

Ethnic Culture in the Field of Ecological Safety

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Abstract: With the related papers and works of it arising unceasingly, the ecological anthropology, an emerging discipline, will take a long way to become a genuine discipline, though it has already evoked a universal interest in the contemporary China. From the theoretical framework of eco-anthropology, no conclusions can have been reached so far, as opinions on the its research programs and subjects vary. As far as its nature of this discipline is concerned, the ecological-anthropology should be a cultural anthropology on the human ecology. Therefore, in the aspect of culture, this paper is trying to understand and answer all ecological questions which the human society faces. It should be an undisputed fact; in fact, there are too many different opinions on ecosystem which the contemporary society faces. Some scholars initiate anthropocentrism, and more maintains ecological-centrism. This paper proposes that the eco-anthropology must be analyzed from culture, and the human constructs his own culture in the ecosystem, which the human culture not only deviates in the natural system, but also in the returning to natural system. So, the human should insist on his cultural centralism.

Key words: ecological anthropology (eco-anthropology); ecosystem; cultural analysis

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The human society is a multi-cultural world, where each existing culture is naturally independent with its own values, which devotes irreplaceably itself to the ecological safety. What we can do is only to respect it, carry forward its superiority, and eliminate its negative effect. Therefore, the cultural centralism which the ecological anthropologists hold is inevitably a multi-centered theory that must affirm its multi-dimension of the ethnic culture, and stress the equal continuation of all nationalities. Only under such a premise, the sustainable development of the human society can possibly have the society and natural foundation which can be controlled.

I. Culture and Ecosystem

To break the fetters of the specific culture and ecosystem on ecological anthropology, obviously we should make a necessary revision to the traditional cultural perspective of cultural anthropology. For over 100 years, the culture in anthropology has basically been understood as the specific culture in the specific item which is not the specific culture itself. In fact, the item is only the state of the materials assembles together with the energy which the culture controls. What the

human can have observed the society and ecological phenomenon is actually the consequence of the materials assembles together with the energy which the culture controls. For a long time, quite a few remarkable cultural anthropologists have devoted themselves to seeing through the appearance to get at the essence, and have continuously maintained some proposals such as the cultural function-structure, deep traces on the cultural item, and the cultural explanation. It is certainly beneficial for these proposals to understand the culture and its associated social facts correctly. But if we understand profoundly the ecological consequence which the cultural movement causes, these proposals will definitely meet some questions beyond the cultural definition. Only by defining the culture as a set of man-made information system, simultaneously by realizing the ecosystem is also the product controlled by the life information, can the ecological anthropology build a communicated bridge mutually between the human society and ecosystem. So, reconsidering what is the essence of the culture is obviously a premise which the theoretical framework of the ecological anthropology can be established. In the perspective of ecological anthropology, we hold that the culture is a set of man-made information system which the human society has constructed to move and develop.

With the development of the system ecology since the 1980s, the ecologists have begun to be aware that steady continuation of a complex ecosystem is not caused by a single causality. In a complex ecosystem, there doesn't exist the simple relation of quantity between its subsystem and integrant element, in which its function between the subsystems may be infiltrated and even substituted mutually. On this, the ecologists are no longer confined to the digital statistics; they analyze the movement of the complex ecosystem by the method of construction. Without doubt, what they have done correctly has affected anthropology. The anthropologists have analyzed the culture with this method. It turns out that the relations between the culture and ecosystem has become a mutual relation of two complicated systems. Indeed, there was not much accumulation about it in the previous scientific research. But numerous researchers are still aware that the experienced judgment can not be neglected in the research. On this understanding, obviously it is impossible to obtain a general rule of causality in the discussion, but at least, to reveal a certain experienced characteristic of the interaction relation¹.

First, the culture with the natural ecosystem which locates has continuation on the basis of its own rule steadily, and the culture has only partial value and significance on the natural ecosystem, so has the ecosystem on the culture. The ecosystem has already existed before the ethic culture formed. Once the ethic culture forms, it has not moved completely in the laws of ecosystem, but has joined many non-ecosystem inherent contents in the natural system by the means of the social strength. In fact, in the ethic culture, numerous cultural features have not had the inevitable relation directly with the corresponding factor in the ecosystem. The ecosystems keep imbalanced functions on the culture, part of which affects a lot, while some of them do not act in another some. It is the same case in the ethic culture. Any kind of the ethic culture, functioned in natural ecosystem, neither balances the natural systems nor completely changes the natural ecosystem. To a great extent, even

the most developed culture, with the aid of the natural ecosystem which locates, will ensure the steady continuation of culture. This symbolizes that the mutual relation, between the culture and its natural ecosystem, is of some kind of selectivity, which selects the methods, objects, and ways of function on the natural ecosystem. The different cultural items have been accomplished under the cultural different selection, and have even constructed thousands of rich and colorful cultural human landscape.

Next, the culture is always attached to the natural ecosystem which locates with, although the cultures between different nationalities vary, but there is no any distinction when they get the living matters and biological energies from the natural ecosystem which locates with. The ways of which the humans will gain the living matters and biological energies will infinitely vary, and the humans' activities will also play the different roles, but these living matters and biological energies will look to the natural ecosystem for supplies. Once the culture and natural ecosystem have formed an attached relation, with which may be compared vividly to the parasitic relations. The culture will not accomplish transformation between the materials and energies with the inherent characteristic of the ecosystem, but the infinitely varied way of the living matters and biological energies in the natural ecosystem is first transformed as an advantageous form, and then integrated in the cultural movement. This is very similar with the biological parasitic relation. The parasitism has not received genetic information of a host, also its protein and carbohydrate has also not transformed to its own body according to the original, but it must be degraded into a single amino acid or monosaccharide at their intersection to absorb in. So has the culture on the natural ecosystem which locates with. It does not distinguishably absorb in all the living materials and biological energies from the natural ecosystem, but through processing to cause them to suit for use. This indicates the culture cannot leave the natural ecosystem which locates with, simultaneously has not submitted to the natural ecosystem which locates with. Before being used, the living materials and biological energies of the natural ecosystem has experienced a processing. Therefore, so long as we can analyze carefully the processing process in the intersection, it is surely for us to deepen our understanding on both of interactive mechanism.

