the thinking process itself.

We can make use the characteristics of human surroundings better and meet humans' need of living, including the need in the field of spirit better, only on the foundation of a better classification and language expression, and further a better cooperation and division of practice.

However, the results of each humans' subjective disposition on the same object may different, because the aim and content of each practice may different. For instance, just as I mentioned in the above chapters, we can call the same cat as "a cat", "a male cat", "a Felidac animal", "a carnivorous animal", "a mammal", "a vertebrate", "a chordate", "a living being", "a thing", etc., and each calling is correct and suitable, so long as we have not determined the condition which we should choose one among the above callings.

What I should state clearly and conversely here is that the results of each human subjective disposition on the same object may be the same or similar, if the aim and content of each practice may be the same, and if the objective and subjective surroundings are the same, or the condition of the subjective disposition is limited by the same objective and subjective surroundings. For instance, I can only call a cat as male or female cat, if some one asks me to tell him its sexual distinction, because I or any of the others are limited and confined by the objective fact of the existence of the cat, and limited by the regulation of the language community in which I or any of the other persons live. Otherwise, the other persons would get confused or reject the result of my distinguishing, and I would fail in quick exchanging the information with the other persons, or fail in helping myself or the other persons in remembering the sexual distinction of the cat.

In the thinking moment of determining the quality of one matter or thing, what we also should change our calling or result of our subjective disposition, if the subjective or objective surrounding, or condition, has changed. Otherwise, the other persons would get confused or reject the result of our subjective disposition, and we would fail in quick exchanging about the information with the other persons, or fail in helping ourselves or the other persons in memory. For instance, I have to call a cat as the cat of my neighbour, but not a cat of my family, when I have to determine the attribute of the cat of my neighbour from the perspective of the ownership. Otherwise the other persons would think that I were taking nonsense. Or the other persons would think that the answer is not to the point and confused logically, and failed in the process of quick exchanging about the information with the other persons.

From the two instances above, we can see that it is limited and confined by the objective situation to determine the quality of an object and its language expression. From the bottom, the limitation comes from the consensus in language, that is, from the customary addresses of a community about a series of objects or things, in order to get the quick exchange of the relevant information. And the customary addresses of a community can not be changed by any individual himself. For instance, to the directions of north, south, west and east, the Chinese language has made the addresses and definition according to the rotation of the earth strictly. No one could change it himself. The process is called acquisition to each individual.

2. Quantity

Quantity is also a thinking moment of humans. In the thinking moment of quantity, humans dispose about the number, size, degree, scale, the duration, the distance of the objects, and etc., in their minds. Hegel thought that "Quantity is the suspended being-in-itself ... Quantity and quality are pure regulations for thinking...Quantity is the pure unity of separation and continuation...What about quantity is the suspended regulation." (Note 2) His above words are quite reasonable.

The humans have to go through the thinking moment of quantity, after they have passed through the thinking moment of quality, in order to have a better and more efficient practice. Hegel also think that quality comes first, and quantity comes second. Hegel said,

"in other places, the regulation about quality is placed before the quantity, it—like many other things is not reasonable, beginning is making use of being itself, therefore to make use of the being of the quality to create, this has been pointed out. From the comparison between the quality and quantity, it is quite easy to understand that the nature of quality makes the quality come first. It is because the quantity is the negated quality, it is not united with being; big and small is the regulation, it is not united with the being as one, but is different from the being, and is suspended, indifferent quality. Size and degree contains the changeable characteristics of the being; the regulation for being is size and degree, big or small, while the thing itself would not change because the size or degree; on the contrary, the regulation for quality is to be united with the being as one, it not only go outside the being, or not placed outside the being, but the direct limitation to the being. Therefore quality comes first as the direct regulation, it has to be made as the beginning." (Note 3)

His above words are in accord with the historical facts.

In the thinking moment of quantity, the objects, or issues, which humans have to dispose are the number, size, degree, scale, and the orders, the duration, the distance, etc., of the objects. It is still has the issue of the size or bulk even if we talk about the state of vacuum. The concept of quantity is the abstraction of these sorts of issues.

