(1) The Foundational Dilemma of Formal Logic

In the world of language, the application of language is at its core. The purpose of the application of language is to enable communication among people. This communication among people is not always effective. That is to say, some people may not express their meaning clearly, while others may not understand the meaning of others. The most important reason to consider in this is whether people are communicating according to some kind of effective rules. Such rules might be a certain habit among the interlocutors, a certain tacit understanding, or a certain explicit agreement that has been reached, and so on. These are some self-defined rules. But these are not the rules we are looking for. What we want is a highest rule, one that possesses the highest standard, a rule that any self-defined rules must also obey. The highest rule of this kind that we currently recognize is formal logic.

Formal logic is the fundamental law of human thought; it provides us with the tools for conducting inference and argumentation. Any philosophical system, if it wishes to explain the world, must be established on the foundation of formal logic. On the other hand, any philosophical system, if it wishes to explain the world completely, must also be able to fully explain and integrate formal logic. Otherwise, such a philosophy is incomplete. That is to say, formal logic as a tool is also an object of philosophical study. Because, if it does not fully explain formal logic, then formal logic will remain in a position above that philosophy, becoming a more fundamental, irreducible logical rule. Therefore, such a philosophy has a fundamental flaw in its explanation of the world, and thus cannot possibly explain this world completely.

On the one hand, one must use formal logic to study philosophy; on the other hand, one must use philosophy to explain formal logic. This seems to fall into a circular argument. On the one hand, one wishes to transcend formal logic in philosophy; on the other hand, formal logic always accompanies any theory. This seems to be saying that there cannot exist a theory that transcends formal logic and is able to explain formal logic.

Historically, mainstream philosophical systems have tended to regard formal logic as a self-evident, a priori law, bracketing the inquiry into its own origin. This has led to a profound rupture between philosophy and its logical foundation. For example, Kant viewed logic as an a priori given, not questioning its origin, but using it to deduce the categorical structure of experience (Kant, 1781, Bviii). By presupposing logic as the foundation of his system, he risked circularity (using logic to verify a priori conditions). Hegel's dialectic attempted to transcend formal logic (Hegel, 1817), but the dialectic is still integrated with formal categories (passivity/negation/sublation), and did not completely escape the dilemma of self-justification.

Any explanation of formal logic from within its own framework must inevitably presuppose its validity, thus falling into the circle of 'using logic to prove logic'. Formal logic becomes the ultimate ground of its own legitimacy, unable to be 'explained' by any other, more fundamental theory. It is precisely this unique self-sufficiency and prerequisite nature that places formal logic in an insurmountable foundational position; any explanation and theoretical construction must be built upon it. Formal logic is in such a situation: it is both an indispensable foundation and difficult to truly explain and integrate.

So, is there a higher ground above formal logic? And is it such a ground that is the standard from

which formal logic itself is generated? We will now use no form action theory to explain the three fundamental laws of formal logic. We will see how formal logic is integrated into no form action theory and becomes a part of it. No form action theory itself also uses formal logic. Is such an explanation possible? Yes, it is possible, because no form action theory can explain itself. No form action theory has the ability to integrate itself into itself. There is nothing strange about the existence of a theory with such an ability, because the entire world integrates itself into itself. This world is a self-organizing, self-evolving system; its existence and development all follow its own laws. This also shows that formal logic has touched upon the foundation of this world, and what no form action theory provides is precisely the key that can unlock its mysteries.

(2) Investigating 'is'

(2.1) The Manifestation Action of 'is'

Let us first analyze the three fundamental laws of formal logic: the law of identity, the law of non-contradiction, and the law of the excluded middle. Let us first define a few expressions: 'A is A' (Expression 1-1), 'A is not A' (Expression 1-2); 'A is B' (Expression 2-1), 'A is not B' (Expression 2-2).

Law of Identity: 1-1 (or 1-1 is true).

Law of Non-Contradiction: 2-1 cannot be both true and false at the same time; 2-2 cannot be both true and false at the same time.

Law of the Excluded Middle: Expression 2-1 is either true or false; Expression 2-2 is either true or false.

Let us first look at the law of identity. If 1-1 is true, then 1-2 is false. For now, we are only considering the problem from the perspective of formal logic. If 1-2 is false, does 2-1 satisfy 1-2? It clearly does. Then 1-2 is false, and it is eternally false. But we use 2-1 in our daily lives, for example, 'Socrates is a man'. Here, 'is' can be explained as 'belongs to'. This is to say that the 'is' in the law of identity and the 'is' in 2-1 are different. Even if the 'is' in the law of identity is also explained as 'belongs to', the conclusion that 1-2 is false will still be reached. Unless, the 'is' in 1-1 and the 'is' in 2-1 are fundamentally different, that is, they cannot be substituted for one another at all. Then how should this be explained? 'Socrates is'. The 'is' in this expression is again different; it contains the meaning of 'being'.

