

Human Extinction Crisis - Environmental Philosophy-

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Abstract— Following the paper on environmental morals, this paper discusses the environmental philosophy that underpins it. The purpose of environmental philosophy is to reexamine our obligations to nature from the sensibilities we feel from the natural world, our scientific knowledge, and our actions toward the realization of our ideals. Nature to be protected is still a child of "nature" whether or not we are conscious of it, even if each of us makes a difference in the details of our claims. The basic idea of feeling the benefits and threats of nature is the same. This is because they live in the organs and environment given by nature. It is an attempt to organize the idea of what it means to protect nature from the standpoint of nature.

Keywords—affinity; autoregressive; consciousness; deep emotion; food chain; diversity; environmental destruction; environmental morals; environmental network; free will; ideal; inspiration; introspection; meditation; model of nature; natural environment; natural regression; natural wisdom; nature; physarum polycepharum; plasmodium; symbiosis; sympathy

INTRODUCTION

Although this paper focuses on nature, we humans do not have an accurate representation of nature. For example, the wisdom of nature is not always the same as the wisdom we express. In order to express nature, it is anthropomorphized using words peculiar to humankind. The following philosophical rationale for natural observations and scientific findings is destined to be constantly revised without being regarded as eternal truth, but the facts that are considered to be true at this time are discussed as the basis for destruction control measures in the natural environment.

Environmental destruction is progressing geometrically, and it has become a problem related to the survival of humankind. We have set up an NPO corporation and have continued environmental conservation activities for many years through the investigation of slime molds [1-3]. The slime mold research center and slime mold museum were set up in the affiliated organization. What I noticed there is that there are various perspectives on environmental protection activities, there are conflicts of interest in each organization and each country, and it is difficult to generalize as a mass movement. In addition, the current measures to prevent environmental destruction are not sufficient. Since the cause of destruction is set individually for automobiles, fossil fuels, nuclear power, etc., it is not a drastic measure. The reason for the destruction that becomes a dark blue book is that it is related to the human lifestyle and lack of understanding of nature. That is, the first cause of destruction is (1) changes in the living environment. This is largely related to social structure and brain development. Here is the cause of destruction, which will be discussed later. The second cause is (2) incomprehension of nature. To think about what nature is, we deal with the definition of nature and the model of nature. As soon as a machine civilization that is free from religion and requires efficiency and speed begins. Brain functions suitable for advanced information processing have increased processing power with the advent of science. In addition, the natural environment is a place of life for living things,

but the power that the natural environment gives, such as adaptation, evolution, diversity, environmental network, accidental events, and animal intuition beyond human expectations, should be considered. In order to prevent destruction, the first thing to do is to have a world view that asks the relationship between nature and oneself. In addition, you should comply with the moral law [4] that you impose on yourself. Next is the understanding of nature, which begins with observing the natural world of the outside world. It should be noted that there are facts that not only reveal the facts but also appeal to the sensibilities. To have a sense of familiarity not only with the flora and fauna of the natural world but also with all things in nature, and to have a deep emotion and sympathy. The next observation is the consciousness observation of by introspection. Through self-observation and this, we aim to experience the natural network and integrate it with all things. Finally, as a consideration for nature, we take up the wisdom of nature and proceed to the self-external nature and self-internal nature, the self-internal others and the in-other self related to the natural network, and discuss free will and the return to nature. The structure of this paper is divided into I Causes of environmental destruction, II Measures against environmental destruction and III The future of mankind.

I Causes of environmental destruction

1. Brain development

According to Eccles, the brain is an elaborate computer created by the genetic code in the process of biological evolution, and the self is the programmer who operates the computer[5]. He takes a dualistic position assuming an ego independent of the brain, but monism became dominant when experimental results showed that free will and consciousness could be reduced to neuronal mechanisms. As a result, many brain scientists have taken the position of denying dualism. However, at present, reductionism

has not been able to explain the ego that makes comprehensive judgments. Even if the ego cannot be elucidated by brain science, we must consider how the ego is involved in solving environmental problems. It is undeniable that the brain is an advanced information processing organ, just as Shannon and Neumann learned the functions of the brain and developed computers. Feed forward as a predictive function and inadequate feedback on one's behavior are causing current environmental destruction. We cannot guarantee that environmental problems can be solved by the development of the brain. Recognizing the role to play in nature concerns issues related to consciousness rather than intellect. Higher animals with a more developed brain have the ability to change the natural environment. Lower animals adapt to the environment by changing their life cycle in response to changes in the environment [3]. The brain is a seat of the mind characterized by intellect, but even if the destruction of the brain causes mental disorders, there is no certainty that the brain is producing the mind. The brain is an important organ as a mediator of the mind, but self-independent consciousness is not limited to the brain. Even in lower organisms without a brain, sprouting of consciousness has been observed, changing the behavior of individuals [6].

