

The Essence of Knowledge is Simulation and Logical Construct

Yong Duan

College of Engineering, China Agricultural University, Beijing, China

Keywords: Epistemology, Logical construct, Concept, Simulation, Maths, Geometry

Abstract: It is an important basis of ontology to explain clearly what the subjective world contains. Frege and other Western philosophers were seriously wrong about concepts and the foundations of mathematics. The simulation is to mimic something with a fake product. People's knowledge about the world is also a kind of simulation. The content of knowledge is fake product relative to the object. The difference between people's knowledge and the object that is simulated can be made on purpose. The altered knowledge doesn't necessarily have real object corresponding to it. These thought games can bring about more value of knowledge and benefit in practice. The civilization and culture of human being mainly come from the innovative thought games. The logical construct of sentences describing something is a simulation of the thing or thought game. A symbol is a substance used to create an association in mind. Logical constructs have three advantages compared with real things: simple, useful, and stable. The concept is the logical construct produced after Abstraction of things. Different degrees of Abstraction can produce different degrees of concept. Abstract concepts of most disciplines retain more attributes, so they are not easy to analyze and study. The concepts of numbers and points, lines, planes and bodies are the results that retain few attributes after Abstraction, which are simpler than concepts of other disciplines and easier to analyze and study.

1. Introduction

Now the development of philosophy is very slow. Derrida, Hawking and others even said philosophy is dead. There are many difficulties in philosophy, but one is the most crucial: we must first make clear what is in the subjective world. This question is really the foundation of the whole philosophical ontology. Many philosophy theories were not understood in the past mainly because this question was not clear.

There are not only dreams and sadness in the subjective world, there are many very important things. In the past, most people mistakenly regarded these contents of the subjective world as objective things. The Subjective Idealist philosophers took note of this, and they babble on and on that consciousness is the principle. But they did not get to the point, they did not make clear which important things are in the subjective world. So their philosophy became elusive. Logical constructs including concepts and propositions constitute an objective world 2 in the subjective world. These contents are the simulation and innovation of the objective things. Understanding these things can help us build a whole new world view.

2. The Simulation

2.1 What is Simulation

Simulating is to use a fake product to mimic a real object. For example, a model car can be used to mimic a real car. The shape of the model car is very similar to that of the real car, which means the model car has some of the same structure and properties as the real car, such as wheels, cab, steering wheel and so on. At the same time, some structure and properties are different, the model car is small and slow, and so on.

Human making simulation products can meet human needs. The same properties between the model car and the real car can meet the needs of children. The different properties can meet the needs of adults, because the structure of the model car is simple, so the price is cheap. For the manufacturer, the cost is low, so it can be produced in large quantities.

Many people think that only the true, kind-hearted and beautiful things are good. In fact, many times the false, cruel and ugly things can better meet people's needs. Toy cars are fake, but for children, fake cars satisfy their needs better than real ones. Fake flowers, rockery are good things, artistic images and artistic plots are almost false. Mercy to the enemy is the crime to friends. Clowns on stage can bring us happy and artistic enjoyment. Heliocentric theory is also false, but in Bruno's time, it played a role in historical progress. All drawings and models are fake, they are essential for all kinds of projects. The ultimate standard of value is people's interests and needs, not necessarily true, good and beautiful. The ultimate standard of truth is not truth and objectiveness, but usefulness.

There are many kinds of methods of simulating. The model car is made of plastic, iron plate and other materials. A photo is also a simulation, but the material of the photo is not plastic and iron plate, but paper and ink. Modern technology can also make acoustic, optical, electrical simulation, computer simulation and so on.

2.2 Knowledge is a Kind of Simulation

People's knowledge of the world is also a kind of simulation, the content of knowledge is a fake simulated product compared with the object of knowledge. The material of this simulation is not plastic, ink, nor sound, light, electricity, but ideology. When I see a real car, I create a model of the car in my mind, which is similar to a photo or a computer simulation.

Some of the structures and properties of this mental model are the same as some of the structures and properties of the objective real car, and some of the structures and properties are different.