This is to say that the meaning of 'is' is diverse. Although in actual application, there are generally no problems, this may be due to the accumulation of experience that has prevented problems from arising. However, this may cause obstacles in our research into the foundational theory of formal logic, may increase the complexity of formal logic, and may hinder our clear understanding of it. The problem is, although 'is' has different meanings, these various 'is's can all be expressed as true or false. How can this be explained? I think this requires a unified explanation of 'is' in order to avoid such confusion and thereby have a better understanding of formal logic.

Why not explain the 'is' in the law of identity (1-1) as manifestation? That is, A's immediate manifestation of itself (that is, it is directly manifested; its transparency allows it to manifest itself). Without indirectness, is it not itself? Is it not identity? 'Is', as manifestation, can combine

with A to produce manifestation action. From the form of the language, the two A's in 1-1 look the same, but in fact, they are not. For 1-1, the first A is an isolated A, and the second A is a manifested A.

For the direct manifestation of the thing represented by A itself, it is its own authentic manifestation. And 1-1, as an expression of language, is precisely the authentic manifestation of A. Such a linguistic expression is a manifestation action, and this manifestation action can be called 'truth' (the truth of manifestation). This is an unconcealed state, so truth is directly manifested. The manifestation action of 1-2 is then called 'falsity' (the falsity of manifestation). In other words, both 'is' and 'is not' are manifestations; 'is not' relative to 'is' can be called reverse manifestation.

The meaning of 'is' as manifestation was understood in this primordial way as early as ancient Greece. Heidegger, in The Principle of Reason, said this: the Greek word εἶναι, which is represented by the Latin esse and our German auxiliary verb 'sein', means: an-wesen [to be-present, to manifest]. Interpreted in the Greek sense, 'Sein' means: to shine forth into concealment and to shine forth from concealment, and thus, shining forth, to endure and to linger (Heidegger, The Principle of Reason, 1957).

However, another problem then arises. According to the explanation of 'is' in 1-1 as manifestation, what does '1-1 is 1-1' mean? Does it conform to 1-1? '1-1 is 1-1' expresses a linguistic manifestation action. In other words, 1-1 expresses the authentic manifestation of A in a linguistic way; it is itself a manifestation action, a manifestation action of linguistic expression. Thus, we can express it like this: '1-1 is true' (and 'true' is also 1-1), or 'truth is truth'. In language, 'truth' becomes the highest manifestation action. As a manifestation action, 'truth' can only be true. There is no other way to express 1-1 than as true. 'Truth' cannot be both true and false. The above explanation is the same for 'falsity'.

In this way, the 'is' as a non-linguistic manifestation in 1-1 and the 'is' as a linguistic manifestation are unified. Thus, the manifested 'is' in 1-1 is self-consistent. This means that both the 'is' in 1-1 and the 'is' in '1-1 is true' have the meaning of manifestation. This is because '1-1 is true' and '1-1 is 1-1' mean the same thing.

For the expression 2-1, if the intension of B is greater than the intension of A, then the 'is' in this expression means 'belongs to'; that is, A is manifested through B. Through continuous tracing by the method of limits, it can finally be determined that 'A is a being of isolation'; that is, the being of isolation is reached. For 1-1, it is impossible to reach such a being of isolation. Thus, we can only explain this expression as manifestation. Only the expression of direct manifestation in 1-1 is eternally true. Only the expression 1-2 is eternally false.

In this way, the 'is' in 1-1 expresses manifestation action; it is a direct manifestation. This 'is' is the 'is of manifestation'. And the 'is' in 2-1 also expresses manifestation action, but it expresses a relationship of 'attribute' (a relationship of isolation). This 'is' is the 'is of isolation'. According to the viewpoint of no form action theory, they cannot be substituted for one another, only mutually transformed. In other words, when the second A in 1-1 is replaced by B, the 'is' in 1-1 (the 'is of manifestation') must be explained by a transformation from manifestation to 'belongs to' (the 'is of isolation'). And when B in 2-1 is replaced by A, the 'is' in 2-1 must be explained by a

transformation from 'belongs to' to 'manifestation'.

We have now defined the most direct, identity-based 'truth' as 'the truth of manifestation'. It originates from the 'is of manifestation' and possesses openness and absoluteness. However, when dealing with propositions like 2-1, which are based on the 'is of isolation', we need to introduce another type of truth.

When the judgment 'Socrates is a man' is confirmed as a fact, it is not merely an isolated statement, but rather opens a chain leading to an ontological ground, the limit point of which is 'Socrates is a being of isolation'. We define this type of truthfulness, which is based on facts and supported by a chain of grounds, as 'the truth of isolation'. Similarly, for a factual causal judgment 'A is the cause of B', by tracing back its causal chain, one can ultimately arrive at 'freedom' as the ultimate cause. We define this type of truthfulness, which is based on facts and supported by a causal chain, as 'the truth of motive force'. Since freedom, being, and manifestation are interconnected at the highest level of no form, then on the basis of facts, these three truths are identical and equal.

These three truths correspond respectively to the three no form actions and have different characteristics:

1) The truth of manifestation: This is the truth of opening. It pursues the opening of essence, as in 1-1. Its truthfulness is direct, absolute, and eternal.