The next place, the information system of the fixed materials and energies conversion in the culture is entirely different from the natural ecosystem which locates with. The information system of the specific culture --- the humans' unique intelligence, is obviously playing a decisive role. However, the natural ecosystem is completely dominated by the movement laws of the inherited life. Between these two sets of information system, there doesn't exist the mutual tolerance, otherwise, the ecological crisis and disasters will not arise. At present what the humans face the ecological crisis does not build up to the cataclysm, the various cultures are usually negligent in the vigilance. As the similar truth, the biological information cannot completely influence the cultural movement, which the natural ecosystem doesn't know how to do with numerous environmental pollutions emerged from the human society. All kinds of negative effects from the human society will not immediately receive the retaliation from the natural ecosystem. Even though the ecological cataclysm arises, they will only be directed against the culture, but against the entire

human society without any distinction. The interaction between the culture and the natural ecosystem which locates with does not have a simple quantity and the corresponding relations, but always with multiple compounds.

Finally, the organizing faculty of the culture and natural ecosystem which locates with, even though the interactive relation causes certain damage on the other side; they will not cause a fatal consequence. At present, the human society has achieved the unprecedented impact on the natural ecosystem, but there is still no any sign to indicate that the natural ecosystem has lost an ability of which restores oneself completely. The ecological crisis is serious, but not fatal. The different ethic cultures frequently display the strong abilities of restoring no matter what great changes take place, it is not thoroughly easy for the culture to extinct. The practice example of various cultures' restore can display extremely different. Its consequence is unceasingly an adapted process of the culture and its located ecosystem which locates with; the culture must pay a heavy price to each adaptation, completing the new accommodation with an additional price to achieve mutual adaptation on culture with the natural ecosystem

In the further observation, it is not difficult to discover, in this intersection of the culture which locates in natural ecosystem, the life form will display comparatively more simply than one in the original natural ecosystem, but the survival biology is more advantageously used to the humans. The survival biological species in this intersection will be less a lot than ones in its surrounding natural ecosystem, so the sum total of the living materials and biological energies has also dropped, which can be used maximally by the related nationalities. The living materials and biological energies of the related nationality are provided centralized by these limited species. For the sake of the related nationality, they also concentrate on this intersection of the ecosystem. If exercising the influence unceasingly over it, this intersection will present the obvious differences with the surrounding natural ecosystem. From this angle, existence of this intersection is obviously an alien. Although the humans have effected numerously on this intersection, but life continuation has to depend on the natural ecosystem to assist and maintain. In brief, this intersection has constructed a mutual link in two complicated systems, between which energy transformation can achieve through a possible form, controlling energy mobility of both sides. Therefore, the intersection may be regarded as the key position to establish an interactive relation between two systems.

II. The humans construct the culture in the ecosystem

The human society has emerged from the natural ecosystem, but it always parasites in this ecosystem. As the cultural system of the human society's movement and natural ecosystem's information construction has the certain compatibility, it can ensure the parasitic relation to continue between the cultures and ecosystem.

The natural ecosystem depends on the genetic information construction and fixed organization from the complex system, which ways of movement can only steadily go on in balance by the living things in the whole continuation, however, the human society can be go steadily in a whole continuation and in balance by the cultural

controlling.

The human society constructs its own culture on the basis of the natural ecosystem, with it the relatedness between the cultural and natural ecosystems also grows. In the entire natural ecosystem, the humans have no any distinct with any other living species in its biological character. Because of the genetic information which dominates a nation's bringing out, development and continuation, there is no any difference from any other living thing. The genetic information what the humans have is the same as any other living species, which depends upon four kinds of deoxyribonucleic acid according to different proportions, quantity and orders of arrangement which have constructed the hyperbolic screw of genetic information carrier, and which have ensured the humans may naturally originate the living materials and biological energies to develop and expand, and become an unit of organizing faculty in a complicated system. This is a sufficient premise for the human society to parasite and be parasite inevitably in the natural ecosystem. The objective existence of the premise has caused the humans to construct their own culture no matter what means they use, and there exists inevitably a biological side in its culture, thus it causes the different society which the humans have constructed to keep a parasitic relation with the natural ecosystem.

Seemingly, the construction of the different cultures may vary as thousands of biological species, but the cultural construction biological of the humans is that a suitable part of the information system throughout the specific cultural movement is consistent with the natural ecosystem and mutually compatible. The different human society which maintained by the different culture can be connected directly with the natural ecosystem in this significance, but the cultural information system maintains relevance. The information system constructed by the different nationality culture, including one side of its biological construction in its construction principle, is for with the natural ecosystem which located compatible, the humans have constructed a culture with an intrinsic and identical essence no matter which cultures cannot deviate from the movement laws of the natural ecosystem which locates with and need to sufficiently ensure in the construction of the cultural information system.

Any ethic cultural construction stems from the living matters and biological energy supplies, at the same time it must maintain some certain communication between the cultural information system and natural ecosystem information system. Any ethic culture must have abilities of receiving, breaking and translating, utilizing some certain information which locates in the natural ecosystem. To achieve it, we must maintain certain relatedness between the natural ecosystem which locates with and culture information system. This relatedness may obtain a response from a classification, evaluation, utilization and transformation on the life phenomena in the different ethic cultures. The differences among the different ethic cultures vary; we should focus on what the natural ecosystem is and utilize what the life phenomena are. It is just like the living species in appearance, presenting infinitely variety without departing the original with vitality no matter how many changes they have. The ethic culture presents the intrinsic uniformity in the attention to the natural ecosystem, and displays obvious differences by the means of utilization. However, no matter what

intrinsic uniformity or external difference is, the ethic culture always accepts the fixed cultural information system. To a certain extent, the cultural information system must directly connect with the natural ecosystem which locates with, ensuring communication smoothly between the cultural information and natural life information within a certain scope.

