# Interpretating and Expanding Laozi's Governing A Large Country Is Like Cooking A Small Fish with Neutrosophy and Quad-stage Method

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Abstract: Based on interpreting and expanding Confucius' Golden Mean through neutrosophic tetrad, this paper discusses interpretating and expanding Laozi's governing a large country is like cooking a small fish with neutrosophy and guad-stage method. There are many different ways for interpretating and expanding, and come to different conclusions. This paper emphasizes the results that besides governing a large country is like cooking a small fish, we should also consider that governing a large Chinese style country is like cooking a small Chinese style fish, governing a large American style country is like cooking a small American style fish, and the like: as well as governing a large country is like cooking a medium fish, governing a large country is like cooking a big fish, governing a medium country is like cooking a small fish, governing a medium country is like cooking a medium fish, governing a medium country is like cooking a big fish, governing a small country is like cooking a small fish, governing a small country is like cooking a medium fish, governing a small country is like cooking a big fish, and the like; governing a large country covers cooking a small fish, governing a large country is not like cooking a small fish, and the like. Finally, according to neutrosophic tetrad, this famous remark can be expanded as follows, simultaneously consider governing a large country, a medium country, and a small country are like cooking a small fish, a medium fish, and a big fish; as well as governing a large province, a medium province, and a small province are like cooking a small fish, a medium fish, and a big fish; governing a big city, a medium city, and a small city are like cooking a small fish, a medium fish, and a big fish; governing a big ministry, a medium ministry, and a small ministry are like cooking a small fish, a medium fish, and a big fish; and the like. Of course, "cooking various fishes" can also be replaced by "cooking various fishes and foods", because "Food is the paramount necessity of the people".

Key words: Neutrosophy, quad-stage method, interpretation, expansion, governing a large country is like cooking a small fish, neutrosophic tetrad

#### 1 Introduction

"Governing a large country is like cooking a small fish" was said by Laozi thousands years ago, which influence is eternity.

So far, there are so many scholars have tried all kinds of ways to interpret and expand this famous saying of Laozi.

We already interpreted and expanded Confucius' Golden Mean through neutrosophic tetrad, based on that, this paper discusses interpretating and expanding this famous saying of Laozi with neutrosophy and quad-stage method.

2 Basic Contents of Neutrosophy

Neutrosophy is proposed by Prof. Florentin Smarandache in 1995.

Neutrosophy is a new branch of philosophy that studies the origin, nature, and scope of neutralities, as well as their interactions with different ideational spectra.

This theory considers every notion or idea <A> together with its opposite or negation <Anti-A> and the spectrum of "neutralities" <Neut-A> (i.e. notions or ideas located between the two extremes, supporting neither <A> nor <Anti-A>). The <Neut-A> and <Anti-A> ideas together are referred to as <Non-A>.

Neutrosophy is the base of neutrosophic logic, neutrosophic set, neutrosophic probability and statistics used in engineering applications (especially for software and information fusion), medicine, military, cybernetics, and physics.

Neutrosophic Logic is a general framework for unification of many existing logics, such as fuzzy logic (especially intuitionistic fuzzy logic), paraconsistent logic, intuitionistic logic, etc. The main idea of NL is to characterize each logical statement in a 3D Neutrosophic Space, where each dimension of the space represents respectively the truth (T), the falsehood (F), and the indeterminacy (I) of the statement under consideration, where T, I, F are standard or non-standard real subsets of ]-0, 1+[ without necessarily connection between them.

More information about Neutrosophy can be found in references [1, 2].

#### 3 Basic Contents of Quad-stage

Quad-stage (Four stages) is presented in reference [3], it is the expansion of Hegel's triad-stage (triad thesis, antithesis, synthesis of development). The four stages are "general theses", "general antitheses", "the most important and the most complicated universal relations", and "general syntheses". They can be stated as follows.

The first stage, for the beginning of development (thesis), the thesis should be widely, deeply, carefully and repeatedly contacted, explored, analyzed, perfected and so on; this is the stage of general theses. It should be noted that, here the thesis will be evolved into two or three, even more theses step by step. In addition, if in other stage we find that the first stage's work is not yet completed, then we may come back to do some additional work for the first stage.