Another aim for humans to put forward the concept of quantity is that humans have to put forward this thinking moment to be the other thinking moment, which can be equal in the degree of abstraction and can be placed the opposite side to the concept of quality, in order to grasp the concept of quality in human thinking. It is because that humans could not understand or grasp any abstract concept if the thinking did not have got any opposite sides. For instance, we could not understand or grasp the concepts of concrete or individual. Another example is that we could not understand or grasp the concept of nation, if we did not put forward or grasp the concept of nation, if we did not put forward or grasp the concept of nation, religious belief, living customs or habits, psychology, region, location, and, etc.

One of the main contents for humans to dispose, in the thinking moment of quantity, is that humans have to dispose the different individual or different things as the same thing from a certain perspective. Or in other words, humans have to ignore the attributes and functions of the objects, and only pay attention to the number of the objects, in order to make humans to be able to count and calculate, and help humans to practice better. The practice includes production, consumption, amusement and entertainment, the reproduction of humans, and etc. Hegel said, "the regulation of quality... the difference of quantity is only moment". (Note 4) In the regulation of quantity, the difference of quality is only a moment, and only a recessive thinking moment.

We have to pass through another negation, and make our thinking transit to number, or natural number, from the thinking moment of quantity, that is, transit to thinking moments of one, two, three, four, five, etc., in order to make good to human practice.

The fundamental unit of the natural number is one, and the other natural numbers are the multiple or times of one. The antithesis of one is more, or many, such as two, three, four, five, etc., which are the existent forms of more, or many. The opposite thinking moment of the natural number, or the concept of the natural number, is the thinking moment, or concept, of ordinal number.

The most original source of natural number is the direct sense, or perception, of each individual of the human beings, through their sense organ, such as eyes, ears, noses, or tongues, or bodies, etc., and the passing on of each culture. Each individual can learn gradually, from his own living practice, that how many slice bread, or how many bows of rise, or how many pieces of potato, which he has to eat, to avoid hunger every day; and how many cups of water, which he has to drink every day, to avoid his thirst; and how many people in his family; and how many brother and sister he has; and how many

fingers and toes he has got, and, etc. And his elder relatives would tell him how to call or name them. Then, he will form gradually the concepts of the natural number of the language expression of them, that is, one, two, three, four, five, etc., in order to be convenient to communicate with the other people of the same language community, and to meet his need in the fields of his material and spiritual living.

The natural number is a part of culture, or an existent form of culture, because what it means and its pronunciation need the education and demonstration of the old generations to pass on to the younger generations. One of the most important feature and characteristic of culture is that the relative activities and language expression can only pass on to the younger generation through the education and demonstration of the elder generations.

The natural number has the dual feature and characteristics of absolute antithesis, that is, the natural number is limited and unlimited, and it can be divided and cannot be divided.

A concrete natural number is limited and can be divided. For instance, the natural number of eight can express eight, and can also be divided into the natural number eight pieces of one, two pieces of four, four pieces of two, etc. A concrete natural number is usually composed of parts. It is because many objects, which humans face every day, can be divided. For instance, the time of a day can be divided into morning, forenoon, noon, afternoon, evening and night, or 24 hours, etc.

A concrete natural number is unlimited or cannot be divided, because the natural number has the feature and characteristic of continuity. A thousand minus one is not a thousand. The most important reason for natural number to have the feature and characteristic of continuity is that many objects, which exist in natural or existent or substantial world and human societies, have the nature which can not be divided. For instance, a living cat is a living cat. It could no longer be a living cat, if it could be get rid of half of its important organs. A day is a day. It would not be able to be a day, if it could be get rid of half of it.

The reason for the thinking moment of natural number to have the feature and characteristic of absolute antithesis is purely that our subjective disposition can deal with one-sided the attributes and state of the existent of the objects, according to human need at different cases, as what I stated in the chapters or sections above.

We have to transit to another thinking moment, that is, the thinking moment of ordinal number, e.g. the first, the second, the third, and, etc. The reason for us to transit to the thinking moment of ordinal number is that we have to arrange the objects, which we have to face and dispose, according to the degree of our need and abilities we have got, because our abilities and time, or duration of lives, are limited.