There are experiments on behavior modification of *Physarum polycephalum* variants [7]. We show that the electric field strength can be used as an effective stimulus to motion control of a plasmodium on an agar-agar surface. (1) Galvanotaxic reinforcement: Our results show that the velocity of crawling increases in proportion to the DC electrical stimulus, up to a specific velocity. (2) Remaining galvanotaxis: A synthetic plasmodium composed of a experienced plasmodium which has been stimulated by the electric field strength and an inexperienced plasmodium which has not been stimulated, shows more rapid crawling than plasmodium which has not been stimulated. (3)

Galvanotaxic application: In the experiment using a T-shaped path consisting of one path of feeble electric field strength and one with no electrical field, an experienced plasmodium, chooses almost always a path without the electrical field. On the other hand, the path chosen by an inexperienced plasmodium is always random. Our method has significant possibilities to find new findings for origin of memory and learning by a simple animal model, the plasmodium of *Physarum polycephalum*.

2. The rise of science

Science is an effective means of recognizing nature, but it is suitable for partial recognition, such as examining the trees in the forest, and cannot recognize the entire forest. The environmental networks that each organism uses to live are affected by changes in the natural environment. It takes a general understanding to know the impact on this, but changes in the environment due to science and technology can cause environmental destruction. Whatever the behavior on nature, its impact extends to all living things through environmental networks. Science is motivated by curiosity, so science is not responsible for its consequences. Science will continue to advance with the support of society to provide a comfortable environment for society through new technologies. Environmental destruction is inevitable if society uses it indiscriminately for the benefit of science. But this is the fate of mankind to stick to science. Mankind uses the power of science to create a comfortable artificial environment, but the resulting environmental destruction is a suicide act of mankind, leading to the path of extinction of mankind. How to deal with science is an issue challenge to delay the extinction of humankind.

3. No understanding of nature

1) What is nature

(1) Contemporary understanding

The widely accepted definition of nature is a non-artificial thing beyond human power. It covers a wide

range from the mind and body of living organisms to the substances, energy, and non-materials of non-living organisms. In this paper, I will discuss based on this understanding. Humans observe natural creations, creative processes, and the mechanisms that make up them, and apply them to creative activities, but the origin of creative activities of nature is still unknown.

Now that the natural environment is becoming more polluted, we should clarify what nature is and how we should deal with it. Because our actions depend on the survival of mankind and the world to which we belong.

Even if it is not possible to know the true nature of nature, it is possible to infer what nature is from its characteristics [4].

(2) Traditional definition of nature

The definition of nature is ambiguous, but the word nature has come into close contact with human life.

① Manifold sense words derived from origin [8]

Word of manifold senses derived from its original meaning of birth or origin.

It may denote the essential constitution or quality of a being or thing, its original uncultivated condition, or its innate character or disposition.

This definition does not clarify the relationship between humankind and nature.

② the metaphysical principle

It may denote the metaphysical principle of life, or the forces and processes of the material world, often personified, and regarded as the agency through which the Creator works [8].

③ Common wisdom

The concept of nature is not understood, but it is used in common sense.

The word nature can be a standard for something. For example, in science, "this data is not as natural as others." In a criminal investigation, "the story of the suspect is not natural." In everyday language, there are many things such as "It is natural for a child to be born if you are young."

The first nature is "not in line with the regularity of nature", and the second example is "not suitable for the content of the story and the characteristics of the way people speak."

The third example means that there are physiological conditions for having a child.

Such an understanding of nature shows that the characteristics given by nature and the characteristics obtained by human experience and observation are used as a measure of judgment of things. In some cases, nature is empirically understood, but the word nature is generally applied to inexperienced and inexperienced things. Nature is not always captured by human senses and experiences. The word "unexpected" is often heard even among experts every time a natural disaster occurs.

2) A clue to know what nature is

(1) Understanding nature as a whole The common will of each member created by nature

① Will to live

i. Individual maintenance and species conservation

a. Providing a living environment

b. Environmental network (circulation system): food chain, symbiosis, sociality (family, division of roles)

The natural environment refers to a system such as a place given by nature for living things to survive in nature.

As mentioned above, the forces of the environment include adaptation and evolution, diversity, and environmental networks.

An environmental network indicates that the world is connected by a relationship. The food chain, symbiosis, and sociality (family, division of roles) formed by the various elements that form the environment show typical relationships. Plotinus has pointed out the relationship of the world from early on [9].

In 1970, Codd proposed a relational data model that is easy for users to understand and suitable for high-speed processing based on this relationship. In this model he introduces a model based on n-term

relations, a format of database relations, and a data sub-language as a universal concept in order to eliminate the flaws in the data model [10].

c. Reuse and recycling of materials

Post-collapse substances and post-mortem bodies of living organisms are decomposed by microorganisms and physicochemical actions and used for the next creation.

d. Environmental adaptation system and evolution

It gives organisms the ability to adapt and evolve to survive under environmental conditions such as soil, rivers, oceans, forests, tropics and cold regions.

ii. Diversity

In the natural world, various ecology and way of life of living things are allowed.

iii. Propagation of way of life

It is prominent in higher animals, but it propagates the results gained through learning and experience to peers.

iv. Change

The dynamism of nature is the creation and collapse of all things, and the birth, death, and regeneration of living things.

