

The Difference in Cognition Consistency Between the Sciences and Humanities

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It is reasonable that the strict sciences represented by mathematics, physics and chemistry have nearly been a kind of substitutional belief of humans after “the Death of God”. To conclude theoretically, the significant attraction or the extremely great power of science is, in a word, the validity of thinking and action. From the viewpoint of human action or practice, science is the only really effective means we have to deal with nature (the other) that speaks the language of power. Being a creature that maybe has no competitive advantage in biological sense except the brain, men could not live in the world without power, and the subjective human power represented and embodied in science can be considered as the only secret by which we could stand above all the other beings on the earth. Cognitively, science is the language that has the most conciseness and certainty of thinking among all the theoretical discourse of human that aim at seeking the truth. Any theoretical disputation or problem in scientific fields will be solved ultimately. In the face of the methodology program composed of rational logic (mathematical calculation) and experimental demonstration (experiment), the true or false of competitive scientific presentations will be judged immediately and unimpeachably. Contrarily, in the research fields of the humanities, the fact that there are various opinions on the very matter and no one could say the last word about which is right is an obvious and common theoretical phenomenon in the liberal arts represented by literature, history and philosophy. As said by A. N. Whitehead, a modern American philosopher, all Western philosophies are just endless reinterpretations of the original philosophy questions asked by Plato. Cognition inconsistency is only a transitory exception during certain developing stages to sciences, but it becomes a regular rule to the humanities. According to the Paradigm theory of Thomas Kuhn, a contemporary scientific philosopher who suggested this theory after studying the process of the history of sciences, this phenomenon means

that compared with sciences, the humanities are still at the “pre-science” stage that no uniform thinking paradigm has been established. The problem that a consensus is hard to reach is the greatest challenge that the humanities face in cognition besides the common query on the validity and practicability of the humanities. The observation on the theoretical difference in cognition consistency between the sciences and humanities is the starting point of all the following analyses.

It is easy to see that, the direct reason why a consensus is hard to reach in the humanities is because people could not put related questions into calculation, as what they do in sciences, for example by mathematical formulas or experiments, when involved in theory disputation. In other words, there is no such authoritative common methodology program in the humanities as in sciences. Experiment is the soul of scientific methods, and the lack of uniform methods in the humanities ultimately results from the lack of the process of experimental demonstration. In philosophy, the cognition consistency belongs to the category of intersubjectivity, and the achievement of intersubjectivity finally relies on subject-object relationship. The lack of the process of practice (experiment), which is the means of realizing the subjectivity to the objectivity, results in the extreme difficulties in judging the right or wrong of theories. Here what needs to be necessarily pointed out is that, academically speaking, the theoretical proposition “Practice is the sole criterion for judging truth”, which is well-known in the intelligentsia of China, is the result of inappropriate words translation of the scientific proposition “Experiments verify theories and hypotheses”. As many people nowadays have realized, the political significance of this proposition is much higher than its academic meaning. Macroscopically, although the general interrelation of a certain social reality and a special social concept or policy, as well as the advantages and disadvantages of different concepts and policies in long term may be judged, we usually are hard to determine the cognition of the concrete effects and mutual causalities of all factors that lead to the total result, thus there is no strict uniform an-

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swer on the question that what concrete theoretical conclusions could be drawn from macroscopical social practice results. For example, western strategy analyzers had early predicted the final collapse of the Soviet Union before its disintegration based on political and economic theories, and the development of the situation in 1989 also seemed to prove the correctness of this prediction. However, just as the column article *Shorting Through the Runes—How pundits and scholars are interpreting the European Revolution that none of them predicted* (*Times*, 23 April 1990) indicates, analyzers still could not reach a consensus on the actual factors and causalities resulting in the collapse of the regime. On the contrary, if there were indeed a means of experimental demonstration in the humanities as in sciences, then the difference in cognition consistency between the sciences and humanities would be unimaginable.