Of course, people often take the natural number, e.g., 1, 2, 3, 4... etc., as the ordinal number, the first, the second, the third, the fourth, etc., as the brief expression of the ordinal number, in their daily substantial and concrete practice and thinking. However, it is only a kind of loan in language. People can distinguish correctly that it is an ordinal number or natural number, according to the context, either one, two, three, etc., or the first, the second, the third, and, etc.

Then our thinking have to transit to another thinking moment, that is, the count and calculation. It is because that humans have been trying to avoid any productive waste, which is not necessary, in their practice. In order to realize it, humans always try to count and calculate before they begin to produce anything. For instance, the city of Xian just needs to arrange two group of bakers, under the leadership of Chen Guoqing, to produce bread, if one group of the bakers could produce 50,000 loaves a day and the city needs 10,000 loaves a day. It would make productive waste if the city arranged more groups of bakers to produce bread. Another example is that the population of China is about 1.4 billion. China had increased its output of grain for 12 years continuously to the year of 2016. And the output of grain is more than 600 million tons a year, which can guarantee absolutely the safety of the grain need of the population in the whole China. It would make productive waste if China continued to increase its output of grain each year. Therefore, the Chinese government declared that Chinese government would not go on pursuing the continuous increase of the wheat, paddy (rise), or corn, which are the three sorts of main grain in China, but announced that the Chinese government might begin to practise the policy that decrease the lowest purchasing price of the government, in order to practise the policy of fallow and crop rotation in some main districts of grain production, and try to carry out the policy to increase the per unit area yield of the grain by trying to promote the development of the relevant science and technology, and the policy of storing the grain in better cultivated land and better technology, on the Program of the News Combination of the Chinese Central Television in December 2016.

In the other industries, people would also try their best to do the calculation before they do their practice. For instance, it is the main content to do complicated and accurate calculation in the industry of engineering design.

G. W. F. Hegel often mentioned the two terms of pure number and definite number when he talked about quantity in his book of Logic. Actually the term of the pure number refers to the natural number which has not been brought into the process of calculation, or the natural number itself, such as 1, 2, 3, and etc. The definite number refers to the natural number which has been brought into the process of calculation. The above difference and limitation that bring the concepts and terms of the pure number and definite number, which have got different characteristics or nature. It can not been lumped together. There appeared quite often the terms of number and unit in the chapter about Quantity in G. W. F. Hegel's Logic. (Note 5) The two concepts refers respectively the two opposite sides which are set by people in the progress of people's calculation. (Note 6) The two concepts or terms can transit to each other at any time, but can not be confused or combined into one in the progress of people's calculation. It because that the calculation could not be carried out if the two concepts or terms would be confused or combined into one. For instance, in the multiplication that four times three is twelve, we can undertake four as the unit and undertake three as the number. In this kind of calculation or algorithm, the unit itself is number. Therefore, the result of the calculation is the same, twelve, if we undertake three as the unit and undertake four as the number. Though the result of the calculation is the same, we can not confuse or combine the unit or the number into one. It is because the objects, which are to be

calculated, are always different from the progress of people's calculation. We can not confuse or combine the subjective disposition and the objects into one. The objects of calculating are objective. Their represents are units. The represents of calculation are natural number and its expression. They are created by the human subjectivity. Therefore, the natural number can be changeable according to human needs. For instance, we can divide one into 10 portions or 100 portions, that is, making 1 into ten 0.1 or one hundred 0.01, or on the contrary, making 0.01 into one, and making one into 100, at our will. On the contrary, the objects usually are not so changeable by our will. One soldier is one soldier. He has the military power of one soldier. One sun is one sun. It has the ability to send out light and heat as a star. In the process of the calculation, we have to suspend the quality of the objects of calculation, making it a recessive thinking moment and ignoring it as it is nothing. However, the process of the calculation has the basic and fundamental connection with the objects or the objective world. This is the broad background of calculation. We can not free from the limitation or confinement of objects or the objective world totally in the process of the calculation. Therefore, we can not get rid of the unit and number, which are opposite sides in any process of the calculation. The units, such as the meters in the distance, the ohms in resistance, voltages, electric current, etc., actually represent the objects or the objective world, in the process of the calculation.