The ethic culture on the earth and cultural natural ecosystem with which depends on varies, but the basic living matter, biological energy and information transformation must actually maintain consistent with the surrounding natural ecosystem, ensuring that a nationality looks like an ordinary living species to take the food as well as with any other living species. In the vital activity, the produced waste returns to the natural ecosystem, joining in the energy circulation and information intercommunication in the natural ecosystem. To achieve this, the ethic culture must keep essential relatedness with the culture which the humans have constructed and natural ecosystem which locates. Because of this relatedness, various ethic cultural constructions are not just known from the human society to realize the surrounding natural ecosystem, it is just from the natural ecosystem which locates with to review the humans oneself, or two ways of observation are paralleled at the different degree. The ethic cultural differences also reflect different combinations in an angle and method of observation. The ethic cultural differences are the manifestation, but the relatedness of the cultural construction and natural ecosystem is a general character of a cultural construction. The communication of the cultural construction between the energy transformation and information maintains certain uniformity with the natural ecosystem, and manifests in the different culture.

From above analysis, the cultural construction takes the natural ecosystem as a main source. In the human society, no matter how complex its cultural construction is, but in the long run, the cultural construction must maintain a harmony with the natural ecosystem, which is the leading form for the human society and natural ecosystem continuing paralleled. The human society is not opposite to the natural ecosystem, but two complex systems in the long-term parallel intergrowth. The coexisting relations of two complex systems are also the parasitic relations. In view of the fact, the two complicated systems between the mutual parallel intergrowths, each of them may support the movement from the organization system. Between relations, the two complicated systems always display interactive process; it is a starting point that we can analyze the human society and nature.

The human society, regardless of the past, present and future, will be impossible to be separated from the natural ecosystem thoroughly, but exist lonely. In order to steady continuation of the parasitic relations, it is inevitably a mainstream for the human society to keep harmonious with the natural ecosystem which locates. There is no evident that the people hold the human society definitely one day will ruin their natural ecosystem, because the humans had left this planet before the natural ecosystem was deconstructed. Meanwhile, we must acknowledge that the human society and natural ecosystem are not occupied in a complicated system, the cultural construction of the human society only takes the natural ecosystem as a main source, but not a transcription and copy, and the human society may maintain its own

independence to a certain extent. This independence manifests that we may be able to initiatively know and utilize the natural ecosystem, which is actually not a substitution of the natural ecosystem to destroy the natural ecosystem. No matter what it is the substitution or destroys, all means that the host of parasite which the human society depends on has been vanishing, the human society is also arriving at the dead end along with it. Because the human society and natural ecosystem are of the organizing faculty's complex system, disharmony in the process of movement may finally obtain adjustment and adaptation in mutual. The ecological crisis and ecology cataclysm are perturbation products in the paralleled human society and natural ecosystem, the new coordinated relations definitely may reconstruct through interactions, and adaptation between two complicated systems. In other words, the human society may finally realize coordination with the ecosystem through the cultural adaptation and restructuring, the existence and continuation of the ecological cataclysm are only a process that the cultures need to restructure and adjust. It is neither the ultimatum of the natural ecosystem nor of the human society.

As two coexisting organization of the complicated system, there are obviously many similarities between the human society and natural ecosystem that obtain complete responses in the national culture through interactive relations in various ethic culture and ecosystem. The human society and the natural ecosystem are composed of multi-level ordered structures, for examples, the natural ecosystem is composed of the smallest unit from the specific species and biological individual to the different community and population, and to the different natural ecosystem again, finally to the natural ecosystem totality. The human society is also similar with this, from individual, then to different social group, to each single nationality, finally assemble an entire human society.

The natural ecosystem always tries to maintain a whole steady continuation, various subsystems, various species, various living individual are composed of the natural ecosystem, which have respectively an organizing faculty, and at the same time which restrict mutually in the steady continuation. They can continue steadily in a respectively unit, and further they can be replaced mutually at the same level and intersected mutually on function. Furthermore, the subsystem on the different level can contribute to the steady continuation on the previous level system, thus has ensured the steady continuation in its entire natural ecosystem. Since the day when they were born, the natural ecosystem and human society continuously continue steadily, and will also continue in the future. In the long history of the humans, some nationalities withered, some newborn, some expanded, some declined, all that are in no way different from biological species in the ecosystem. However, owing to the contribution of the steady continuation of different units on different levels in an autonomous movement, vanishing and continuation of each unit in the subsystem will not damage to the overall steady continuation.

What the ecosystem depends on is a set of the intrinsic structural genetic information system which can go to regulate, causing the biological species to be possible to present very different in thousands of ways which meet the need of the different living environment, then constructing existence form of taking the

generation change and metabolism, and which is maintaining the overall steady continuation. In the human society, what can just regulate entire information system is a culture, but not the genetic code. In the different culture, social individuals, the mass organization, and the nationality also construct unceasingly the different culture in the human individual generation change and in social norm metabolism to meet the need of the different survival. It is in balance mutually that the human society can steady continuation in the different cultures with some restricts.

Any complicated system of organizing faculty has continuities in its movement; it does not allow to be interrupted in the process, which means destruction in the whole system. The human society has suffered a lot of hardship, undergoing much more crisis and cataclysm which may cause some nations' withering away or population reduction on the scale, whereas will not suspend the continuation of the human society. The human society has been changed a lot externally after experiencing cataclysm in extension. On this significance, the steady continuation does not have any challenge, crisis, and even cataclysm. Changes have only taken place in the new species production, new survival ways and new balanced pattern. The reason why the complicated system cannot be interrupted is that they are constructed by the information system which can continue steadily. If the generation changes were interrupted, that means the information of constructed complex system would lose the carrier, so the information has also been unable to continue, and the entire system has also been unable to restore.

