Dev Reprod 2022;26(4):183-190 https://doi.org/10.12717/DR.2022.26.4.183

ISSN 2465-9525 (Print) ISSN 2465-9541 (Online)

Che-Yong(體用) Logic and Research Methodology

[†]YongNam Yun

Department of Ethics Education, Sungshin Women's University, Seoul 02844, Korea



Received: September 17, 2022 Revised: November 14, 2022 Accepted: December 5, 2022

[†]Corresponding author

YongNam Yun Department of Ethics Education, Sungshin Women's University, Seoul 02844, Korea Tel: +82-2-920-7239 E-mail: master@uri42.net

Copyright © 2022 The Korean Society of Developmental Biology.

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/licenses/by-nc/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ORCID

YongNam Yun https://orcid.org/0000-0002-1667-1525

Conflict of interests

The authors declare no potential conflict of interest.

Acknowledgements

Not applicable.

Authors' contributions

The article is prepared by a single author.

Ethics approval

This article does not require IRB/IACUC approval because there are no human and animal participants.

Abstract

Today's Eastern philosophers try to use the formal logic organized by Aristotle, saying that there was no logic in the East. This researcher found that Confucius and other Asians used Che-Yong logic. The Che-Yong logic is based on the Che-Yong law, which is a natural law. The Che-Yong law consists of the Che-Yong principle and the Hyeon-Mi principle. The Hyeon-Mi principle is that if there is an appearance on the outside, there is a corresponding cause in it. The Che-Yong principle is that the highest common cause of various appearances is Che, and the Che grows and changes on its own to become a Yong. Identifying Che and predicting Yong is Che-Yong logic. Here, I'd like to introduce Che-Yong logic and suggest a new research methodology to apply it.

Keywords: Che-Yong logic, Formal logic, Che-Yong law (體用理論, root-branches law), Che-Yong principle (體用論, root-branches principle), Hyeon-Mi principle (顯微論, appearance-hiddenness principle)

INTRODUCTION

We identify something from our circumstances, understand it, and live our lives by predicting and preparing for the future based on that knowledge. However, Eastern and Western cultures have different ways of solving this problem. The West compares the similarities and differences between things and seeks to distinguish, classify, and grasp them accurately. Induction is the primary method used for this purpose, whereby identical cases are collected to lead to knowledge of the universal. Knowledge becomes more accurate, as more cases are gathered. Errors are reduced when accidental phenomena are removed and more essential cases are collected. The major premise is obtained from the knowledge acquired from therefrom, and deductions are made in three steps based on it. This is the deductive method. The advantage of this method is that it is possible to draw inductive conclusions in a statistical methods and use them as the major premise to make strict deductive reasoning. The disadvantage is that in the search for the essence, many exceptional cases occur that the abstractive method discards, and it has difficulty in dealing with these properly. For example, drawing the conclusion that "Human beings are rational animals," it excludes many minors and the mentally ill. Further inductive reasoning is undertaken to solve this problem. Thus, constantly striving for true knowledge is both a disadvantage and an advantage. It also causes many problems by focusing solely on the accumulation of knowledge and neglecting the practical aspects of the theory. A solution is found and presented when one problem arises, and the solution creates new problems, creating continuous conflict and a vicious circle. This is an inherent limitation arising from the inductive method's abstracting the essential and disposing of the

https://www.ksdb.org 183

non-essential as problematic. Though it has the charm of reversal, it makes solving comprehensive problems or systematic understanding difficult.

On the other hand, the East first tries to find the proximate cause in the problem facing us and then seeks a more fundamental cause. For it, Hyeon-Mi principle is employed for method. It is supposed that there must be a suitable cause for the phenomena and one tries to find their cause. Based on the comprehensive causes revealed thereby, we can discover how the object will change and develop, and respond accordingly. The theory used in this case is Che-Yong principle, and the reasoning based on it is Che-Yong logic. The advantage of this method is that it comprehensively analyzes even a phenomenon appearing from a single object to find both the proximate and ultimate causes, allowing us to understand them comprehensively and systematically. In addition, if the cause is known, one can propose a solution and respond to it properly. On the other hand, it lacks universality because it uses an organic and systematic method rather than collecting large amounts of data on a phenomenon and processing them in a statistical manner. Moreover, it does not generate a sufficient number of creative ideas from various perspectives and is slow to offer solutions because greater emphasis is placed on practice than knowledge. In addition, formal logic is an artificial one that utilizes new conceptual definitions and sets, but Che-Yong logic is a very natural one that follows natural laws. Thus, I would like to present the logic and research methodology of the East so that it can be used in parallel with those of the West, thereby hoping to contribute to human happiness and cosmic peace (Yun, 2001, 2020).