The name of the simulated product is determined by the same attributes of the simulated object and the simulated product. A toy similar to a car is called a toy car, referred to as a car. A toy similar to a pistol is called a toy pistol, referred to as a pistol.

The name of the cognition is determined by the same attribute of the human cognition and the imitated object. The knowledge similar to the car is called the knowledge (or experience, phenomenon) of the car, referred to as the car. The knowledge similar to the pistol is called the knowledge of the pistol, referred to as the pistol.

Cars and pistols as cognition are not real cars and pistols, but Materialists and Objective Idealists regard them as real cars and pistols. When you stand in front of me, I don't see you as you really are. What I see is my knowledge. My knowledge about you may or may not be the same with you. So Marx's motto was "Doubt everything".

Materials such as plastic and iron are suitable for children's toys because they are cheap, easy to play with and not dangerous. Materials of photo are paper and ink, so photos are small enough to be printed in large quantities, easy to be mailed and carried.

So the simulated product and the imitated object must be different, if they are exactly the same, they can not meet the needs of people. A photo of a building can go in your pocket, but a real building can't. Simulated products and simulated objects are always two fundamentally different things.

The materials used for human cognition are the products of thoughts made by the nervous system in our heads. The nervous system is something everyone is born with, and it costs nothing. Therefore, human's understanding of the world and the objective world itself must be different. If they are exactly the same, they can not meet human needs. The understanding of the world is always something fundamentally different from the objective world itself.

People's cognition can influence people's practice. Since some properties of cognition about cars are the same as those of real cars, this cognitive model can lead to correct practice. But the cognitive model doesn't have much in common with the real car. The real car is very complex. The cognitive model can be very simple. Due to the limited ability of memory, learning and thinking, it is difficult for people to apply the complex cognitive model. The simplification of the model is conducive to practice in many occasions.

2.3 Innovation and Thought Game

The original purpose of making simulated products is to make some of the attributes of simulated

products the same as the imitated object. But this purpose may not be able to achieve. It is possible that a tiger is drawn like a dog. Human cognition as a simulated product may also fail. No one will buy a bad toy, a wrong knowledge will bring bad results in practice. But sometimes people deliberately make the product different from the object they are imitating. For example, people added four feet and two horns to a snake to draw a dragon. There are no real dragons in the physical world, and this difference can add value to simulated products. The deliberate change is called innovation.

Similarly, the difference between human knowledge and the imitated object can also be made on purpose. The altered knowledge doesn't necessarily have corresponding real object. But Husserl said that there must be a corresponding objective object. The Phenomenology of Husserl is a great bad regression of philosophical epistemology.[1] After the innovation of simulated products, strictly speaking, they are no longer simulated products, but the products of thought games. These thought games can bring increasing value of knowledge and practical benefits. Human culture and civilization mainly come from such innovative thought games.

According to Popper, the growth of knowledge depends largely on imaginative conjectural solution.[2] Therefore, our understanding of the objective world is not mainly simulation of the objective world, but the artificial creation and a variety of thought games. People create many logical constructs, such as point, line, plane, numbers, bit, predictions, plans, axioms and theorems, and so on. These logical constructs make up the objective world 2.

Some products of guess, assumptions, and thought games may have objective things corresponding to them, but usually we can't see them. There are a lot of micro-structures that we couldn't see before that we can see now. Many distant stars were never seen before, are now or will be seen in the future. But we can never see such as forces and chemical composition. We can only guess and assume, and their confirmation can only be indirect by logical confirmation. This logical proof can only prove that they are useful, but not objective.

A complex and orderly system of thought products that has nothing to do with the object being imitated can be a tool for man. These thought products come from people's guess, assumption and logical processing. These thought games can completely disregard the laws of the objective world and only obey the rules of the subjective world. Some of the thought products thus produced were of no value to human practice and life, so they were gradually abandoned. Some of them have value, so they are retained and spread, and then new thought processing make them into more complex and ordered systems. Human culture has been evolving through this constant selection and abandonment.

3. Logical Constructs

3.1 Meaning of Symbol and Logical Construct

Speaking and writing is a kind of practice governed by man's mind. When people use language or words to express their thought, there are logical relationships such as “and, not, or” between multiple sentences. The statements connected by these logical relationships are called logical constructs or logical structures. A logical construct of sentences describing something is a simulation of something or a thought game. Some of the structures and properties of this logical construct are the same as the objective real things, and some of the structures and properties are different.