The proposition, or thesis, or judgment, and their language expression, are totally created by human subjective disposition. They can be proved by the fact that one is call one in English, and *yee* in Chinese, in the language field.

The most important numbers are one, or 1, and zero, or 0, in the process of the calculation. It is because that people begin their count from one, the other numbers are the folds or times of one. Therefore, one, or 1, is the most basic number. (Note 7) Zero, or 0, has got the dual characteristics, natural number and unnatural number. It is the natural number when it composes the natural number 10, or 100, etc. It is not a natural number, because it can not be divided as the other numbers. It expresses only the beginning or end of the calculations in many cases. It expresses the beginning or end from the multiplication and division. It manifests more clearly in the higher mathematics. From the perspective of subjective dialectics, 0 or zero manifests the lack of antithesis, or opposite side, in the true world. Therefore calculation can not go on, 6 times 0 is 0, 0 times 6 is 0, too.

Besides, computational mathematics, which based on the binary system, has been developing very fast, following the fast development of the industry of computer manufacturing. 1 and 0, which is the written form of the binary system, are playing more and more important role, and their usage are wider and wider. 1 and 0 can record and manifest any written symbol, which have been created by all the human beings in any time, from the most ancient time until at present, with the help of computers nowadays. However, the function of 1 and 0 in the computational mathematics has become the selected tool of human beings to control the computers, because the their characteristics in written, that is, their writings are the most simple ones among all the written symbols. This is already different from its original and primitive function for people to create the natural number 1 and 0 as apart as heaven and

earth. As one of the written forms of the computational mathematics, they have qualitative difference from the natural number 1 and 0, though they still have the natural link with the natural number 1 and 0. They represent respectively the openness and closeness in the circuit design. They have become the objects of the computational mathematics from a perspective, e.g., the objects of digital data processing system and digital condense, etc. And they are not the objects of the metaphysics or the philosophical methodology, which are more abstract, any longer, from the perspective of philosophy.

The sole output of the calculation were useless to humans' practice, because we only pay attention to the quantity, ignoring attributes, or the different social and natural function, which the objects play, for we make all the objects as the same thing, without pay attention to the quality of each individual, or the objects are different, in the thinking moment of quantity. For instance, we do not know that it were 12 meters in distance, or 12 square meters in area, or 12 persons, or 12 pigs, etc., if we only knew the output of a calculation. We have to have another negation of thinking, and make our thinking to pass on to next thinking moment, that is, measure.

3. Measure

The two concepts of quality and quantity are different, but connected, and refine each other, and transit to each other. Hegel said in his *Encyclopedia of the Philosophical Sciences* that "Measure is the unity of quality and quantity...Measure is a general quantum and also a particular quantum...Number, in general, is the quantum in its complete specialization...geometry must call in the aid of number, when it is required to specify definite figuration of space and their ratios." (Note 8) His above words are in accord with the historical facts.

Human beings connect the two concepts of quality and quantity together, and link the concrete things together, and dispose the relationships, which appear between them, when the two concepts are linked together in the thinking moment of measure.

I said in the previous prescription, that the criteria are quite different for humans to observe each object, because the aims for humans to practice or thinking are quite different, and correspondingly each object in the world can have many attributes and qualities about the same object. The human beings can observe, or investigate, or make use of each object from many aspects and many strata. In other words, to determine the quality of object is affected or refined by human aim for each practice or thinking.