2) The truth of isolation: This is the truth of ground. It pursues the ground of the substance, as in 2-1. Its truthfulness depends on the correct grasp of the relationship of a thing's belonging.

3) The truth of motive force: This is the truth of cause. It pursues the substance as cause, as in 'A causes B'. Its truthfulness depends on the correct grasp of the causal connection.

Although these three 'truths' are interconnected and unified at the ultimate level of 'no form', on the practical level of cognition, their reliability exhibits profound differences. Only 'the truth of manifestation' is directly manifested, unconditional, and absolute. Both 'the truth of isolation', due to the concealment brought about by its nested chain of grounds, and 'the truth of motive force', due to the indirectness of its causal transmission process, are such that they may be fallacious in specific judgments. In other words, a proposition that we consider to be 'the truth of isolation' or 'the truth of motive force' may still be false. This profoundly reveals the fundamental difference between absolute logical truth and fallible empirical truth, and finds its ontological root.

The question now is how to apply this 'is' of the law of identity, explained as manifestation, to 2-1 and 2-2. We can rewrite Expression 2-1 in this way: Expression 2-1 can be written as 'A is the A that belongs to the set B' (Expression 2-1-1). ('A is B' can be explained as: A is manifested according to B; that is, B is the ground of A). This can be abbreviated as 'A is the A in B'. For example, 'Socrates is a man' can be written as: 'Socrates is the Socrates that belongs to the set of men'. In this way, this 'is' still has the meaning of manifestation; that is, it is an extension of 'A is A'. The added parts 'A belongs to the set B' and 'Socrates belongs to the set of men' are, in fact, the content of a factual, empirical judgment (this is a truth of isolation). In this way, it has been incorporated into 1-1. According to the preceding discussion of the two types of 'truth', this is, in

fact, a combination of the two 'truths'.

This both maintains the law of identity and expresses content. It is compatible with the identity of 1-1, and it also enriches its content. That is, the individual, through its own attributes, is indivisibly integrated into the structure of the whole, and in turn, the individual is known through the whole, constituting a unified ontological structure. In this way, 'is' still retains the meaning of 'manifestation', but it is expanded into a nested manifestation.

If A is indeed a member of set B, then in 2-1-1, according to the truth of 1-1, 2-1-1, as an extension of 1-1, is true. According to the falsity of 1-2, 'A is not the A that belongs to the set B' (Expression 2-2-1) is false. 2-2-1 is an extension of 1-2. If A is not a member of set B, then in fact, 2-1-1 will become an extension of 1-2 (2-2-1): 'A is not the A that is in the set of non-B'. A similar analysis can be performed.

Note, the purpose of doing this is for the theoretical study of formal logic, not to replace the usual mode of expression. The approach above is, in fact, to bind the 'is of isolation' onto the 'is of manifestation', thereby making these two 'is's into a single whole.

Thus, the law of identity can be expressed as: 1-1 is true; the law of non-contradiction can be expressed as: 2-1-1 and 2-2-1 cannot be both true and false at the same time; the law of the excluded middle can be expressed as: 2-1-1 and 2-2-1 are either true or false. In this way, the three fundamental laws can all be explained within the framework of the 'is of manifestation'.

Kant, in his research conducted around 1790, said: "The understanding can show its capacity only in judgments. It is nothing other than the unity of consciousness in the relation of concepts in general..." (Kant, 1793, p. 97). Any relation of representations requires a unity to be maintained; this unity is realized through judgment and is embodied as the objective unity of concepts (Kant, 1781, B141). Aristotle expressed a similar view earlier: "In judgment, the manifold of representations are always gathered into some kind of unity" (Aristotle, De Anima, Γ6, 430a).

Kant made this clear in the title of the important Section 19. The original text is: "The logical form of all judgments consists in the objective unity of the apperception of the concepts contained therein." (Kant, 1781).

Both Aristotle and Kant recognized the unity of concepts in judgment, but Kant did not clearly explain what this unity means. In fact, the unity Kant spoke of is a unity on a higher level. Based on the preceding analysis, this higher level is precisely the identity of 'A is A' and its extension. The identity of formal logic must ultimately be elevated to the identity of manifestation in human consciousness, because it is man who is thinking, it is man who is manifesting.

As for 'Socrates is', this is an expression that does not point to any object, or rather, it can point to any object that it is able to point to. For instance, with 'Socrates is a man', through the method of limits, we can ultimately obtain 'Socrates is a being of isolation'. Even if we do not know what a certain thing is in detail, we can still arrive at such a conclusion. Take dark matter, for example. We only know that dark matter is, but we do not know what it is in detail. We do not concern ourselves with what it is in detail; in any case, it must be something (since we already know it has gravity, at this stage we can at least say it is a thing that has mass and gravity). Through the method of limits, we can also say that dark matter is a being of isolation.