THE SYSTEM OF CHE-YONG LAW

Che-Yong law collectively refers to Che-Yong principle and Hyeon-Mi principle (Fig. 1). Che-Yong law is a natural law that applies to everything from the vast universe to the tiniest things within it. Everything in the universe is generated based on this law and exists and lives accordingly. Thus, we use this to observe and study the existence and activities of all things and human beings and predict the future.

1. The system of Che-Yong principle

The "Che" and "Yong" of Che-Yong principle have the same root. "Che" contains many things like a seed, and "Yong" is like a root or bud sprouting from the seed, which is what grew out of the "che". The relationship between "Che" and "Yong" is like that between the seed and its sprout. If the seed is a bean, the root and sprout from it are also beans. The proverb "Bean from beans and red

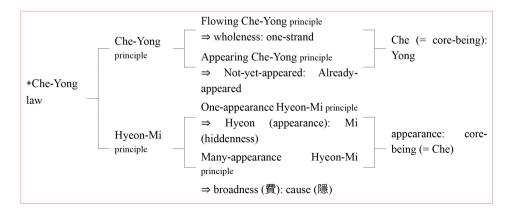


Fig. 1. System of Che-Yong law.

beans from red beans" is based on Che-Yong principle. If the seed is "Che," not only are the root and sprout that first come out of it "Yong," but everything that grows from the seed, such as stem, branches, leaves, flowers, and fruits, are "Yong." In addition, the mind of love is "Che" and all actions that flow from it are "Yong." "Che" acts as the cause of "Yong's" emergence. In other words, if there is a seed, it will enable the sprout to come out, and if there is a loving mind, it will induce acts of love. Thus, it is a general principle that if there is "Che," "Yong" cannot be non-existent.

Che-Yong principle can be divided into two. One is flowing Che-Yong principle, and the other is appearing Che-Yong principle. First, flowing Che-Yong principle is that the characteristics or forces of "Che" flow into "Yong." In this case, "Che" is wholeness and "Yong" is the one-strand, a part of "Che" that has flowed out. Several elements are lumped together in wholeness, and when appropriate conditions are met, what was there flows out strand by strand. For example, a seed is a wholeness in which the embryo and albumen are lumped together in the testa, and under appropriate conditions, a sprout comes out that is a part of the wholeness. We can see the sky and the earth as a lump, the earth itself as a lump, and a tree as a lump, depending on our purposes. Wholeness is that which combines the characteristics and abilities of each lump. Wholeness is always reflected when adapting to or coping with a given situation. In other words, a part of the wholeness flows out and goes into the one-strand. Flowing Che-Yong principle shows that some parts of the wholeness are divided into strands and flow inside "Yong." For example, a fertilized egg is a wholeness and the organism from the fertilized egg is "Yong" as one-strand. The gene inside the fertilized egg spreads throughout the body of the organism.

Appearing Che-Yong principle is that "Che" reveals its identity outside itself. What has not yet revealed itself is "Che" as not-yet-appeared, and what has revealed itself is "Yong" as already-appeared. The not-yet-appeared is what has not yet appeared, and already-appeared is what has already appeared. "Che" reveals itself when the right conditions are met. Sometimes it reveals its whole self at once, while at other times it reveals a part of its identity. "Che" tries to reveal itself as "Yong" rather than remain latent. When Che encounters a situation meeting its needs, it naturally reveals itself. For example, we can look at a seed and tell what kind it is because it reveals itself, and sprout, branches, or leaves reveal their appearance so that we can tell what the sprout or branch belongs to. In addition, if one has a loving mind toward someone, one unknowingly reveals one's love in a certain situation. Here also, the loving mind is Che, and it is Yong that reveals it.

Che-Yong principle has the following operating principles. First, Yong is prepared in Che. Thus, what is not in Che cannot flow into or appear as Yong. The present me is contained in the fertilized egg. Second, Che comes first and Yong follows. Since Che is the cause of Yong flowing or appearing, Che must be established first. The fertilized egg exists first and acts as a driving force for self-growth. Third, Che is one, but Yong is diverse. When Che flows and appears as Yong, it transforms into various forms. Hair and skin have the same gene, but their functions and appearances are completely different.