In the situation that determining the quality of object is affected or refined by human aims, the determination of the quality is affecting the determination of the quantity of the existent forms of the relevant objects, that is, to affect the quantity of the existent forms of the relevant objects. For instance, a cat have got the qualities or names as pet, carnivorous animal, mammal, vertebrate animal, a chordate, living being, thing, etc. All these names or qualities are correct or suitable, so long we do not impose any subjective or objective condition. However, the difference of names or definitions means that we have determine the cat as different things, and corresponding the quantity which connected directly with the cat is quite different. For instance, the living individuals are less than 10 billion in the world,

when we call a cat as pet, for there are less than 10 billion families in the world. The living individuals are more than at least one trillion in the world, when we call a cat as a mammal. It because that there are at least nearly seven billion of the living human beings, adding the all kinds of mice, pigs, dogs, oxen, houses, sheep, etc., the total sum of the mammals is much more than a trillion. When we call a cat as an animal, the corresponding animals are at least millions of trillion. It because that only the insects, which have got the scientific names of the species today, have got more than one million species. The number of the living individuals of insects are at least millions of trillion. We cannot count the number of the ants, which have got thousands of the species today in the world. Therefore, it has got direct defining function in determining the living quantity to determine the quality of an object.

Conversely, the quantity of an object also determines or influence the quality of an object, which is determined by humans. For instance, Hegel mentioned a famous paradox in the ancient Greek, when he talked about that the quantity of an object also determines or influence the quality of an object. The example says, that if someone asks, if a grain was taken away from a pile of grain, then the pile is left or not? If the taking off is connected only with difference in the quantify, which is not important, the people would agree to do so without any hesitate. And the people do it again and again. Each time people take only one grain. Then the change of quality appears. The pile disappeared. The people forget that the sum total of the quantity composes the whole of the quality. Then the sum total disappeared, and the pile disappeared. (Note 9)

Anyhow, the determination of either quality or quantity is refined, or influenced, or determined, by the aim of each practice or thinking of human beings. It is the same in the process of the determination of measure. The determination of measure is refined, or influenced, or determined, or defined, by the aim of each practice or thinking of relevant human beings.

However, it is mainly connected with the quantity, or quantum, of the intention or connotation of the objects, in the determination of the measure in our daily life. In other words, the determination of the measure is a existent form of the determination of the quantity, or quantum, in our daily life. That is, the aim for people to keep the notation of measure is to find a standard, which is convenient for people to quantify the quantity, or quantum, of the intention, or the connotation, of the objects.

Hegel put forward the two concepts, the quantum of the intention and the quantum of the extension, in his *Logic*. (Note 10) Actually, the quantum of the extension refers to the quantity which can be grasped exactly and directly by the organs of the human bodies, that is, which can be counted directly by the organs of the human bodies, such as eyes, ears, noses, tongues, bodies, etc. And the quantum of the intention refers to the quantity of an object which can not be grasped, or counted, exactly or directly or precisely by the organs of the human bodies, such as the weight, the hardness, the temperature, luminosity, the duration of time, the air humidity, the voltage, the current intensity, and resistance of an electric wire, etc. It seems that human beings deal with the quantum of the intention much more than the quantum of the extension everyday at present in their daily life in the situation that the science and technology have developed so much today. We have to use some instruments to grasp the quantum of

the intention. From this perspective, the quantum of the intention presents itself as measure. Therefore, Hegel gave a relatively minute description of two concepts, the quantum of the intention and the quantum of the extension, in the part of measure.