The basic elements of logical constructs are symbols. There are many kinds of symbols. Words, numbers, graphics, animations are symbols, sounds, language and actions may be symbols, too.

A symbol has three characters. First, it is a man-made substance, not a consciousness. Second, when we see or hear it, we'll have certain associations in mind. Third, the properties of the symbol itself have no value, while the associations we make in mind when we see and hear it have a lot of value.

A logical construct usually consists of multiple sentences. Russell called each sentence an atomic proposition, and multiple sentences constitute a molecular proposition. For example, China has a

long history, and China has great people. This is a molecular proposition consisting of two atomic propositions. Molecular proposition is a logical function composed of atomic propositions. An atomic proposition can be its own logical function. Multiple molecular propositions constitute documents, theories, books, and systems of thought.

The logical construct composed of symbols is substance, not consciousness. But when the logical construct is constructed, processed and used, the corresponding consciousness needs to be produced. The symbol is dead, and the consciousness corresponding to it is alive. So the main function of logical construct is that of consciousness.

Definition: Logical constructs are simulated or innovative thought products, including thought products as consciousness and symbols.

There are three forms of logical constructs as thought product. The first is composed of multiple statements and propositions. The second is composed of multiple images, videos and so on. For example, when we think of China, we think of maps of China, the Great Wall and Huanghe river. These images and videos can also be connected into a complete logical construct by logical relations such as “and, not, or” like propositions, in which each image or video is equivalent to an atomic proposition. The third type is composed of statements, propositions, images and videos.

Objective things have many properties, some properties can be simulated by image and video, some properties can not be simulated by image and video. For example, the weight of product cannot be represented by images, but only by literal symbols. The shape of the product is difficult to describe clearly with words, but suitable for graphic description. So the simulation needs both image and language. The combination of these things with logical relation words is a complete logical construct.

As a tool, the main function of logical constructs is to influence our decisions, which can determine our practical behavior. These practices are real and objective material movements that satisfy our needs and bring us happiness.

3.2 Logical Constructs Are Simple and Steady

Logical constructs as consciousness are not real objective concrete things, but compared with real things, they have three advantages: simple, useful, and stable.

First, simple. Ancient events can be described in words, and the description is the simulation of ancient events with logical construct. How far is ancient times up to now? Between jokes. A war kills millions and consumes millions of resources, but language takes little effort.

Objective and concrete things are infinitely complex, but man-made things are very simple at the beginning. As time goes by, slowly processing, they will become complex. Simplicity is one of the standards of truth, also known as Occam's razor, which shows how important simplicity is. Logical constructs are all fake, but their simplicity is an advantage.

Second, useful. Logical constructs are easy to use because it is simple. People are stupid and lazy, they always like to use simple things. The development of logical constructs has become the main means of the development of human civilization. Logical constructs are the basis of all human civilization and the most orderly content of human culture.

Xun Zi, a famous ancient Chinese thinker said, “Obeying and praising the heaven rules is not as good as creating heaven rules and using them.” Laws are the heaven rules made by human. No matter whether they are real heaven rules or not, as long as people can use them and bring benefits, they are the best and most important. The heaven is objective, obeying the heaven rules is not important, whether the knowledge are objective is not important. Xun Zi said, “The heaven is able to create things, but it cannot distinguish things. The ground can carry people, but it cannot govern people.” The heaven cannot distinguish things, we must use artificial logical constructs to understand things. The ground cannot govern people, we must rely on man-made tools.

Third, stable. It is not difficult for a person to do a good deed, but it is difficult to do good deeds all his life. It would be rash to call John a good man if you found him doing a good deed. We always take permanent things as real. Concrete things are always changing, while logical constructs can remain unchanged for a long time. Everyone will grow old, but the fairy will not grow old, the

Monkey King can live forever. The story of *Journey to the West* can be told generation after generation. The speed of the car changes, the acceleration changes, but the relationship between the force and acceleration never changes. The truth is eternal and invariable, they are correct all the world. Things remain essentially the same despite all apparent changes. So the truth is useful.