For the statement 2-1, we can see it as a simplification of 2-1-1. Thus, based on 2-1-1, it can be seen that the purpose of 2-1 is to express A through B (to distinguish it from 'A is A'); that is, to manifest A in the mode of isolation (there is distinguishability and independence between A and B). For A (isolation action) to be manifested as B, its motive force action comes from human thought (this is the reason we always feel that 'is' has a certain dynamism, but in fact, it is not that 'is' has dynamism, but that human thought behind it has dynamism); it is man who is going to manifest this A. This is a no form united transformation.

Previously, using the method of limits, the concept of 'being' was obtained. Based on the trajectory of its path, this is a being of isolation. This 'is' is indeed very similar to being, but it is also indeed different. This 'is' is required to be different from all forms, because it is to manifest all forms. Thus, such a difference can only require that 'is' be no form. However, through the manifestation action (2-1) generated by 'is', and then through the method of limits, the concept of 'being' can be reached. This connects 'is' and being. Viewed in this way, 'is' can, through some means, transition to being.

'Is' is the manifestation of the world of language, a manifestation of isolation. Thus, 'is' and being are both no form; they are interconnected. Therefore, sometimes we express the being of something as 'A is'.

(2.2) The Three 'Is's

For A, 1-1 and 1-2 are contradictory. This contradiction arises because in 1-1 (the truth of manifestation), a 'not' is used to negate 1-1, thereby causing the truth manifested in 1-1 to become the falsity manifested in 1-2. The negation of 1-1 is, in fact, a total negation (this will be discussed in the subsection "Dialectical Logic"). This total negation means that negating 1-2 will result in 1-1. That is, they are mutually negating. This rule does not belong to formal logic, but to dialectical logic. This shows that formal logic cannot be separated from dialectical logic.

We call the 'falsity' that arises from the deviation from the identity of 1-1 the 'falsity of manifestation' (that is, the absolute falsity of logical form). And we call the falsity that arises from a judgment 2-1 that does not conform to empirical facts the 'falsity of isolation' (that is, the falsity of empirical fact). If 2-1 is a fact, then it is the 'truth of isolation'. If 2-1 is not a fact, then it is the 'falsity of isolation'. This is because, from the strictest perspective, which recognizes only 1-1 as the absolute 'truth of manifestation', any statement that introduces a different concept (B) has already destroyed that pure, direct self-identity. Therefore, in its logical form, it is no longer the truth of manifestation, and thus falls into the broad category of the falsity of manifestation (that is, 1-2, 'A is not A'). Regardless of whether 2-1 is a fact or not, it belongs to the falsity of manifestation (1-2), and 1-2 includes both of these cases. So, from the perspective of the falsity of manifestation: the falsity of manifestation of 1-2 is equivalent to the 'falsity of manifestation' of 2-1. So, conversely, negating the falsity of manifestation of 1-2 (or 2-1) will result in 1-1.

Note, negating the truth of manifestation of 1-1 will result in the falsity of manifestation of 1-2 (or 2-1), while negating the truth of isolation of 2-1 will result in the falsity of isolation of 2-1. These two negations are different. That is to say, for 2-1, there are two types of falsity: the falsity of manifestation that arises from negating 1-1 (which is equivalent to the falsity of manifestation of 1-2). Regardless of whether 2-1 is a fact or not, it is a falsity of manifestation. The other type is

the falsity of isolation, which is a falsity of fact. Of course, corresponding to an incorrect causal judgment, there should also be a 'falsity of motive force'.

How can a thing be turned into a thing that is most different from it? It is by negating it, by turning it into a thing that is its negation. Therefore, to 'negate' a thing is the greatest change for that thing. This 'negation' is the way motive force is expressed in the words of language; it is the motive force of the words of language. Affirmation is also the motive force of language, because it is the opposite motive force to 'negation'. In other words, in the words of language, there are two opposite motive forces: affirmation and negation.

The negation of Expression 1-1 is a negation of the 'is' of manifestation; this negation is the negation of manifestation. To negate 'A is A' is a total negation; it is a negation of identity, meaning that A no longer manifests itself. Thus, a contradiction arises, and one moves completely to the opposite of A. This is a strong negation.

The negation of Expression 2-1 is a negation of the 'is' of isolation; this negation is the negation of isolation. 'A is not B' does not necessarily produce a contradiction; the result of this negation could be 'A is C'. Therefore, this negation of isolation is not a total negation. This is a weak negation. Therefore, in the isolated world of language, not all 'negations' are the same.

Since we have explained 'is' as manifestation, any change of a concept in language is a negation of that concept (this is a negation of identity). Therefore, in the words of language, there are only the two motive forces of 'negation' and 'affirmation' (the verbs in language are semantic motive forces; they express the motive force of facts, e.g., 'jump', 'walk', 'run', etc.). Therefore, it is said that contradiction arises from the motive force of negation. It is the motive force of negation that generates two mutually negating propositions: 1-1 and 1-2. 1-1, through the negation of 'is', is transformed into 1-2. In fact, 1-2 can be seen as a manifestation of 1-1, called reverse manifestation (this will be explained in the subsection "Dialectical Logic"). Then, 1-1, as an isolated thing, is transformed through the motive force of negation into the reverse manifestation 1-2; this is a no form united transformation.