In the middle of 20th century, anthropologist Steward noticed that there exists a certain inner link between the cultural and biological diversification. The varied natural background created all kinds of ethic cultures; they studied cultures as a supernatural system than the predecessors, which has obviously made a significant innovation and breakthrough. But it is supplementary to passively accept the model of the natural environment. The culture, as a complicated system of organizing faculty, is not to passively accept another model of a system, but to deal with the environmental fluctuation, and even drastic changes. Not permitting interruption from any complicated system of organizing faculty in its continuation, any complicated system faces the external environment which has no abilities of continuing steadily in this system. The drastic change of the external environment of extension condition is surely to threat to the continuation of this system, and even to the ruin.

In order to ensure that its own steady continuation won't be interrupted, any complicated system of organizing faculty has inevitably a movement tendency of causing itself to complicate day by day with the aim of obtaining more high abilities to deal with the environmental changes suddenly. With diversification coexisting, the organize may deal with the natural selection and realize the adaptation with the living environment. Diversification of the human culture is not only the consequence of creation but also active selection. It is very important to understand the principle because this movement of the complicated system may tell us, including great changes of the humans' living environment, at the same time it is definitely to challenge and tribulation to the related natural ecosystem and the ethic culture. However, this challenge and tribulation are in no way fatal, because any complicated

system of organizing faculty has genius of self-restoring. So long as the related complicated system isn't interrupted, it definitely may find out the best adaptation to change the way of the environmental existence, which can obtain a potentiality of the steady continuation from the complicated system which owns diversification and coexisting pattern. In addition to the intelligent and wisdom of the humans, this project of self-restore may also speed up, i.e., with the aid of culture, the human society will have more abilities to deal with great changes of the living environment, more stronger, higher active, and more effective than the natural ecosystem,

The inorganic condition used high effectively by the environment in the natural ecosystem, which must have genius for all the complicated system of organizing faculty. Because the inorganic environment which is reincarnated from the organization complicated system is usually disordered, the condition of the organization system for the steady continuation will not meet its needs of the external environment. To deal with the inevitable fluctuation in the external environment, any condition for the external environment will not be used extremely, so any slight modification from the external inorganic environment will damage on the steady continuation. All the materials and energies from the external complicated system always carry out self-moderation which the ultimate goal is possibly to deal with the evitable fluctuation from the external environment. Thus obtaining ability against risks can still ensure its own steady continuation when risks take place. The culture, as one of the complicated systems, with the organizing faculty, also follows this principle.

III. The deviation of the human culture in ecosystem

In the human culture in its normally operation, an important part in which the cultures which locates with combines closely with the natural ecosystem, that is a cultural core. It is the cultural core which each nationality depends upon that they can achieve communication with the living matter and biological energy in the natural ecosystem which locates with, providing life supplies for this national members.² While the human society does not equate with the natural ecosystem, to the certain extent, it maintains deviations with the natural ecosystem which locates. It is a must for the human society and the natural ecosystem to maintain the deviation to certain extent, while the human society impossibly integrates to the natural ecosystem forever. The relations what the human society parasites in the natural ecosystem and suspend it, with harmonious coexistence ensures that the human society and natural ecosystem may continue steadily. Now that the deviation is allowed in the humans and natural ecosystem which locates with, if this deviation suspends the permitted scope, it will destroy the harmony between the human society and nature, which will also lead to disasters on the human.

In biology, the human is only one of numerous species in the natural ecosystem. The humans must live on other living species as foods, in verse, the wastes left by the human activities have to participate in other species and energy cycle which will not change the human society because the humans have constructed their own society. However it has developed, the human society can not live on without the natural

ecosystem. Certainly, we have understood the new concept since the latest half century. "Since the ecological environment is a fundamental factor which the humans and its community survive with, the ecological diversification and essence relation also make it inevitably that the human society is developing with diversification and multi-linear."³ From this, it indicates the diversification and variability when the humans response the natural ecosystem which locates with. So, we can draw a conclusion that diversification of various ethic cultures in the contemporary world is, to a certain extent, a consequence of the different cultures which the natural ecosystem locates differently.

Understanding its importance, we can comprehend from the beginning the construction of the human cultures have sufficiently been developed in the natural ecosystem which locates with. With knowing the ecosystem, growing a set of this cultural unique information system goes to stipulate a social individual in this culture, retaining the fixed compatibility with the natural ecosystem which locates. Then with the promotion of people's realizing the natural ecosystem, they revise unceasingly this information system, which symbolizes the culture itself in the development. The cultural construction is an uninterrupted process, which is unceasingly understood by the natural ecosystem which locates with, and integrating it in the information system to maintain the consistent process with this natural ecosystem.

However, with the infinite complex natural ecosystem, any culture cannot all be known, especially in the specific history, as a result, the deficiency of understanding displays more highlights. From one side of it, we know the nature cataclysm and movement of the human society are related, but the cultures do not intend to damage on the natural ecosystem. The culture makes the feedbacks without completely knowing all the situations, which is unable to be responsible for all disastrous consequences which have brought out from it. No matter which culture, no thoroughly understanding the natural ecosystem, it certainly has no abilities of restoring the ecosystem damage. What's more, any culture is the parasitism in the natural ecosystem, reproductions of the social crowds must depend on the cultures to restore, which seems no different from the host of the human society --- the patient--- who wants to cure oneself by his own imagination.