Stable things are simple compared with mutable things. Logical constructs are more stable than many objective things, so logical constructs are simple. Human pursuit of eternal truth is the pursuit of simplicity.

Materialists say that motion is absolute and unconditional, while stillness is relative and conditional. That may be true in physical world, but it's not what we want. Do you want Newton's laws to change every day? Philosophers regard the immutable thing as the Principle. So the logical constructs as subjective things are part of the Principle.

The Surangama Sutra treats these immutable things as sacred and explains them in great detail. That's why professor Jicheng Guo of China University of Political Science and Law said that *the Surangama Sutra* is deeper than Kant and Hegel. Objective Idealists believe that only things that are objective and true can be immutable, so they insist on saying that logical constructs are objective and true.

Some subjective things are stable and some are unstable, some objective things are stable and some are unstable. Humans need something stable, so they made up a lot of concepts and theorems. Humans have the ability to make stable things, then science was born. There are a lot of order things in civilization and culture that are stable things people made. They can be passed down from generation to generation. Who can say they are not stable if they can be passed down from generation to generation? On the contrary, many objective things are unstable. For example, the amount of water in a river varies from year to year, or even from day to day. You cannot step twice into the same river.

Objective Idealists arbitrarily assume that only objective things are stable, and subjective things must be unstable. So they treat stable subjective things as objective things. That's how Plato's Theory of Ideas came about. What's more, Plato thought that only stable things are real, unstable things are not real, so he believed unstable things in the objective world are not real. Heidegger said, "To Being, therefore, seen Platonically, permanence belongs. All that becomes and suffers alteration, as impermanent, has no Being." [3] If all that changes are false, then the son of a judge must be a judge, and the son of a thief must be a thief. If the son of a thief becomes a judge, he must be in pretence.

3.3 The Evolution of Logical Constructs

The concrete things in the subjective world is different from the concrete things in the objective world. Every concrete thing in the objective world has infinite number of properties, while the concrete thing in the subjective world contains only a finite number of properties, it is a logical construct. The more process people make on the logical construct, the more properties it contains. For example, the role of white snake in *The Legend of White Snake* was just a man-eating snake at the beginning, then through continuous artistic processing of her in various dynasties she became a flesh-and-blood and emotionally rich character.

A real car contains an infinite number of attributes, while for the average person, the logical construct of the car in the subjective world only has one shape and the attribute of running, excluding other attributes of the car, such as engine structure, tire, electronic control function, etc. With professional training, the properties of the logical construct of the car in the subjective world will gradually increase. The course that the logical construct gradually increase its attributes and getting orderly is the forward evolutionary process of logical construct and culture gene. [4]

4. The Theory of Concept

4.1 Abstraction

Abstraction is a kind of thought game, which is characterized by focusing only on some properties of things and ignoring others. For example, Chinese people have male and female, old and young. I only care about whether you are Chinese, do not care about you are male or female, old or young, that is Abstraction. Commonness is the Abstract of many materials, and the law is the Abstract of many events.

4.2. Introduction

There are different degrees of abstraction. More abstraction means fewer properties to focus on and more properties to ignore. Concrete and abstract are opposition, the less degree of abstraction means more concrete. All objective things are concrete beings with infinitely multiple properties. Human cognition can only focus on some attributes, so all human cognition is abstract.

Simulated products have some of the same attributes as the object, and some of the attributes are different from the object. We tend to only pay attention to the same attributes, do not care about the different attributes. Then the simulated product can be regarded as an abstract of the simulated object.

4.3 The Simulation of Event, Material, Law and Commonness

In the objective world, there are events, materials, laws, commonness and relationships. Event is the movement and changes of material and relationships. Logical construct comes from artificial simulation products. Logical constructs can simulate all events, materials, laws, commonness and relationships.

A car is a concrete material, which can be simulated by words, images and other symbols to form a logical construct about the car. An event can also be simulated, that is to describe the event by words, images and other symbols. For example, to describe the process of accelerating and overtaking of a car, or describe an ancient story.