2. The system of Hyeon-Mi principle

Hyeon-Mi principle is that there is no discordance between appearance, the outward look, and the core-being, the cause that allows the appearance to exist. What can be detected through the five senses is the appearance, and it is the core-being that enables the appearance to be what it is naturally while not showing itself. The core-being, the skeleton, is inside the body and allows us to maintain our appearance. The core-being of Hyeon-Mi principle is like this. According to Hyeon-Mi principle, it is impossible for the appearance to be human while the core-being is something other than human. If the appearance is of a chicken, the gene inside it is the gene of a chicken.

While Che-Yong principle observes from the present to the future over time, Hyeon-Mi

principle observes appearances and their kernels that exist in different regions of space at the same time. In other words, it seeks the cause of the appearance from the outward look. Thus, Hyeon-Mi principle is like Che-Yong principle in reverse. That is, Hyeon-Mi principle observes Che through Yong that has appeared. However, while the Che and Yong of Che-Yong principle are homogeneous, the revealed appearance and hidden core-being of Hyeon-Mi principle are heterogeneous. For example, Che-Yong principle contrasts the gene in a fertilized egg with that in an aquiline nose, while Hyeon-Mi principle contrasts the aquiline nose with its gene.

There are two kinds of Hyeon-Mi principle. One is one-appearance Hyeon-Mi principle and the other is many-appearance Hyeon-Mi principle. One-appearance Hyeon-Mi principle holds that there is one core-being in one appearance, while many-appearance Hyeon-Mi principle holds that there is one common core-being in many appearances. Several appearances may exist at different times or at the same time. However, when observing several appearances in many-appearance Hyeon-Mi principle, appearances with different and opposite shapes are comprehensively observed rather than the same appearances being collected and observed as in induction. Thus, the cause of the appearance can be better identified, and the highest and ultimate core-being can be identified systematically and comprehensively. Therefore, observing an object through many-appearance Hyeon-Mi principle can reveal the overall structure of the object. For example, when observing a house, the entire structure of the house, including the main room, the living room, the kitchen, and the table, can be grasped. The entire structure of the house must be revealed to know the highest core-being.

Hyeon-Mi principle has the following operating principles. First, the core-being, which is the cause, is contained in the revealed appearance. Appearance and core-being always coincide. This is because the cause of the appearance is always the core-being. A depressed expression has within it a depressed mind as the core-being. Second, the appearance is always expressed and the core-being is inside it. Since the appearance that can be detected by the five senses is outside, one can observe the core-being inside. The core-being inside reveals its identity in the appearance. The depressed expression can be seen, while the depressed mind inside cannot. Third, there are core-beings of several layers in one appearance. The revealed appearance has not only one proximate cause but also a distant cause. Moreover, there is one common core-being for many appearances. A happy expression has both a happy mind and a loving mind. The depressed mind and the happy mind have the loving mind inside.

RESEARCH METHODOLOGY USING CHE-YONG LOGIC

Che-Yong logic reason based on Che-Yong law. In other words, we reason based on the Hyeon-Mi principle that the core-being inside always coincides with its appearance, and on the Che-Yong principle that that core-being flows to or appears to as future Yong. For example, Che-Yong law is that beans are contained in bean pods and bean shells, and when that beans are planted in fertile soil, they sprout beans. Here, we reason that when we plant beans on the soil, they will sprout soon, and then flowers will bloom again and beans will bear fruit. This is Che-Yong logic. The eastern people have long considered it reasonable and valid to reason and argue based on Che-Yong law, an ordinary natural law (Fig. 2).

1. The application of Hyeon-Mi principle

To use Che-Yong law in reasoning, we must first determine the highest core-being through Hyeon-Mi principle. In one-appearance Hyeon-Mi principle, one core-being can be known through one appearance. Admittedly, we can certainly predict what kind of Yong will come out next

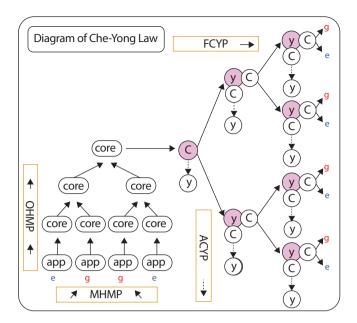


Fig. 2. Diagram of Che-Yong law. FCYP, flowing Che-Yong principle; ACYP, appearing Che-Yong principle; OHMP, one-appearance Hyeon-Mi principle; MHMP, many-appearance Hyeon-Mi principle; core, corebeing; app, appearance; C, Che (root); y, Yong (branches); e, Eum; g, Yang.