In fact, the biological essence of the humans has already stipulated that the humans are only ordinary species in the biological significance, based on this characteristic, no matter how the cultures construct. It is inevitably that the cultures also have biological nature, and simultaneously has deviations in biology which ensure the cultures can suspend the community to the certain degree in the natural ecosystem. The previous cultural research focused on that part of having surpassed the natural ecosystem, namely its social part, however, we has actually neglected the cultural biological part, which has caused vigilance of cataclysm when the ecological crisis arise. But the vigilance has aroused the humans to acknowledge their biological essence when they construct the cultures.

Any culture needs to be supported by the natural ecosystem which locates with, and simultaneously it must facilitate the living matters and biological energies in the related nationalities, which cause the ethic culture not to keep a equal structure with

the natural ecosystem, so the identical structure of the ethic culture inevitably has a series of characteristic which agrees with the natural ecosystem. The dominating casualty mutually restricts and depends on each other. It is very easy to notice these surface characteristics when we get to know the ethic culture, actually it's difficult to insight its deep compound casualty and describe the relation between the ethic culture and natural ecosystem, regardless of the quantity, forms and scopes. To sum up this relation, we can use the concept of "deviation" to explain it.

The deviation means a collection of numerous differences, which restricts the intrinsic compound casualty of differences. The deviation is also adapted to an analysis on the human's utilization on the natural resources. In the specific research, different cultures utilize the different constituents in the natural resources or same constituents with the different ways. The natural resources have their own unique features, what the humans take advantages of it will cause completely different results; it definitely will initiate a series of chain-reactions, which will make the feedbacks to the human's utilization by completely different ways.

From a qualitative angle, the deviation of the ethic culture and natural ecosystem has the following characteristics: on the one hand, the species growing in the ethic culture are surely to be less than ones in the ecosystem, as to what degree is related to the cultural attribute of the ethic culture. On the other hand, the relations among biological species will also be simplified by the humans' intervention in the living environment, which are simply divided into the good and bad, the useful and useless, the noble and humble, and so on. In this division, the value-orientation of the culture is playing a vital role. At the same time, transformation of the materials and the energies is divided into two parts by the humans' intervention: one is transformed according to the biological principles, and the other according to social principles.

Sociality of the nationalities not only directly restricts the specific cultural construction and movement, but also causes the ethic culture to deviate the natural ecosystem with which the ethic culture locates. But the deviation will not work all along so that it causes the ethic culture to completely conflict with the natural ecosystem which the ethic culture locates. Because what another tendency brings it into play will control this deviation in certain scope. The ethic culture will imitate the movement characteristic of the natural ecosystem to create these ecological imbalanced cultures and to revise unceasingly, which will not cause the deviation enlarged blindly between the ethic culture and natural ecosystem which the ethic culture locates, but to realize the effective restore. The deviation and restore are an opposited interactive process, in which the ethic culture will swing limitedly between the stereotype and continuation of its living environment according to a winding path in imbalanced and balanced, ensuring the ethic culture operating steadily.

Although sociality of the human himself causes the ethic culture to unavoidably deviate the natural ecosystem, this "deviation" has also the positive significance. If there were no deviation, the humans would become as ordinary as any species, the human society would not absolutely be prosperous, and would not have accumulation research methods of scientific knowledge to discuss the deviation. This deviation is very important to the human society, we should have the following correct attitudes

towards it: to acknowledge truthfully it unavoidable, simultaneously tries to find solution to control effectively this deviation, so as not to let it enlarge and spread infinitely. The humans will have their own plans to deal with challenge of losing balanced.

What the original force of controlling effectively “the deviation” comes from a tendency of the culture itself; however, the tendency of the culture does not violate the basic principles of the cultural construction. When this deviation is enlarged, the human society will pay high price on obtaining living matters and energies from the specific ethic survival environment. To be economical, the culture will naturally imitate the movement of the natural ecosystem to reduce the deviation. Similarly, when the expansion of this deviation affects a nationality’s cohesive force, the culture will also imitate the movement of the natural ecosystem to start the mechanism of the reverse adjustment for the cohesive force of the national members. In the human history, no matter which nationality it is, it has experienced the following contradictory social process: in some certain period of time, they have strengthened the relationship between the persons and marriage relations; in verse, in another period of time, they have got rid of puzzles from the families, patriarchal clans and marriage relations, seeking for individual independence; for a period of time the social classes between members have been split to the extreme, the social status of an individual seems doomed since a birth. But in another time people also emphasize the notions “everybody being their brother whoever he is” and “all people being equal”. Both of the growth and decline are actually a self-adjusted process, whose goal is to maintain the cohesive force between the members from different social classes, and simultaneously not to hurt the positive innovation of an individual for the society. Neither of adjustment can be emphasized, we can only maintain the social steady continuation in balance. In brief, we are unable to eliminate, and should not eliminate the deviation in the natural ecosystem with which the ethic culture locates, because this deviation will cause the humans to confront imbalance and cataclysm in the living environment. But this is not fearful; the culture itself has a genius of returning to the natural ecosystem, which can definitely dispel imbalance and cataclysm in the living environment with the operation of the culture. To achieve this, we need to clarify three cross-correlated significant problems. First of all, we must clarify the deviation of the substantive connotation between the ethic culture and natural ecosystem which locates with; Next we must make clear what has caused the social mechanism to accumulate and enlarged the deviation, seeking for the means of guarding against, and resisting magnification and the accumulation; Finally, we must find out the reason why people have no vigilance when the contemporary ecological crisis is accumulating and expanding. If the humans could foresee the imbalance of the living environment, they would have consciously coordinated the ecological notions and ecological behaviors of the different nationalities.

The biological essence of the cultural construction is taken the natural ecosystem as a main source, but does not copy the movement principles of it. To understand the biological essence of the cultural construction, we should make out the differences of the biological species from the cultural information system and natural ecosystem. Of

course, the human society needs to utilize the energies and information in the natural ecosystem, but obtaining them does not belong to the cultural category, but only the human's biological instinct. With success of the cultural construction, the different nationalities use many means to absorb in the living matters and the biological energies, what differences are the different contents which the different cultures have entrusted with. In the cultural construction, the peculiar content lies in its information system construction. In such construction, the humans have in fact digested, absorbed and transformed the objective information in the natural ecosystem which can be used for oneself. There are four functions when the human culture had been digested, absorbed and transformed⁴.