The simulation of objective laws is the scientific exposition of various theorems, axioms and principles. However, we cannot directly observe the objective laws, so we cannot directly simulate the objective laws. We can only observe events first, and then abstract the commonness of the events, we regard the abstract result as the simulation of the objective law.

All cars have wheels, which is a commonness. The description of this commonness is a logical construct. The commonness come from abstraction of individuals rather than simulation of objective commonness, which cannot be observed. In the process of abstracting events and individuals, there are many guesses and assumptions.

The relations of objective things includes time relation, space structure relation, same, similar, function relation and so on. Many simulations of relations also come from guess and assumption.

Materialists and Objective Idealists are wrong to think that the knowledge of objective laws and commonness comes from the simulation of them. We have never seen objective laws and commonness. We can only see individual things and events one by one. Since objective laws and commonness cannot be observed, they are never the criterion of truth. If we could see the objective law, then we can see whether our knowledge is right when we compare the objective law with our knowledge. But we cannot do that. The usefulness is the criterion of truth. Our knowledge of objective laws is considered to be true if it brings benefit when applied to practice.

4.4 Concepts Are Logical Constructs

A concept is a symbol. When we see this symbol, we will have certain associations. The definition of a concept is the description of these associations. The concept may be the name of commonness of things or the name of a set of things, the standard of classification is the commonness. The content of concept is the logical construct produced after abstraction of things. Different degrees of abstraction can produce different degrees of concept. For example, sparrow, bird, animal, creature, matter are all concepts, but they have different degrees of abstraction.

G.C.Lichtenberg, Professor of physics at Gottingen University said, "Mother Nature does not create genera and species, she creates individuals." [5] Therefore, concept is not the simulation of

objective things, but the innovation of logical construct. The method of innovation is abstraction. For example, there are many kinds of birds, there are migratory birds and resident birds, there are carnivores and omnivores, and there are many differences in size, call, color and so on. The concept of “bird” ignores all these differences, focusing only on the fact that they have wings, no teeth, etc., and then we make the logical construct of “bird”. The concept does not exist in the objective world. There are sparrows and eagles, but no individual animal is named bird. The objective world has white, red, yellow and black horses, but no horse. There is not a horse in colour both white and black, yellow and red at the same time. The concept “horse” can only exist in the human mind as a product of thought game. So Gongsun Long, an ancient Chinese thinker, said, “A white horse is not a horse.”

Gongsun Long said, “A chicken has three feet.” Because he added concepts of different abstract degrees together. A chicken's feet include the left foot and the right foot, which are abstracted to produce the concept of “foot”. The abstract “foot” is neither left foot nor right foot, and it includes both left and right feet. It includes the feet of all chickens, big and small, of all colors, it is both one foot and countless feet. The two feet of a chicken should not add to the abstract foot of course.

A chicken with two feet can also be an abstract concept, paralleling with the concept of chicken's foot in the subjective world. Concepts at all different levels of abstraction can coexist in the subjective world, but the results of thought games such as adding and subtracting them do not necessarily make sense.

4.5 Concept is Not Objective Idea

In the process of producing concept, a certain kind of things are abstracted and some attributes are ignored. The simulation of a specific bird, such as a sparrow, also ignores some attributes. Because the simulation of concrete sparrow has objective counterpart, so Plato believed that abstract concepts also have objective counterparts. Plato believed that ideas were real things in the objective world, not artificial logical constructs.

Plato's Idealism has been heavily criticized. It is now accepted that ideas do not exist in the objective world, it is just like the God doesn't exist in the objective world, but concepts do exist. The so called “do exist” is existence as logical constructs in the subjective world. The fact that concepts and ideas do not exist in the objective world does not mean that concepts are not important. On the contrary, concepts are very important and are the basis of all science and philosophy. The richness and development of concepts often represent the level of development of science and philosophy. Since idea is the same as concept in the subjective world, Plato's Objective Idealism is of great value to the development of philosophy.