The second stage, for the appearance of opposite (antithesis), the antithesis should be also widely, deeply, carefully and repeatedly contacted, explored, analyzed, perfected and so on; this is the stage of general antitheses. It should be also noted that, here the antithesis will be evolved into two or three, even more antitheses step by step.

The third stage is the one that the most important and the most complicated universal relations, namely the seedtime inherited from the past and carried on for the future. Its purpose is to establish the universal relations in the widest scope. This widest scope contains all the regions related and non-related to the "general theses", "general antitheses", and the like. This stage's foundational works are to contact, grasp, discover, dig, and even create the opportunities, pieces of information, and so on as many as possible. The degree of the universal relations may be different, theoretically its upper limit is to connect all the existences, pieces of information and so on related to matters, spirits and so on in the universe; for the cases such as to create science fiction, even may

connect all the existences, pieces of information and so on in the virtual world. Obviously, this stage provides all possibilities to fully use the complete achievements of nature and society, as well as all the humanity's wisdoms in the past, present and future. Therefore this stage is shortened as "universal relations" (for other stages, the universal relations are also existed, but their importance and complexity cannot be compared with the ones in this stage).

The fourth stage, to carry on the unification and synthesis regarding various opposites and the suitable pieces of information, factors, and so on; and reach one or more results which are the best or agreed with some conditions; this is the stage of "general syntheses". The results of this stage are called "synthesized second generation theses", all or partial of them may become the beginning of the next quad-stage.

4 Interpretating and expanding "governing a large country is like cooking a small fish"

For realizing the innovations in the areas such as science and technology, literature and art, and the like, it is a very useful tool to combine neutrosophy with quad-stage method. For example, in reference [4], expanding Newton mechanics with neutrosophy and quad-stage method, and establishing New Newton Mechanics taking law of conservation of energy as unique source law. in reference [5], negating four color theorem with neutrosophy and quad-stage method, and "the two color theorem" and "the five color theorem" are derived to replace "the four color theorem".

Now we briefly describe the general application of neutrosophy to quad-stage method.

In quad-stage method, "general theses" may be considered as the notion or idea <A>; "general antitheses" may be considered as the notion or idea <Anti-A>; "the most important and the most complicated universal relations" may be considered as the notion or idea <Neut-A>; and "general syntheses" are the final results.

The different kinds of results in the above mentioned four stages can also be classified and induced with the viewpoints of neutrosophy. Thus, the theory and achievement of neutrosophy can be applied as many as possible, and the method of quad-stage will be more effective.

Based on interpreting and expanding Confucius' Golden Mean through neutrosophic tetrad in reference [6], we discuss interpretating and expanding Laozi's governing a large country is like cooking a small fish, while neutrosophy and quad-stage method will be used.

The interpretating and expanding process in this paper can be divided into four stages.

The first stage (stage of "general theses"), for the beginning of development, the thesis (namely "governing a large country is like cooking a small fish") should be widely, deeply, carefully and repeatedly contacted, explored, analyzed, perfected and so on.

Considering different times, "large countries" can be divided into "ancient large country", "modern large country", and "contemporary large country"; similarly, "small fishes" can be divided into "ancient small fish (clean)", "modern small fish (less pollution)", and "contemporary small fish (more pollution)".

Considering different regions, "large countries" can also be divided into "east large

country", "west large country", "south large country", and "north large country"; similarly, "small fishes" can also be divided into "east small fish", "west small fish", "south small fish", and "north small fish".

In addition, we are interested in the styles of "large countries" and "small fishes". For example, "large countries" can be divided into "large Chinese style country", "large American style country", and the like; "small fishes" can be divided into "small Chinese style fish", "small American style fish", and the like. Thus, besides the original thesis (namely "governing a large country is like cooking a small fish"), many other theses should be added, such as governing a large Chinese style country is like cooking a small Chinese style fish, governing a large American style country is like cooking a small American style fish, and the like.