based on this core-being as Che, but rather, to use this logic more broadly, we must apply manyappearance Hyeon-Mi principle. When applying many-appearance Hyeon-Mi principle, it is recommended that one observe one appearance and its opposite comprehensively, which in other words is to use EumYang (陰陽) principle. For example, one can find a common cause that causes both an active and an inactive appearance. The common cause lies in the depressed expression and the happy expression. In other words, one is depressed because he did not hear from his beloved and becomes happy when he hears news. Thus, one can find the highest core-being by increasing the number of observed appearances and summing them up.

Some appearances can be easily observed intuitively through the five senses, while others require strenuous observation using devices or experiments. The inductive method collects many things with the same characteristics and tests them in the same way. However, Hyeon-Mi principle observes one object in many ways and finds the cause by synthesizing them. Since the occurrence of a phenomenon in the object will in principle have a cause inside it, it analyzes the object from various angles to find out where the cause is. Moreover, since there will always be an organic relationship in the function of each object, it observes the cause comprehensively to find a solution. Since some phenomena not only have major causes but other causes, such as secondary causes, all of them need to be found. It is possible to grasp the overall organic interrelationship within the object by observing it in various ways and synthesizing the observations. After considerable effort, the remaining parts can be known even if the whole is not completely observed. This is possible because the organic structure can be easily understood through observation combining many-appearance Hyeon-Mi principle and EumYang principle.

When experimenting with formal logic, the same treatment is applied to many samples and the results are analyzed by a mixture of the agreement method and the difference method. On the other hand, Hyeon-Mi principle finds the causes and synthesizes them by observing a single object from various perspectives. Once an object is understood almost completely, things that are identical or similar to it can be understood accordingly. Formal logic helps us understand a single aspect of many objects with certainty, but it has difficulty yielding knowledge about an object as a whole. On the other hand, Hyeon-Mi principle is useful for fully understanding one object, but it is not good for handling multiple objects uniformly.

In formal logic, one tries to identify the essence of all humans, positing that humans are rational or social. On the other hand, Che-Yong logic judges all human beings' identity based on appearance and the highest core-being. In other words, it is said that 'there is such and such appearance, so they are humans.' Ultimately, it is that humans are humans because they have similar appearance, not because they have the same essence. For this reason, something can be a human being even if there are some differences in the appearance. Moreover, it values mutual differences and mutual cooperation in addition to human sameness. It values cooperation and coexistence despite the differences rather than the completely identical aspects between A and B. In other words, it values people gathering and forming a new community. It values how people live with complementary relationships while having different strengths and weaknesses or characteristics. Those who use formal logic identify the common essence of many apples and create a "set of apples", from which it defines and infers that "all apples are such." On the other hand, those who use Che-Yong logic are more interested in how apples and humans or apples and magpies are related to each other. It not only observes the relationship between objects, but also the relationship between the eyes and ears, the mouth and nose within the object.

2. The application of Che-Yong principle

Since Che acts as a cause of flowing or appearing into Yong, if there is Che, there will be Yong that reflects it in the future. In Hyeon-Mi principle, the same core-being can lie in opposite appearances, such as Eum (陰) and Yang (陽). Therefore, even when the core-being flows into or appears in Yong, it can flow to opposite directions. For example, if one has a loving mind, sometimes one has a depressed mind and sometimes one has a happy mind. In either case, the loving mind flows, both into the depressed mind and into the happy mind. One has a loving mind, but when one loses contact with one's loved one, one gets depressed mind, and then one makes a depressed face. The loving mind is thus found in both the happy mind and the depressed mind. This is an application of flowing Che-Yong principle. The loving mind flows into the happy mind and the depressed mind, and these two minds cause one to make a happy face or a depressed face. This is an application of appearing Che-Yong principle. When a single core-being encounters different situations, it responds differently according to the situation. Thus, Che-Yong logic reasons based on natural laws.