Frege's concept is just Plato's idea. “And we are driven to the conclusion that number is neither spatial and physical, like Mill's piles of pebbles and gingersnaps, nor yet subjective like ideas, but non-sensible and objective.” Frege said. “Now objectivity cannot, of course, be based on any sense-impression, which as an affection of our mind is entirely subjective, but only, so far as I can see, on the reason.”[6]

Frege argued that concepts had nothing to do with psychology. He said, “We suppose, it would seem, that concepts sprout in the individual mind like leaves on a tree, and we think to discover their nature by studying their birth: we seek to define them psychologically, in terms of the nature of the human mind. But this account makes everything subjective, and if we follow it through to the end, does away with truth.”[7] Frege's bias was completely wrong, his error was the same as Plato's essentially.

The purpose of abstraction is to simplify. Concrete things are complex and difficult to deal with logically. After simplification they are easy to deal with logically, and easy to be used. Only after they can be dealt logically, can we play complex thought games. Every discipline is based on abstract concepts. But the concepts of most disciplines retain more attributes after abstraction, so they are not easy to analyze and study, while numbers, dot, line, plane and body are the results that retain few attributes after abstraction. They are simpler than concepts of other disciplines and easier to analyze and study. Therefore, rich and colorful thought games were played even in ancient times.

5. Maths and Geometry

5.1 Numbers Are Abstract Logical Constructs

What is a chicken plus a dog? Is it equal to two chickens or two dogs? Obviously neither. But we can say that 1 plus 1 is 2. Because we have abstracted them before we do this operation. What do we mean by 1? It is a logical construct created by abstracting things such as a chicken, a dog, a person, and an earth. When I need to add a chicken and a dog, I have to first abstract away their personalities and retain their commonness, such as they are both small animals, so that I can add them.

“Never let us take a description of the origin of an idea for a definition.” Frege said, “but psychology should not imagine that it can contribute anything whatever to the foundation of arithmetic.”[8] Frege did not know that many of the most basic concepts must be defined by association in mind. For example if a child does not know what is 1, adult will say to him, “Look, child, this number is called 1. What is 1? I have a pen, an eraser, a chair, these are all 1. Got it?” The child says, “I understand.” By saying this the child means that he has created an association in his mind. Next time he sees 1, he will think of a pen, an eraser and a chair. That's how the concept of 1 is defined. Frege devoted 24 pages of his *Arithmetical Foundation* to trying to define 1[9], which he left unclear.

Frege said, “No, sensations are absolutely no concern of arithmetic. No more are mental pictures, formed from the amalgamated traces of earlier sense-impressions. All these phases of consciousness are characteristically fluctuating and indefinite, in strong contrast to the definiteness and fixity of the concepts and objects of mathematics.”[10] Frege did not understand that the subjective products of abstraction can be certain and stable. Frege kept to fundamental principles: always to separate sharply the psychological from the logical, the subjective from the objective.[11] He regarded this as an important principle of logic. Later western language philosophers regarded Frege's principle as the standard.

Abstract processes can only be carried out in the subjective world. In the objective world, there is no Abstract number 1, only a specific person, a book, a table, etc. No two leaves are the same in objective world, and one is never equal to one. In the Abstract subjective world, 1 can be equal to 1. Because every time we talk about 1 in maths, we're talking about a logical construct that doesn't have specific properties.

5.2 Introduction

The natural numbers studied in maths do not exist objectively, but are logical constructs of human imagination. Other numbers are also logical constructs, integers, fractions, decimals, real numbers and imaginary numbers are all logical constructs created by human being.

Chess is a game with a board and pieces. Among the pieces there are rook, horse, soldier, king and queen, etc. These pieces are fake. They are simulations of real things like chariots and horses. Numbers, points, lines, planes and bodies are highly abstract concepts, just like the chess pieces.

The rules of the game of chess are simulation of the objective rules, but these simulations is far from the real rules, can be said completely innovation. Under these innovative rules, a variety of games can be played. Maths and geometry are like chess, playing thought games using innovative rules rather than objective rules. Philosophy, like maths and geometry, is a game of thought.

The thought games of maths and geometry can lead to many theorems and conclusions that can have a great guiding effect on real life. That is just like people who have played chess for a long time can learn many life philosophies from the game.