First, in the natural ecosystem, the information relations of the species are absorbed by the humans different cultures, becoming a big source of information in the related cultural construction. In the cultural construction, all nationalities have proceeded in common that the natural biological information has been received.

Next, in the national culture construction, we in no way utilize completely the existing information in the natural ecosystem. What we have done is to select and utilize a small part of it according to the needs of this ethic culture to construct its own culture. We call this characteristic of the cultural construction an obsolete process, or an obsolete principle. No matter which nationality's cultural construction, what it involves in biology information is only limited but is not a completely part in the natural ecosystem which it locates with. That is to say, since the cultural construction, the information has deviated with the natural ecosystem which located in, but not the replica of the natural ecosystem.

Moreover, the cultural construction will also format to the objective biological information according to the criterion of a society, which will transform this biological information from the nature and normally play the roles of transmission, dissemination and explanation in the human society. This process is so complex that we will only take the allocation of the social value as a representative to explain. In the natural ecosystem, all the biological species are equal, of which there is no any distinction between the noble and humble class. Once these living species have contacted with the human society, the situation will be completely different. Anyway, no matter which national culture, there is a whole set of a gradation table on the unique biological species; the information of the related biological species has also obtained the different gradated attribute. The anthropologists have collected many similar cases in the different nationalities, but these materials have compiled a general character, that is, no matter which ethic culture it is, it will not equally treat its all living things in natural ecosystem which it locates. Some certain living species have been man-made raised to a high status, to entrust with the divine nature, meanwhile some others have entrusted with a low gradation; while some living things are regarded as the propitiousness, some as the evils, because this gradation is divided differently by different nationalities. All the ethic cultures must rely on the related natural ecosystem to obtain survival and continuation. No matter which culture makes the information feedback to the ecosystem, they do not conduct as the inherent information system in natural ecosystem instead of the socialized localization and

feedbacks to meet the natural ecosystem change. It means that no matter which culture it is, it always processes information from the natural ecosystem to the socialized request which the goal is to transmit, accept, explain and utilize effectively in the human society. After all, the cultural construction also displays the deviation in the natural ecosystem which locates with. Just like Holley says, the humans as the cultural animals make a response to the life net not the biological animal. What needs to be explained here, the cultural biology what Holley mentioned above is established in the cultural social attribute. The so-called cultural biology is that the person in nature is the social biology.

Finally, the cultural construction also needs to man-made classify the biology in the natural ecosystem to the society. No matter which culture it is, in the initial period of construction, the classification to the biological species always carried on in the means of that time. After having experienced a long-term development, some classification is not the same as its present. But if it doesn't cause the society's misunderstanding, this kind of classification which looks superficially unreasonable would still continue. In fact, this classification has controlled realization, understanding and utilization of the related nationality to the biological resources, which impact perturbation on the natural ecosystem which locates with, and it turns out that the human society deviates from the natural ecosystem which locates. If we contrast every classification of the various nationalities, it is so easy to discover the enormous differences that we hardly make clear what they have in common. In the specific ethic culture, this classification which looks superficially unreasonable is easier to be accepted by these ethic members. The various nationalities classify the biological species according to the need of the society but not to its own attribute of the biological species, so what the social activity dominated by culture on different species' manner and perturbation will deviate from its own characteristic of the various species, and will perform much self-contradictory behavior and practice. This phenomenon is regarded normally no matter which ethic culture is constructed. The different cultures have perturbation for a long time on the natural ecosystem which locates with, but the related cultures have never given an essential attention to this perturbation, because the human society parasites in the natural ecosystem, a nationality must rely on the social life, but it has to process the natural ecosystem and transmitted information to satisfy the needs of the humans.

It turns out that no matter which the ethic culture it is, even its biological construction must adapt the social need, but not be completely faithful to the characteristic which the natural ecosystem locates. The behavior of the related nationalities happens to change this information and utilize the natural ecosystem. As a result, the cultural biological construction will display obvious duality: on the one hand, it utilizes and maintains its needed content; on the other hand, it sets aside or crudely treats this unused temporarily culture, or even disgusts other things. Either utilization or maintenance is limited, so no matter which ethic culture it is, the deviation always displays in the natural ecosystem which locates with. But in the normal operation of the cultures, this deviation is controlled in the extremely limited scope which will not result in the ecology tragedies to realize coexisting harmony in

the human society and natural ecosystem which locates with.

In the history of the humans, the drastic changes of the natural ecosystem took place many times in various nationalities which located with. In some historical period, some nationalities were distributed to some certain different natural ecosystems, while its inherent natural ecosystem of some other nationalities was possibly occupied by other nationalities, all that caused the related national to dislocate with the corresponding pattern of the natural ecosystem, furthermore the related national culture would move unusually. The former would display inefficiency of the cultural operating; the latter would display distortion of the cultural movement. Having to plundering-likely utilize the natural ecosystem which locates with will harm to the related ecosystem. In the normal condition, any national culture has both utilized and maintained the natural ecosystem, although this maintenance and utilization are non-overall, but the coexisting pattern between the cultures and natural ecosystem which locates with can depend on the inherent organizing faculty of the natural ecosystem which unceasingly restores the disturbance from the humans.

Cultural movement in the background of heterogeneous natural ecosystem, the benefit not only drops, maintenances but also cannot receive; when the living environment is compressed, plundering-like utilization can not go on, let alone maintenances. In the historical records, the majority of the cataclysm of the soil erosion and environmental deterioration occurred in the staggered region of the different cultures, or in the period time of the nationalities' sharp conflicts, its reason is that, the movement of the cultures performed unusually, which has already been far away from the general characteristic of the cultural construction.