Therefore, the 'is' of motive force is 'is not (negation)'. Thus, according to the viewpoint of no form action theory, we have found the 'is of manifestation', the 'is of isolation', and the 'is of motive force'. These three 'is's are classified according to the different ways in which 'is' is used; it is not that 'is' can be divided into three categories from the perspective of its intension. Because 'is' is no form, has no intension, and cannot be further divided from the perspective of intension.

After establishing the three 'is's, we further assert that they do not exist in isolation, but rather constitute a no form integrated transformation:

Since 1-1 and 1-2 are in total negation, according to the viewpoint in the later subsection "Dialectical Logic," 1-1, 1-2, and negation constitute a no form integrated transformation. And the 'is' in 1-1 is the 'is of manifestation'. 2-1 and 1-2 are equivalent on the level of 'falsity of manifestation' and can be substituted for one another. The 'is' in 2-1 is the 'is of isolation'. And negation is 'is not' (the 'is of motive force'). Therefore, the three 'is's constitute a no form integrated transformation. Therefore, the transformation of any one of the three 'is's into another necessarily takes the third as a mediator or prerequisite. They thus constitute a logically closed and dynamically balanced system, profoundly revealing the intrinsic unity of logical

judgment.

For the 'is of isolation', based on the different characteristics of B in 2-1, it can be further divided into three different 'is's of isolation'. For example, 'that flower is red' can be rewritten as 'that flower is a red thing'. Here, A is the flower, and B is a red thing (usually simplified to: B is red). This B contains 'red' as a manifested property. Therefore, this 'is' is a 'manifestation-type is of isolation'. For another example, 'the Earth is warmed by the sun' can be rewritten as 'the Earth is a thing that is warmed by the sun'. Here, A is the Earth, and B is a thing that is warmed by the sun (usually simplified to: B is 'warmed by the sun'). This 'is' is a 'motive force-type is of isolation'. Adding to this the previously mentioned 'is' of belonging (which is the 'isolation-type is of isolation'), there are three different 'is's of isolation according to the different B's.

In fact, both the 'manifestation-type is of isolation' and the 'motive force-type is of isolation' can be seen as the 'isolation-type is of isolation'. They can all be used to extend 1-1 in the same way as the 'isolation-type is of isolation'. For example, it can be extended to: 'that flower is the flower that belongs to the category of red things' (or simply: 'that flower is the red flower').

(3) The Relationship Among the Three Fundamental Laws of Formal Logic

Since, in language, truth and falsity are the highest manifestation actions, we can completely use truth and falsity to replace A and B in the three fundamental laws of formal logic to carry out deductions and derivations among the three laws. Then, the law of identity becomes: 'true is true', 'false is false'; the law of non-contradiction becomes: 'true is not false', 'false is not true'; and the law of the excluded middle becomes: 'it is either true or false'. This is the 'truth-falsity' version of the three fundamental laws of formal logic.

In fact, the three fundamental laws are operating on the relationship between A and non-A. That is, a set is divided into A and non-A. The result is that A and non-A are completely independent. The three fundamental laws together determine this result. The same is true for truth and falsity; 'false' is defined as 'non-true'. This is, in fact, transforming the two-dimensional static relationship of A and non-A into a three-dimensional (the three fundamental laws of formal logic) dynamic relationship.

Let us see if the 'truth-falsity' version of the three fundamental laws of formal logic is equivalent to the non-'truth-falsity' version:

Law of Identity: For '1-1 is true', it is equivalent to '"true is true" is true'. Because A includes all things, it certainly includes 'true'. Therefore, '"true is true" is true'. Simplifying this, we get 'true is true'. Conversely, if 'true is true', then 1-1, as a truth, is true. For Expression 1-2, the same conclusion can be reached in the same way.

Law of Non-Contradiction: If 2-1 cannot be both true and false at the same time, then if 2-1 is true, we get '"true" cannot be both true and false at the same time', which is 'true is not false'. If 2-1 is false, we get '"false" cannot be both false and true at the same time', which is 'false is not true'. Conversely, if 'true is not false' and 'false is not true', then if 2-1 is true, it is not false, and if it is false, it is not true. This means that 2-1 cannot possibly be both true and false at the same time. Only if there is a relationship of belonging between true and false could 2-1 possibly be both true and false at the same time.

Law of the Excluded Middle: 2-1 is either true or false. Then, regardless of whether 2-1 is true or false, it is certainly the case that 'true is either true or false' and 'false is either true or false'. Conversely, 'true is either true or false' and 'false is either true or false' also determine that 2-1 is either true or false.

In this way, we have established that the 'truth-falsity' version of the three fundamental laws of formal logic is equivalent to the non-'truth-falsity' version. Note, in the expression '2-1 is true', 2-1 is being taken as truth itself (the truth of isolation), while the 'true' in '2-1 is true' is the manifestation of 'truth' itself. This is just like the previous explanation of the two A's in 'A is A'. The argument for equivalence above makes use of this point.