5.3 Geometric Shapes Are Simple and Useful But Unreal

Geometry deals with points that have no size, lines that have no width, surfaces that have no thickness, and bodies that are regular. In the objective world all points have a size, all lines have a width, all planes have a thickness, no bodies are regular. Therefore, the points, lines, planes and bodies studied in geometry do not exist objectively, but are symbols and logical constructs imagined

by human being.

Humans create logical constructs for simplicity. All concrete things are infinitely complex, subjective things are much simpler. When creating logical constructs, there is always a process from simple to complex. The logical constructs created at the beginning are all very simple. Geometric forms are simple and useful but unreal logical constructs.

For example, the surface area of a cube is equal to the length of the sides squared times 6, which is very simple and very precise. But if you want to calculate the surface area of an irregular rock, can you figure it out? There is no real cube in the objective world. A regular cube is a logical construct created in human mind and can only exist in the subjective world. The cube in the objective world is not a regular cube, all have various bumps or defects. Humans create regular cubes for the purpose of simplification, an abstraction from the real cube.

Some real things are useful, some real things are not useful. All we want is useful things. For example, a park wants to paint a huge stone, they need to calculate the surface area of the stone, and then decide how many barrels of paint to buy. They don't need a precise number, just a rough estimate. So they can simplify the irregular shape of the stone into regular polyhedron, which make it easier to calculate. The surface area of this regular polyhedron is a simple and useful but unreal number.

5.4 Maths and Geometry Are the Systematization of Logical Constructs

Numbers, dots, lines, planes and bodies are not objects of the objective world, but symbols and logical constructs created by human being. People continued to construct and deduce these logical constructs, making them complicate and orderly in order to form subjects like maths and geometry. The content of these subjects is the systematic content of subjective logical constructs.

When human first created symbols, the purpose was to simulate the real things. Later, the symbols gradually developed, and the symbols themselves constituted a complex and orderly system. The process in which these symbols are processed and transformed by people's thought games often has nothing to do with the external things that were initially imitated. Maths and geometry are such systems of symbols. Points, lines, planes, and bodies can find their external counterparts at the beginning, but many of the geometry propositions they constitute have nothing to do with external things. Natural numbers can be said to be description of the number of external things, but the relationship between external things and decimal, fraction, irrational number, set, calculus and other mathematical content is becoming less and less.

Because maths and geometry played complex thought games in ancient times, and the products of these games were of great practical significance and were the basis of all human culture and civilization, these abstract concepts were much more important than concrete things. It makes sense for Plato to push the idea to a supreme position, and it makes sense that Plato and Objective Idealism enjoyed a high place in the history of philosophy. Today, we should correctly evaluate the value and defects of Idealism, at this basis, establish a new philosophical theory in which concepts replace ideas and Dialectical Dualism replace Objective Idealism.[12]

6. Conclusion

All simulation is fake, all the concepts, all the logical constructs, all the innovations of the logical constructs coming from simulation, are fake. These fake things are simple, useful and stable. They are the main content of human civilization and culture. The ultimate goal of philosophy and science is not to pursue objectivity, but to pursue practical value and serve practice.

This theory about concept, simulation and logical construct is of Dialectical Dualism philosophy. This theory has some similarities with western language philosophy, but at the same time there are essential differences. The ontology of language philosophy is Idealism. They do not understand the nature of logical construct and concept. They do not have an accurate definition of symbol, and lack a correct understanding of symbol systems of maths and geometry, etc.

References

- [1] Popper,K.R.(1972)Objective Knowledge-an Evolutionary Approach.Oxford:Oxford Univ. Pr., p.164.
- [2] Heidegger,M.(1991). Nietzsche. Translated by David Farrell krell. New York: Harper San Francisco, p.173.
- [3] Y. Duan, Collections of Taiji Evolutionism. Lambert Academic Publishing,2019:196.
- [4] G.Frege.The Foundations of Arithmetic : a logico-mathematical enquiry into the concept of number. English tr. by J.L.Austin.Oxford: Blackwell, 1953,p.38.
- [5] Y.Duan. The World View of Dialectical Dualist: The Dialectical Relation View of the Subjective World and the Objective World.*International Journal of Philosophy*.Vol.9,No.2,2021, pp.78-84.