The relations between the cultures and natural resources are indirect which can naturally have deep influence on the experience accumulation of utilizing and maintaining the cultural natural resources. In the legal of the ethic culture, what is at the striking position is the cataclysm of the related natural resources but not the continuous slight change of the natural resources. In the movement of the national living environment, if the serious cataclysm of the natural resources does not emerge, the related cultures often remiss in the vigilance. Obviously, the cultures on the natural resource are in a subordinate status, so the accumulated experience is extremely inferior to the natural resources no matter which culture it is. Thus, when we plan a protection of the natural resources, it is especially important for us to absorb in and draw lessons from other nationalities' experience.

The undirected relations between the cultural and natural resources are easily to speed up and enlarge the deviation of the culture to the ecological environment. In the construction of the national living environment, the harm which forms some disadvantageous maintenance to the natural resource is easily hidden by the short-termed result, and unconsciously leads to the cataclysm. To change this passive situation, people usually place the hopes on the accurate natural scientific experiment and theoretical guidance. Even if they have obtained a theoretical summary, the experienced performers can hardly comprehensively master these complicated operative technique. It is an arduous task for every performer to correctly understand and apply the techniques in the implemented process which each performer can

understand and utilize correctly. As far as a culture is concerned, the sedimentary experience of the related natural resources is more indirect. With single cultural accumulated experience, it is obviously insufficient to deal with the complex natural resources on the issue of maintenance. The integrated experience from the different nationalities can be compiled into instructive experience.

In the second half of 20th century, what we saw is that, the majority nationalities of the third worlds were threatened by politics, economical and even military from high-powered countries, the various traditional modes of utilizing the living, water and soil resources moved unusually. The expanding of the regular farmland occupied the utilizable prairie; the quantity of expansion of the unitary domestic animal caused the prairie to overload; disorder mining resources have destroyed the forests, prairies and farmlands and so on. All these situations suggested unusual movement of the related cultures, displaying the decline of the cultural inherent controlling itself, unable to carry out the maintenances of the national habitat on the inherent cultures, expanding and repeating mutually the limited deviation from the natural ecosystem which various cultures locate with. This is a directed cause which the contemporary ecological crisis arises. It is the loss of the normally movement of various traditional ethic culture that has caused the ecological crisis which the human society faced. The crisis and cataclysm involves in numerous social stratus and nationalities, no matter what charitable rescue or investments they are, or methods of the modernized engineering technology and even the coordinated actions organized by the United Nations will not matter. Only the multi-dimensional coexisting culture can gradually restore the damaged system, which is also the foundation and future of the humans existing and developing.

IV. The human culture may return to the ecosystem deviation

Normally, the biological essence and sociality of the humans always integrate well which own unique constructed culture by the humans is the only way to realize the integration. The culture is a system of social norms, by which the humans unite closely individuals into a social effect, with this effect, the unique way of this culture keeps exchanges with the living matters and biological energies in the surrounding natural ecosystems, to be born, grow up and breed for generations in an endless succession. But to maintain the individual reliable union is not easy. Individual different wishes, different demands, different ideals, different value-orientations and so on will cause the interpersonal relationship more complicated. To maintain the polymerization for a long time, it should be a whole set of social norms to continue. In brief, the culture, this human's unique creation, effectively integrates the humans biological essence with sociality, which characteristic of the human's double restorations has completely depended on the culture to realize and continue.

Since the humans created its own culture, they have started to increase a long distance with other living species. In the natural ecosystem, one of living species is called the "autotrophs", which may obtain directly energies and inorganic substances from the inorganic world, which manufactures his living matters for himself to complete its own vital activities. The other living species is called the "heterotrophs",

which has to live on other living species for the living matters and biological energies to realize their vital activities. The humans are the heterotrophs who depend upon plants and animals for obtaining the living matters and biological energies to realize his vital activities.

The humans as the “heterotrophs”, there are quite differences between the humans and other living species. Firstly, the distribution area of the humans is much broader than any other heterotrophs in the natural ecosystem, whose trace has been left in any corner on the earth. However, any other heterotrophs are only able to survive in the area where are suitable for multiplication in the ecosystem instead of other unsuitable places. Secondly, the product of the human individual and average-weight of an individual is a very huge number. In other words, the total quantity of the living matters what the humans keep normally in dynamical balance is much bigger than any other species. Thirdly, the channels which the humans gain the living matters and biological energies are much broader than any others, the humans are the biggest species of omnivorous animals. In the pure view of biology, these three differences cause the humans in the natural ecosystem to be prominent and peculiar.

The prominent and peculiar characteristic of the humans is neither obviously realized by its biological essence nor strictly biological survival rules, but sociality of the humans has created this result. In the natural ecosystem, the survival of other living species has been highly dissimilated in the influence of the laws of the natural selection. For example, the entire body structure of the bees has been adapted by the honey and pollen from flowers; however, it is unable to take the sugars from the sugarcane although the sugarcane contains more sugars than honey. Even if the bees defend piles of the sugarcane, they may only die of starvation. So does the plant. eg, the cactus may grow normally in the half-droughty desert, the rice is able to grow well in the warm shallow swamp, but both of their growth area cannot be exchanged absolutely. Without doubt, the rice is doomed to die in the desert and the cactus in swamp. On the contrary, the humans may use social internal effects to utilize the living resources which have not been used previously. The humans enable to change the environment in a certain limited scope where has not been suitable for living and survive in it.

The physiological structure of the humans is unable to directly take the hay as their foods like cows, while it does not hinder them to use the hay indirectly. The humans may control the social strength to grow and reproduce the cows, let the cow live on the hay, then the humans eat the cows again. The humans may also use the hay to plant the mushroom, and then eat the mushroom again. The abilities of the humans, who can avoid their physiology limits effectively and utilize the originally unused living resources, completely get benefits from the social strength. With the social strength, the humans have achieved anything that any other living species unable to do.