The difficulties in applying practical means to judge theories and reach consensus in the field of the humanities relate to various complex factors, including the special moral restrictions on social experiments, the non-experiential direct features of social and historical phenomena that are unlike that of nature, and the heterogeneity of humanistic reality that is different from natural entities and makes quantitative studies hard to be carried out, and so on. What is more important, humanistic studies usually are involved with value conflicts, while the basic human value orientations such as the incomplete compatibility between freedom and equality usually make the matter that is undiachronic from certain viewpoint hard to get a uniform answer. For instance, the American government used to stipulate that colleges and universities should have a certain enrollment proportion of black students in order to avoid racial discrimination. However, some white students whose test marks were better than black ones were denied by the school as a result of this regulation, and this even caused a lawsuit between white students and the school authorities in the Medical College of University of California (Affirmative Action; ref. 1). The lawsuit reason of white students was also to fight against the inequality due to complexion, and they demanded the right to be enrolled according to the mark. In this case, there does exist the possibility of verifying the regulation by practice, but in front of the allowable discrepancy of people's interests, the verification result would be of no help to the outcome of a consensus that could be accepted by both sides. The reason is that, from the viewpoint of the efficiency of

education investment, practice can display the different effects that students contribute to the society between high-marked ones and low-marked ones, while from the viewpoint of avoiding racial discrimination, certain related policies are also necessary to be implemented whereas this may result in a new inequality to the white. Anyhow, we may easily draw a concise and clear conclusion from any point of view, but the question is that we could hardly find a uniform resolution that satisfies both sides; therefore what is practical is only the compromise in politics. In conclusion, it is an unavoidable fact that there is much difference in cognition consistency and thereby the clearness and certainty of the theory between the sciences and humanities because of different possibilities of the means of experimental demonstration in cognition methods.

Facts speak for themselves. However, what kinds of thought conclusions can be drawn from facts depend on fine and concrete analyses.

In the eyes of scientific monists, the fact that there is noticeable difference in cognition consistency between the sciences and humanities clearly demonstrates the weak and immature academic state of the humanities compared with strict sciences. To the hawks of these monists, this fact can be the adequate reason to sentence the humanities to death in academic sense. To the doves of them, this at least means that sciences are the only academic model, and the humanities should improve themselves with sciences as their example. It seems needless to tell the advantage and disadvantage of the sciences and humanities in cognition and their respective academic future according to the present discussion. However, the conclusion may not be so if we make detailed analysis on the actual meaning and necessity of the achievement of cognition consistency in sciences.

Thanks to Wittgenstein's supposition on "language game", we can see that the experimental demonstration program, which is the settling mechanism of cognition differences in sciences, hides a theoretical prerequisite, namely reference exclusivity, by which game rule sciences finally attain the unique criterion of judging the validity of cognition. For example, the demonstrating means of sciences is like the goal of football, and the judgment of win or lose can be made only by the score on the basis of this experiential and practicable means. On the contrary, the situation of the humanities seems like that there is no goal in a football match, and the win or lose (score) is replaced by which team plays "better", which is an ambiguous concept. Therefore, disagreements are un-

avoidable because features like technique, pass, possession, or sport morality can all be used validly but differently by referees, coaches or fans as the criterion of judgment under the background of the lack of uniform criterion.

The setting of the goal and the rule of judging the match by the score ensure the authority of the match result, however, the question now is that, are such game rules really reasonable and unimpeachable? This is because the features like possession and technique besides score are indeed essential judging elements in football, while the score sometimes can not totally reflect the actual situation of the match, especially in cases such as the weak team goals in one shoot and wins while the strong team shoots many times but could not goal, and also the judgment by penalty kicks after 120 minutes' draw. In fact, the reason why the score becomes the criterion of judgment is largely because of its game's rule instead of rationality.