Both the 'truth-falsity' version of the three fundamental laws of formal logic and the traditional three fundamental laws of formal logic constitute a no form integrated transformation. It will be shown in the later subsection "exploring philosophy with mathematics" that they constitute a no form integrated transformation. Thus, we can say that the three fundamental laws of formal logic have an indivisible relationship of being mutually dependent, mutually supporting, and mutually defining.

From the above discussion, it can be seen that the three fundamental laws of formal logic can be completely detached from concrete things and can simply deduce the relationship between 'true and false'. The essence of the three fundamental laws is the relationship between 'true and false'. Manifestation guarantees that there is truth; motive force guarantees that there is falsity; and isolation guarantees that there is only truth and falsity. This is the relationship between the three no form actions and formal logic. Our simplification of the expression of the three laws of formal logic enables us to study the three fundamental laws on the higher level of 'true and false'. By removing some superfluous elements, we can operate directly on 'true and false', which makes our operation on the three laws of formal logic simpler and our understanding of them clearer. Only in this way can an essential understanding of these three fundamental laws be achieved.

(Note: If symbolic logic is used to represent the three fundamental laws of formal logic, it can also be proven that the three laws are mutually transformable. The law of identity: P implies P (equivalent to ~P $\vee$ P). The law of non-contradiction: P $\cdot$ ~P. The law of the excluded middle: P $\vee$ ~P. In this way, the law of identity and the law of the excluded middle mean the same thing. Adding a negation before the P $\cdot$ ~P of the law of non-contradiction will turn it into the P $\vee$ ~P of the law of the excluded middle. But this can only show that they can indeed be mutually transformed. This purely symbolic level of transformation cannot fully reveal the deeper meaning of these three laws in logical reasoning and philosophical understanding. This transformation loses the original meaning. Therefore, this is a flaw in symbolic logic.)

From the preceding analysis, it can be seen that the law of identity is related to manifestation; the law of non-contradiction is related to motive force; and the law of the excluded middle is related to isolation.

Law of Identity (Manifestation): Embodies the identity of a thing with itself; this is the direct presentation of manifestation action.

Law of Non-Contradiction (Motive Force): Embodies the change that occurs in a thing under motive force action (negation), which leads to the generation of a contradiction.

Law of the Excluded Middle (Isolation): Embodies the fact that a thing is distinguished into different categories under isolation action; it is either one or the other.

The law of non-contradiction can be explained as: the manifestation of the same thing cannot be both identical and not identical at the same time. Otherwise, it could not be called identity; identity would not exist. The manifestation of the same thing can only present identity; it cannot simultaneously present identity and negate identity. Therefore, the reason for the generation of a contradiction is the destruction of a thing's identity. Identity, as the foundation, is the prerequisite for a thing's being. Once this identity is destroyed, the self-expression of the thing will exhibit a contradictory duality. This self-division constitutes the most essential contradiction. Negating identity also gives rise to falsity.

The law of the excluded middle can be explained as: for the manifestation of the same thing, there are only two possibilities: it is either identical or not identical. If it is identical, it is true; if it is not identical, it is false. We see that formal logic maintains identity on the basis of not destroying identity.

The traditional view holds that it is meaningless to deduce one law of formal logic from another, because in deducing one law from another, one is, in fact, already using the fundamental laws of formal logic. Not only that, Heidegger also explained it this way: because, strictly speaking, these principles of thought cannot be proven. In fact, any kind of proof is already an activity of thought. Thus, any kind of proof has already submitted to these laws of thought (Heidegger, Identity and Difference, 1957).

The above viewpoint is incorrect. It overlooks the intrinsic connection among the fundamental laws of formal logic. Even so, it cannot be denied that one cannot use the three fundamental laws of formal logic to find their own origin. That origin is that they all come from the identity of manifestation action, and the identity of manifestation action comes from the identity of no form. The key is that the deductive transformation among them is a no form integrated transformation. The three fundamental laws of formal logic are all laws concerning the manifestation action, motive force action, and isolation action of things. When elevated to no form action theory, an intrinsic connection exists among these laws; they are mutually transformable. Such a deductive transformation conforms to the laws of no form action theory and can be explained by no form action theory.

The integrated transformation among the three laws of formal logic shows that although they are separate, they are, in substance, an integrated whole. Their separateness is due to isolation action (distinction); their integration is due to manifestation action (identity); and their integrated transformation is due to motive force action (changeability). Only by ascending to this height can we cast off the cognitive shackles we have placed upon ourselves and thereby come to know the essence of things.

Such a deductive process is not a circular argument. The question of whether it is a circular argument is only valid within the domain where formal logic can be applied, when using formal logic to reason. The domain of application of formal logic refers to that within pure isolation (or motive force) action. Such a domain is precisely the domain of isolation (or motive force) action. For language, this is a domain composed of concepts that are isolated (or of motive force) in

meaning. Formal logic embodies ground or cause. Reasoning conducted among such various concepts cannot be circular. Because such an argument is merely defining itself; it is equivalent to not embodying anything (not embodying ground or cause). It is not an integrated transformation under the identity of no form.