In the second stage (the stage of "general antitheses"), the opposites (antitheses) should be discussed carefully. There are more than one opposites (antitheses) here. For example, governing a large country is like cooking a medium fish, governing a large country is like cooking a medium country is like cooking a small fish, governing a medium country is like cooking a medium fish, governing a small fish, governing a small fish, governing a small country is like cooking a big fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a big fish, governing a medium fish, governing a small country is like cooking a medium fish, governi

In addition, other two opposites (antitheses), namely "governing a large country covers cooking a small fish", and "governing a large country is not like cooking a small fish", are very important.

It is obvious that "governing a large country covers cooking a small fish"; because the person governing a large country can lead the person cooking a small fish, while the person cooking a small fish cannot lead the person governing a large country.

It is also obvious that "governing a large country is not like cooking a small fish"; in fact, there are many differences between "governing a large country" and "cooking a small fish". For example, "cooking a small fish" can be tried by everybody almost, but "governing a large country" cannot be tried by everybody.

Here, there are so many "antitheses", these reflect the reason for expanding "antithesis" into "general antitheses" in quad-stage method.

The third stage is the one of the most important and the most complicated universal relations to link with "governing a large country is like cooking a small fish". The purpose of this provision stage is to establish the universal relations in the widest scope.

Here, we will mainly link the various thoughts about this famous saying presented by different people from different countries at all times; especially the actual situations that these thoughts are based on.

We already said that, for this famous saying, different people will have different interpretations, even if the same person, at different times and in different situations he or she may have different results. Therefore, seeking the only correct interpretation will be meaningless. The wise way is collecting various interpretations presented by different people, and adding the own interpretations, in order to form the so-called "full interpretation" as the "wisdom library" to store up; if necessary, we can choose one or several optimum interpretations from the wisdom library immediately, or temporarily reach

one or several optimum interpretations according to the actual situation and the information given by the wisdom library; thus we will be resourceful, inventive, and invincible.

Now, some specific interpretations given by different people will be presented.

In Chinese ancient times, the emperors Tang Taizong and Song Huizong, the scholars Han Fei and Wang Bi, and the like, they linked with the fact that a small fish is the most delicate one, it must be handled with caution; otherwise, if a small fish is flipping back and forth, it will become chaotic; thus they concluded: cooking a small fish cannot stir arbitrarily, so does governing a large country. But some people question this viewpoint: do cooking a big fish can stir arbitrarily? The fact is that, at the very start a big fish cannot be stirred, and it can only be stirred arbitrarily as it is cooking for a long time and becoming very soft; while a small fish can be stirred arbitrarily at the very start.

Some scholars link with the fact that, as cooking many small fishes concurrently, we should take care of each small fish; thus they concluded: "in a country, there is not abandoned person", namely people in the world should receive the same attend; and this viewpoint is the true meaning of "governing a large country is like cooking a small fish". In addition, some authors also think that governing a large country need to coordinate various relations, in the words of today, it is building a harmonious society.

From the experiences and lessons of cooking a small fish, some people concluded: governing a large country should strengthen the sense of responsibility, understand everything, work hard, respect the law and rule, carry on any plan step by step, and so on.

Some authors believe that, everyone may cook a small fish, so everyone may govern a country, and eventually it leads to political inaction. While this viewpoint may not be correct, because some people may not cook a small fish with the correct manner, and the cooked fish may not be delicious. However, considering this sentence from the reverse side, we can say that do not allow the situation that only one or two people can cook a small fish. For example, the most important work cannot be undertaken by only one or two people, otherwise once they refuse to work, the consequence could be disastrous. In addition, we can also associate that anyone cannot eat only one kind of small fish, and reject other kind of small fish and other kind of food, because in this case there will be no appetite.

It is said that Russian President Vladimir Putin is a JIU-Jitsu master. If he contacted JIU-Jitsu game's experience of victory and defeat, he might say: "governing a large country is like playing JIU-Jitsu". One of the more important experiences may be "Killing with kindness". This is also true for cooking a small fish, for some small fish that is difficult to cook, we have to cook it for several hours, or even one or two days by using slow fire.