One of the important characteristics of the judgment of problems by a unique practicable criterion is that, the right and wrong are entirely different, namely "Winner takes all". The rationality of such logic clearly should be doubted. Utility is the most fundamental game rule in sciences, and according to the theory of pragmatism, in experiential world the possible utility of the truth of cognition is its actual "cash value", and whether the cognition is true or not depends on whether it is effective in practice. We agree to some extent that there are relative differences between the exploration of truth in scientific theory and the application in technology, but fundamentally speaking, what sciences pursue is the concrete "Knowing" to the object instead of the close and sympathetically "Understanding" that the humanities try to do. What sciences finally give to us is the controlling power to the object, which is the internal reason of the strengthening integration of science and technology in modern society. Actually speaking, the so-called "true" is simply equals to "effective" under such game rules.

One of the common characteristics of the humanities is their separation with concrete practice. Theories of history or philosophy could neither be put into experiments one by one nor be converted into technical means that have direct effects on reality. To some extent, humanities are really trying to master the complete truth about the world and the existence on the whole. Under the background of the lack of experiential orientation and verifying program, only

complete and resolute truth can be considered as real truth. Hence the acquirement of humanistic truth can only be approached endlessly and historically in a circle of hermeneutics of the part and the whole, and the current absence of cognition consistency is thus the theoretical cost of such exploration of truth.

The fable that the blind men try to size up the elephant is suitable for describing the different situations in cognition between the sciences and humanities. The words of the blind men considering the elephant by what they have touched can be compared with the research of the humanities considering the truth by what they have explored, and the status that all the persons are blind can be regarded as the absence of complete truth (the whole elephant). Here what should be specially noticed is that, we should not simply regard the blindness in the fable only as a visual defect, but should regard it as a certain symbol of human cognition. We do not have the God's eye that could see everything clearly in the exploration of the truth of world; as a result we can only touch this or that part of the elephant in the darkness. The different words of the blind men about the elephant are ludicrous from direct seeing, but we are in the same situation as the blind men of the fable in the face of the world in cognitive sense. To emphasize, although neither of the blind men can realize the true face of the whole elephant, their different words about the elephant are not groundless but each has its basis and is right from its point of view.

In the field of sciences, what the "elephant" is like is decided by its actual utility, which means that the thing touched is the thing what it can be used as. For instance, if a fellow is leading a horse and wants to tie it, then he may take the leg of elephant for a hitching post, and seemingly the person who hides from wind behind the elephant may take its huge body for a wall, and so on. Anyhow, in the point of view of the complete truth, experimental science is also blind like the humanities. The difference is that the former replaces the whole blindness with partial clarity while the latter undertakes the exploration for complete truth under the background of the absence of partial clarity because of their different possibilities in experimental demonstration.

As the saying goes, seeking truth from facts, and the so-called "truth" usually come out as one "unique truth", whereas the puzzlement of the humanities in cognition consistency is that it is unable to decide which is the unique truth. This fact is indeed disappointing, however, to further investigate, the en-

thusiasm of human to seek the unique truth in the end is still directly related to the need of action. Different minds are the cause of failure while undivided attention is the essential thinking prerequisite to the success of action. This is the background on which the cognition consistency attains its theoretical importance in sciences. On the contrary, the inconsistency of cognition is not the absolute prerequisite to the truth of thought in the field of the humanities, which are aimed at education and cultivation instead of direct practice. Therefore, there is no inevitable logic relationship between “truth” and “unique truth”, and it is uncertain for competitive theoretical words that one of them must be false or all are false as in logic. Unable to decide which is right is fundamentally different from nothing is right, and the novelty and richness of theory often have more essential significance to the thought in the situation that the aim of cognition is not directly related to a certain action that is ready to go. Overpressure of consistency on the contrary would easily kill the creativity of thought and the vitality of theory.

In conclusion, there is noticeable difference in cognition consistency between the sciences and humanities. Cognition consistency has significant meaning

to sciences that ultimately aims at practice and utility, whereas it is not so to the educational subjects of study (in the German term, *Bildung*) like philosophy, history that are not practice-oriented and whose status of serious learning can not be disturbed by the lack of cognition consistency. Although in different forms, the sciences and humanities are both indispensable academic languages of human and have no difference in superiority. In Gadamer’s words, the humanities meet “the claim to truth outside science” and “can be philosophically legitimated” (2), and this is our conclusion.

References

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