Formal logic seeks ground in isolation action, or seeks cause in motive force action. Whereas no form integrated transformation crosses different no form actions and embodies the identity of no form; it is not self-circulating. Its legitimacy comes from whether it successfully maintains the dynamic balance and fundamental identity among the three actions. Their actions are different, and their criteria for judgment are also different.

The no form integrated transformation among the three fundamental laws of formal logic does not exist in formal logic; it is another kind of logic, one that transcends formal logic. It is because the three fundamental laws belong respectively to the three different no form actions that no form integrated transformation can be used to explain them. No single one of the three fundamental laws can reveal the essence of formal logic; in dynamic thought, they are an indivisible whole. This also embodies the significance of the three no form actions. We cannot clearly explain each fundamental law in isolation; it is only meaningful to explain the three fundamental laws in a united way from the perspective of the three no form actions. According to the above explanation of the three fundamental laws of formal logic, the law of the excluded middle cannot be negated, because the law of the excluded middle, as one of them, is indispensable; the three laws are an indivisible whole. Without the law of the excluded middle, the law of identity and the law of non-contradiction would also not be explained. To negate the law of the excluded middle is to negate the law of identity and the law of non-contradiction.

From the above, it can be seen that although the world of language is a 'pure' world of isolation, in this world, it is necessary to use words to 'simulate' manifestation action and motive force action. Otherwise, this world of language, as a system, would not be able to function; it would be unable to display its functionality. This also shows that the identity of the three no form actions is indispensable. Any system needs to operate around the identity of no form action. For some impure worlds of isolation, they must also conform to formal logic in their isolation aspects. In this way, we have found the legitimacy of formal logic's authoritative rule in the domain of isolation. This at the same time also determines the reasonable position of language in explaining this world, because it is a 'pure' world of isolation, and therefore can effectively explain this world in its isolation aspect.

We have used no form action theory to elucidate that the three fundamental laws of formal logic constitute a no form integrated transformation. In other words, in the isolated world of language, the identity of no form is transformed into the three concretely operable fundamental laws of formal logic. Therefore, these three fundamental laws, as a whole, embody the identity of no form.

Each fundamental law maintains the identity of a specific proposition from a different perspective. For example, for 1-1:

1) The law of identity (from the perspective of manifestation action), '1-1 is true', merely says that this expression can have a 'true' value; it does not say that it cannot have other values.

2) The meaning of the law of non-contradiction (from the perspective of motive force action) is that the value of 1-1 cannot be 'both true and false'.

3) The meaning of the law of the excluded middle (from the perspective of isolation action) is that the value of 1-1 can only be true or false.

Therefore, the combined meaning expressed by these three fundamental laws is that the value of 1-1 can only be true. The three fundamental laws are the laws of the isolated world of language. Their requirement is that the identity of a specific proposition must not be destroyed; they maintain the identity of a specific proposition in a way that does not destroy identity. This is the essence of formal logic.

But we have also seen a problem: the law of identity is different from the identity of a self with itself. The identity of a self already contains the three fundamental laws, whereas the law of identity merely says that 1-1 has a 'true' value; it does not say that it cannot have other values. In other words, the three fundamental laws all originate from identity; each one of them is incomplete. Only by combining them can the identity of a self be guaranteed—that is, to guarantee that the value of 1-1 can only be true. Of course, for '1-2 = false', both sides are false, which in substance is also a 1-1, and a similar analysis can be performed.

Based on the above analysis, in the world of language, we have divided 'is' into three types: the 'is of isolation', the 'is of motive force', and the 'is of manifestation'. We see that these three 'is's are fused and bound together with the three fundamental laws of formal logic. This explains the relationship between 'is' and formal logic.

In summary, no form and its three actions have 'descended' into this isolated world of language in the mode of isolation. Therefore, our rational understanding of no form is necessarily linguistic, and also of isolation. We also express the identity of no form in a manner that conforms to formal logic. The three fundamental laws of formal logic are the isolation of the laws of no form action in language; they are the 'incarnation' of the laws of no form action in the isolated world of language. Our explanation of formal logic using no form action theory above is, in fact, an explanation of formal logic by formal logic itself. This is at the same time no form action theory's own explanation of itself, in the mode of formal logic, within the isolated world of language. And no form action theory is self-explanatory. In other words, this self-explanation of formal logic is the isolated version, in language, of the self-explanation of no form action theory.

(4) Truth, Harmony, and Beauty

1) In the world of language, what is pursued is 'truth', which is the pursuit of the identity of a self with itself. This is the identity of isolation (that is, what is commonly called formal identity). To destroy such an identity will produce a contradiction.

2) In the world of emotions, what is pursued is 'harmony', which corresponds to the harmonious unity among different emotions and psychological states. This is the identity of m-otive force. And the destruction of this identity is conflict.