When using this in an experiment, one can confirm whether the core-being derived from Hyeon-Mi principle is correct by creating opposite situations and observing whether the corebeing responds to them accordingly. To understand an object completely, one must create many pairs of situations and observe them. The level of the situation can be raised, lowered, or extended sideways. Adjusting the level is to reflect the changes over time, and extending sideways is to adjust the amount according to the expansion of space. In the case of a seed, the root and sprout come out at the first step, stem come out at the next step, and branches come out at the next step after that. Leaves, flowers, and fruits come out one after another. In this process, the gene that were first in the seed flow into the fruit and are transmitted to it. This refers to step-by-step growth over time. Meanwhile, as time goes by, branches grow sideways at the same time. Some extend to the east and some extend to the west. Thus, we can confirm how the highest core-being flows by synthesizing all the branches extending in all directions. In this way, we can reason using flowing Che-Yong principle.

A seed sprout, stem come out, and then branches come out. These are the appearance of the gene in the seed. The gene appears outward according to a given situation. Based on this, we can

reason using appearing Che-Yong principle. One can observe changes over time and space in one tree or observe by setting up relationships with different trees or animals. If we expand this further, we can observe the entire universe as a lump.

The highest wholeness is one, but there are several lower core-beings inside it. When the corebeing encounters the proper conditions or situations, it flows or appears. In an experiment, we can give conditions suitable for the core-being as found by Hyeon-Mi principle and test whether it flows or appears properly. Thus, we check whether the core-being obtained by Hyeon-Mi principle is correct. If the core-being does not flow or appear properly, one should first check whether the core-being was set up incorrectly, then see whether the conditions given are accurate. Thus, one can determine the core-being by finding the core-being with Hyeon-Mi principle and testing it with Che-Yong principle. Subsequently, one can predict how the core-being will flow or appear when it encounters another situation.

The scope of application of Che-Yong law includes not only the human world, but also animals, plants, and inanimate objects, and everything from the universe to microscopic worlds such as molecules, and atoms. In other words, Che-Yong law is the natural law of the entire universe. We can therefore reason based on this law.

CONCLUSION

Hyeon-Mi principle is similar to induction in terms of its roles, and Che-Yong principle is similar to deduction. Just as induction is used to collect cases, create a major premise, and apply deduction, the core-being found by Hyeon-Mi principle is used as Che for reasoning with the Che-Yong principle. Formal logic is generally a three-stage argumentation, while Che-Yong logic is the two-stage argumentation. Induction focuses on finding the homogeneity of several objects and drawing conclusions based on that, while Hyeon-Mi principle focuses on finding how the elements within an object are organically combined and what cause governs them. The advantage of induction is in finding the essence of things, distinguishing them, and classifying them, while the advantage of Hyeon-Mi principle is in understanding the internal structure of an object and knowing how it will react to external situations. Induction is more accurate with more experimental cases and fewer exceptions, while Hyeon-Mi principle is more accurate the better one understands the entire circulatory structure of the object.

Induction only collects the same elements, and deduction also reaches the same conclusion. After doing so, new elements are collected, induction is used, and the understanding of the object is expanded. However, there is no way to synthesize the conclusions obtained by the many inductions. For example, there is no way to combine the two conclusions "Human beings are rational animals" and "Human beings are social animals" to draw a new conclusion. By contrast, Che-Yong law synthesizes the opposite into a unity from the start. Both happiness and depression come out of a single loving mind, and root going down and sprout going up come from the same seed. Ultimately, formal logic is good for dealing with multiple objects in a unified manner, while Che-Yong logic is good for examining one object in many ways and synthesizing it into one organism. Moreover, formal logic is poor at dealing systematically with multiple objects, and Che-Yong logic is poor at classifying the same and different aspects of many objects.

When using formal logic in experiments, one uses the same case as far as possible and performs the same treatment accurately, then concludes that such a treatment results in a given outcome. When using Che-Yong logic, various cases of an object are collected, and the causes are identified and synthesized. It is then reasoned that it will react thus in a given situation.

The advantage of formal logic is in being able to accurately cognize objects, while the advantage

of Che-Yong logic is in grasping the cause of a phenomenon comprehensively. Since each has different strengths, weaknesses, and areas of application, it would be desirable to use them together.

REFERENCES

Yun YN (2001) The system and function of CheYong theory in CHU HSI. J Asian Philos Korea 15:275-306.

Yun YN (2020) CheYong logic and EumYang theory applied to the analects of confucius. J Eastern Philos 103:7-41.