Link to Chairman Xi Jinping's speeches, many brilliant expositions are related to "governing a large country is like cooking a small fish". For example, Xi Jinping has quoted a saying that "the Prime Minister will come from the provinces (states) or departments, and the general should be chosen from the soldiers". That means "to progress step by step". This is also the situation that knowing well the technoque of cooking the small fish. In general, a chef should cook the low-price fish firstly, the medium-price fish secondly, and the high-price fish thirdly; none can cook the upscale fish at the beginning.

In addition, "apply medicine according to indications" is also very important. Cooking a small Chinese style fish is quite different with cooking a small American style fish. As Chairman Xi Jinping said, we are willing to learn from all human achievements, but will not copy the model of development of any country. China's reform is the self-improvement and development of socialism with Chinese characteristics. Only running the road suited to China's national conditions, we can go through and go well.

Finally, we would like to point out that, taking into account all possible circumstances, inevitably we will find the great resemblance in the aspect of "happiness" for "governing a large country" and "cooking a small fish". For example, When a mother sees her family members are enjoying the delicious fish of her cooking, she would be very happy and laughing fondly; when a state banquet chef hears that the famous fishes cooked by him are praised by Chinese and foreign guests, his heart will be sweeter than eating honey. Similarly, when a government officer finds that he is welcome by the people, he will be very pleased; and when the Chairman or President of a large country notices that during his administration, the people's lives are more happy and healthy, the country is more prosperous, and makes greater contribution to the lofty careers of peace and development for mankind, then for his cheerful spirit and mood, it's hard to describe in words.

In the fourth stage, we will carry on the unification and synthesis regarding various opposites and the suitable pieces of information, factors, and so on; and reach one or more results for interpretating and expanding Laozi's governing a large country is like cooking a small fish, which are the best or agreed with some conditions.

It should be noted that, in this stage, various methods can be applied. Here, we will according to neutrosophic tetrad (thesis-antithesis-neutrothesis-neutrosynthesis) to seek the results of interpretation and extension.

In reference [7], the dialectical triad thesis-antithesis-synthesis of Hegel is extended to the neutrosophic tetrad thesis-antithesis-neutrothesis-neutrosynthesis.

A neutrosophic synthesis (neutrosynthesis) is more refined that the dialectical synthesis. It carries on the unification and synthesis regarding the opposites and their neutrals too.

A neutrosophic synthesis (neutrosynthesis) includes <A>, <Anti-A>, <Neut-A>, <A> plus <Anti-A>, <A> plus <Neut-A>, <A> plus <Neut-A>, <A> plus <Neut-A>, <A> plus <Neut-A>, and so on.

As interpretating and expanding Laozi's governing a large country is like cooking a small fish with neutrosophic tetrad, also various methods can be applied, and reach different results.

For example, firstly we suppose that "governing a large country", "governing a large province", "governing a big city", "governing a big ministry", and "cooking a small fish" are theses; secondly "governing a small country", "governing a small province", "governing a small city", "governing a small ministry", and "cooking a big fish" are antitheses; thirdly "governing a medium country", "governing a medium province", "governing a medium city", "governing a medium province", "governing a medium city", considering neutrosyntheses, thus according to neutrosophic tetrad, this famous remark can be expanded as follows, simultaneously consider governing a large country, a

medium country, and a small country are like cooking a small fish, a medium fish, and a big fish; as well as governing a large province, a medium province, and a small province are like cooking a small fish, a medium fish, and a big fish; governing a big city, a medium city, and a small city are like cooking a small fish, a medium fish, a medium fish, and a big fish; governing a big ministry, a medium ministry, and a small ministry are like cooking a small fish, a medium fish, and a big fish; governing a big ministry, a medium ministry, and a small ministry are like cooking a small fish, a medium fish, and a big fish; governing a big ministry are like cooking a small fish, a medium fish, and a big fish; and the like.

Of course, for the further expansion, "cooking various fishes" can also be replaced by "cooking various fishes and foods", because "Food is the paramount necessity of the people".

### 5 Conclusions

The combination of neutrosophy and quad-stage method can be applied to effectively reliaze the interpretation and expansion of governing a large country is like cooking a small fish. The results of interpretation and expansion are not fixed and immutable, but changeable depending on the times, places and specific conditions. This paper deals only with a limited number of situations and instances as an initial attempt, and hoping to play a valuable role.

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