3) In the world of sensations, what is pursued is 'beauty'. This is the identity of direct manifestation. Beauty originates from this identity; it is the perfect and self-sufficient state of a thing's direct manifestation, which gives people the feeling of pleasure and enjoyment. When

this identity is destroyed, a state of ugliness is generated. The complementing and repairing of a broken identity is what generates beauty. And by repairing and sublimating this destroyed identity, the mode of being of beauty is reconstructed. In summary, beauty is our consciousness's acquisition of identity. This is the essence of beauty. In fact, to complement and repair an identity is to acquire an identity.

There are many ways to acquire identity. For example, the coordination in music is identity; this is the beauty of music. In painting, the use of contrast and chiaroscuro can produce a strong visual effect. This visual effect is the unity of opposites of identity.

For another example, to clearly express certain things generates beauty. Before a thing is clearly expressed, it is in a state of concealment, and a state of concealment is a state that lacks identity. When we remove this concealment and manifest a certain unconcealed state, an identity is achieved. At this point, beauty is generated. This is especially true in literature, for instance, in poetry. The purpose of poetry is to clearly express a certain direct knowledge or feeling. If a poem lacks this clarity, then it has no artistic value. The fact that poets in ancient Greece liked to write poems about philosophical truths is a proof of this. Because philosophy is the discipline that pursues the acquisition of the clearest concepts, writing philosophical poems is a better way to clearly express one's knowledge and feelings.

We are always uneasy about contradictory thoughts and are always seeking a reasonable non-contradiction. If 'non-contradiction' were not a form of beauty, why would we pursue it? Non-contradiction is the maintenance of a self's own identity. From this perspective, whether it is the harmonious melody of music, the contrast and balance in painting, the harmonious unity of our inner emotions, or our pursuit of non-contradiction in thoughts and ideas, they are all processes of capturing and realizing identity through different artistic or cognitive means, thereby bringing about the experience of beauty.

In the sense that the acquisition of identity is beauty, beauty is broad, and it is interconnected in different worlds. In other words, when acquiring 'formal truth' and when acquiring the harmonious unity of inner emotions, one also acquires beauty.

Formal logic, which seems unrelated to beauty, through the discussion of normative laws such as the law of identity, the law of non-contradiction, and the law of the excluded middle, and through layers of logical deduction, has surprisingly led to the concept of beauty, and has surprisingly brought us close to the poetic and mysterious domain of aesthetics. The mystery is hidden in the impossible. Formal logic and aesthetics, two seemingly completely different worlds, yet through meticulous conceptual connections, we discover that there is a hidden correspondence and correlation between them. Although formal logic and aesthetics on the surface seem to belong to different domains of knowledge, upon in-depth exploration, we find that they are both established on the understanding of the core concept of 'identity'. Therefore, when we are faced with an intellectually unsolvable problem, to take the path of 'beauty' as a guide in our thinking to solve the problem is a correct path.

Beauty, harmony, and truth are all interconnected at this high level of the identity of no form. In other words, artistic beauty, emotional harmony, and logical reasoning are also interconnected at a high level; there is an intrinsic connection among them. Therefore, our human pursuit of these

three aspects is equally important; there is no hierarchy among them. Since they have an intrinsic connection, they can also mutually promote one another.

(5.) Explaining Russell's Paradox with No Form Action Theory

Russell's Paradox: Proposed by Bertrand Russell (Russell, Principles of Mathematics, 1903). Consider a set R defined as "the set of all sets that are not members of themselves." That is: $R = \{x \mid x \notin x\}$ (the set x does not contain itself).

Proposition: The set R contains itself ($R \in R$).

Analysis:

If $R \in R$ = True, then $R \notin R$ (according to the definition), which is a contradiction.

If $R \in R$ = False, then $R \in R$ (satisfies the definition), which is a contradiction.

Although methods of restricting sets, such as the Axiom of Regularity in ZF set theory, can effectively avoid Russell's Paradox, there is indeed a lack of a satisfactory deep explanation for why this restriction works, and what Russell's Paradox truly signifies.

A set cannot contain itself. This is deduced from the Axiom of Regularity (also known as the Foundation Axiom) in ZF set theory. The Axiom of Regularity states: for any non-empty set A, there exists an element x in A such that x and A have no intersection, i.e., $x \cap A = \varnothing$. The intuitive explanation is that no set can have itself as its element, because if a set did contain itself, then according to the Axiom of Regularity, this set would be unable to find such an element that satisfies the condition. Therefore, within the framework of ZF set theory, a set containing itself is excluded, which allows for the avoidance of paradoxes in set theory.

I explain the 'is' in 'A is A' as manifestation, and the 'is' in 'A is B' as isolation (belongs to); they generate different no form actions. This is, in fact, to say that when a set A belongs to itself, 'belongs to' should be transformed into 'manifestation'. Therefore, it is said that a set cannot contain itself. This is consistent with the requirement of the Axiom of Regularity.

Explaining the 'is' in 'A is A' as manifestation comes from the identity of no form. Therefore, the generation of Russell's Paradox is a violation of the identity of no form; this is the fundamental reason for the generation of Russell's Paradox. The explanation for the Axiom of Regularity shows how the relationship of 'belonging' (isolation action) is transformed into manifestation action. This transformation, in fact, connects no form action theory, formal logic, and set theory.

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