The humans not only may expand its sources through the social strength, but may also be able to change the survival environment to meet the needs of their own survival. In the very cold of tundra climate in the North Pole, the other living species resist severely coldness by instinct. In winter, the migratory bird may fly to the warm

south for survival, the caribou may grow thick furs and subcutaneous fat to endure the severe winter, and other animals and plants might be at the dormant state, they will nurture when the next spring becomes warm. But through the social strength, the humans themselves build the house against coldness, putting on the thick winter clothing, or make fires to keep warm indoors. The biological energy itself does not have a natural endowment of the house, winter clothing and heating, which are external things all that are completely endowed with its sociality. An individual is so helpless that the social endowment gathers each individual together to achieve. Having understood this, the specificity of a nationality in the natural ecosystem might also obtain a reasonable explanation.

What the culture has integrated with sociality and biological essence of the human society has cultivated the humans' specificity. But when their own culture is constructed, the humans' limits are unable to have their own ways. On one hand, no matter how it creates, it cannot violate the laws of individuals gathering together. On the other hand, the economical rationality of the humans always achieves own goal at the possible less cost. At the same time, it has to guard against and avoid the risks no matter which is natural or the social. All these limited factors enable the humans finally not only to create one culture, or comprehend or give up the culture riskily, because it needs to maintain the cultural continuation steadily as possible.

The natural ecosystem has provided an extremely complicated space for the humans' survival so they may also divide into many different natural sub-ecosystems in the natural ecosystem. Each of them has its own characteristic of constitution and ways of movement. When the humans create the culture as the same stereotype, it will cost too much although it may also mobilize the social strength to forcefully change the structure and movement characteristic of a certain natural ecosystem. For the economical and actual benefit, they can never do that when the humans construct the culture. In this sense, now that the natural ecosystems on the earth vary in thousands of ways, the humans also construct various cultures economically when they construct the culture. With the aim of utilizing effectively that part of the natural ecosystem which a certain group species of people locate with. It is with the laws of diversification and economic of the natural ecosystem that has induced naturally the cultural diversification of the humans'. Since the human culture mobilizes the social strength which has not been abused, it is used beneficially to have imitated the natural ecosystem structure as a main source, with having constructed mutually different coexisting multi-culture.

In the ancient time of the humans, a certain culture usually corresponded with a specific natural ecosystem, which maintained very close mutual corresponding relationships between them. The loose corresponding relationship of the culture and specific natural ecosystem has derived with long-term development. The innumerable coexisting multi-culture which the humans have constructed is closely related with the principles which the cultures need the humans to connect reliably. When the coverage of culture spans many types of the natural ecosystem, it inevitably means that the differences of the material supplies spread out a long distance in this culture, which maintain the diet structure, cold-resistance and warmth, contact relations,

psychological comfort and so on in the society's daily life. As a result, the life style which this culture maintains will also have a big difference from it, but such a difference will weaken the abilities of this culture which maintains to its members. To enhance an individual's maintenance, the culture will naturally reduce the span on the natural ecosystem as far as possible; coexisting multi-cultural has become a quite ideal choice, and become the foundation of steady continuation for the human society.

Under induction of this principle, its scale of the crowd which various coexisting cultures maintain will vary. If a natural ecosystem is distributed very broad on the surface of the earth, whose structure of the biological species has easily contained many species used directly by the person, moreover the output of these species is very high, and then the corresponding culture with the natural ecosystem can maintain the expanded population with it. Otherwise, these biological species whose distribution is narrow, the output used directly is low and few with few, it is very difficult to expand in a view of the culture of the ecosystem construction and its population scale. Even in the ancient time, in each coexisting culture, there were objectively big differences in the population capacity. The initial reasons of imbalanced development between various nationalities also lie in it. Of course such difference does not violate the principle of which culture maintains its members reliably that it has been continued in the human history. See that this difference is most possible to induce the conflict and contradiction between the nationalities.

Having explored for more than one century, the humans have gradually achieved a mutual recognition that before it has not been suffered from exterior impact, it will relatively continue in a long time no matter which culture it is. The reason is that it is not easy to construct a culture and accumulate and finalize gradually with the time's continuation, and it will unceasingly become plentiful and perfect in the inherited process. Any culture inevitably displays a collective work and intelligence so that a slim change or easily giving up means a numerous loss.

All in all, the diversification is the premise and foundation when the humans construct the culture. On one hand, it is inevitable to suffer from the natural cataclysm of the natural ecosystem; the coexisting multi-culture has obvious superiorities against the natural hazards. Once a natural ecological region encounters a natural cataclysm, its corresponding culture will definitely have the serious loss, but it will not be linked up with other cultures together. Coexisting multi-cultural has advantages in the continuation of the human culture. On the other hand, the culture may avoid the risks through the changed natural resources. Let's take an example. When dealing with the flood, the people may build the dam against the flood or move the settlement seasonally; they may also build the railing house so long as the flood is not too heavy, it may dispel the loss of the flood. Many methods of dealing with the risk give account of the humans who create but the superiority of coexisting multi-culture.

Because this superiorities of the culture has controlled the scope of deviation on the natural ecology, and simultaneously has realized an effective return --- whoever started the trouble should end it. When the ecological crisis threatens the human's own survival, what responsibility the humans should take, and how the humans are responsible for. It is clear that the humans are very different from any other species

with the characteristic of double restoration; of course, it should not expect any other living species share any ecological responsibility for itself. The life movement rules of the natural ecosystem will be unable to solve the problem finally for the ecological consequence, because it has made a part of deviation for the humans' survival. The humans will take their own responsibility for any ecological problems caused by the existence and continuation of the humans themselves.

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