In the thinking moment of measure, one of the contents which human beings have to grasp is that those, who do practice and scientific research, grasp the conjunctive point or cross-over point of the changes of objects, that is, the conjunct point or cross-over point of the quantitative change to the qualitative change, which is an important content of current Marxist textbook, originated from ancient Greek philosophy as has mentioned above. It is because that the quantitative change to the qualitative change is a total change, and a leap in the process of cognition, a break in the process of cognition. It is because that the objection of the cognition, which is in the process of the quantitative change, break off the quantitative change itself suddenly, or the quantitative change itself suddenly is stopped. Then our cognition about the quantity or quantum need change correspondingly. For instance, the water can has three existent forms, that is, the solid state, the liquid state, and the gaseous state. And the same quantity of water, in different state, needs different quantity of heat to raise a degree of the temperature, that is, the specific heat is different. At the sea level, the zero degree and the 100 degree in centigrade is the conjunctiva point or cross-over point of the quantitative change to the qualitative change. It is the same in the social field. For instance, to the graft 5,000 yuan RMB is the conjunct point or cross-over point at the beginning of the 21's century in China. If someone grafted less than 5,000 yuan RMB, he would not be sentenced to jail. If someone grafted more than 5,000 yuan RMB, he would be consented to jail in many cases. One of the important reason for Chairman Mao Zedong (1893-1976) to be chosen to be the highest leader of Chinese Communist Party is that he could point on time that the main mission of the whole party should also change correspondingly, when the situation of the Chinese revolution had met its conjunctive point or cross-over point. For instance, the Central Committee of the Chinese Communist Party, with Chairman Mao Zedong as its key figure, adjusted in time the general policy of the whole party, from the policy of trying its best to overthrow the warlord governments in China at that time, with Chiang Kai-shek as the key figure of the Central government of China, and to make the united front with the Central government of the warlord at that time, with Chiang Kai-shek as the key figure, to be against the Japanese militarism, when the Japanese militarism had launched the all-round and full-scale war over China, in order to defeat the Japanese militarism first. The Central Committee of the Chinese Communist Party, with Chairman Mao Zedong as its key figure, adjusted in time the general policy of the whole party, from defeating the Japanese militarism first, to try its best to overthrow the warlord governments in China at that time, with Chiang Kai-shek as the key figure of the Central government of China, when the Japan had surrendered to the Allies, which includes China, and to establish the new China. The Central Committee of the Chinese Communist Party, with Chairman Mao Zedong as its key figure, accordingly adjusted in time the general policy of the whole party, from the working stress in the rural areas to the urban areas, when the warlord governments in the mainland China had been overthrown, and so on so forth.

Another reason for people to set up the thinking moment of measure is, that people need to try their best to keep the change of the specific thing or matter in the scope of the quantitative change, by trying best to follow the laws of the development of the specific thing or matter, when people need to keep the quality of the specific thing or matter. On the contrary, when people need to change the quality of the specific thing or matter, people have to try their best to speed the change of the specific thing or matter by following the relevant laws, in order to change the quality of the specific thing or matter quicker either in real world or in their minds.

What should be pointed out here is that Hegel had explained quite clear the fact that the three thinking moments of quality, quantity and measure can transit to each other in his book *Logic* and *the Encyclopedia of the Philosophical Sciences*. What the had not explained clear is the fact that the transition can only happen in our subject disposition, and the transition cannot happen easy, or casual, or wanton. The transition need go through a series of processes of the subjective disposition, that is, a series of thinking moments, as what Hegel said. Hegel did not point out the three concepts of quality, quantity and measure were three thinking moments, which are the dispensed with during the process of grasping our objective and subjective world. Therefore, many readers of his *Logic* or *Cyclopedia of the Philosophical Sciences (1830)* do not know what he was saying, or why he said so in that way. I think, the defects in Hegel's two books above come from the historical fact that Hegel did not get to know clearly what is being or what is subjective disposition.

Notes

Note 1. G. W. F. Hegel, Logic, trans. by Yizhi Yang, Peking: The Commercial Press, 1966, vol. 1, p. 198, (III. pp. 215-216). [in Chinese]

- Note 2. ibid., pp. 198-199 (III. pp. 215-216), p. 251 (III. p. 272).
- Note 2. ibid., pp. 198-199 (III. pp. 215-216), p. 251 (III. p. 272).
- Note 3. ibid., vol. 1, p. 66-67 (III. pp. 75-76).
- Note 4. ibid., vol. 1, p. 280 (III. pp. 305-307).
- Note 5. ibid., vol. 1, p. 223 (III. pp. 242-243).
- Note 7. ibid., vol. 1, p. 218 (III. pp. 236-237).

Note 8. Hegel's Logic, Being Part One of the Encyclopedia of the Philosophical Sciences (1830), Trans. by William Wallace, third edition, New York: Oxford University Press, 1975, Reprinted 1991, pp. 149-151, § 101-102.

Note 9. ibid., vol. 1, p. 364 (III. pp. 405-406).

Note 10. ibid., vol. 1, pp. 214 and 232 (III. pp. 232-233 and 252-253).