(2) Understanding of nature by integrating the individual facts that make up nature

You can find out the health of the forest by examining the trees in the forest. Examine the relationship with other elements as well as individual elements. Individual elements represent the diversity of nature, and relationships suggest the unity of nature through environmental networks. Nature encourages living things to form an environmental network that fulfills their will to realize their ideals for the purpose of survival.

3) Consideration for nature

(1) Nature's wisdom

As science reveals, the structure of matter, the formation of the universe, the birth and activity of life, etc., the creation of which exceeds the intelligence of humankind.

Hilty argues that, considering the orderly universe, even if the ultimate cause of universality is expressed by impersonal names such as the laws of nature, those laws are a spiritual element, a kind. Their names are meaningless unless they are understood as wisdom. [11]

On the other hand, in a pantheistic view of nature, nature praises the power to protect the strong and destroy the weak. Justice, patience, mercy, and love advocate the significance of God's existence as nature lacks the attributes of God.

The various systems that nature has created are more straightforward to assume the existence of some wisdom that goes beyond human knowledge, rather than by the accidental action claimed by modern science. It is obvious when compared with human creative activities.

Even if you make a new car artificially, you have to go through a process of planning and designing with careful consideration, making use of your experience full of failures. Wisdom that surpasses human wisdom is required for the composition of the universe and the creation of life from matter.

Looking at the natural world, some parts are suitable for survival in the natural world, and some parts are not.

However, as proposed in the model of nature, nature forms not only the nature of the outside world but also the inner world, and is also the source of free will to modify the outside world.

Scientists are negative about the existence of intellect in nature. It is replaced by accidental physicochemical action. No one can verify whether the thing itself has a creative effect, but the creation of all things is considered as a physicochemical effect that happened by chance.

Nature's intelligence encourages mental improvement and conveys a rethinking of how humans use free will to pollute the environment and how to deal with the associated nature.

Human intelligence is preceded by impulses, and its side effects cannot be considered, and even if they are considered, they are limited.

In fact, nuclear development and automobile development are causing destruction of the natural environment.

Even in the age of all-around science, it is difficult to deal with things that go beyond human knowledge. When creating a system, it is desirable to design it to function properly in the event of an accidental situation. For example, in logic circuit design, it is necessary to set the worst conditions.

In addition, in order to obtain comprehensive judgment, it is necessary to develop a method that draws out intuition that does not rely on deduction that advances logic one by one. Intuition does not always lead to the correct result, but intuition precedes deduction and can be confirmed by deduction.

(2) Natural network

① Nature outside the self and nature inside the self

The self is a phenomenal existence in real time. It can be observed by the senses. Therefore, it is characterized by reality, which is the expression form of the present being.

The self is the existence that represents the depth of existence that makes it exist. Nature outside the self refers to nature and the natural world that are not affected by self-consciousness. The self-consciousness of one's body and mind, the information processing system that mediates between both and the brain, and the information processing system that replaces the brain are called natural system(or nature) within oneself. However, the knowledge, feelings and intentions gained through learning and experience are second or indirect natural system(or nature) ,within oneself.

② Others and self within others

Others Inspire us by impression and empathy, teach us depth of existence and recommend return to nature.

(3) Free will

The source of free will is in nature. Free action depends on one's own initiative, but may be modified by acquired knowledge and experience to cause anti-natural behavior, that is, behavior contrary to natural characteristics such as destruction of diversity and environmental networks. It is desirable to build a new environmental network that adheres to the characteristics of nature [4].

(4) Return to nature

① Realization of ideal

As an innate function according to the development of the brain, the willingness to realize social goals such as freedom, equality, and philanthropy, which are the basis of law and ethics in humans. Although it changes depending on the times and social structure, the altruism for social stability does not change. As we understand the environmental network due to environmental destruction, we are trying to transform into a social structure that incorporates natural mechanisms.

② Autoregressive

Higher organisms that have come to have a brain created by nature search for nature through nature observation in order to satisfy their curiosity. Exploratory behavior is the act of nature returning to itself through its own creations, and is the act of knowing oneself.

II Measures against environmental destruction

Preventing environmental destruction related to the survival of humankind is an urgent task for us. For that purpose, it is necessary to practice the moral law "moral law" that has a world view and a view of nature and is responsible for one's own actions.

1. Have a world view

1) Compliance with moral law By having your own worldview and observing the environmental morals derived from it, you are responsible for your actions towards the natural environment. It makes sense to impose responsibility on ourselves. This not only maintains compliance with moral law, but also

explores the meaning of life by enriching the worldview that is directly linked to the view of nature.

2. Understanding nature

1) Nature observation

(1) Impression and empathy

This is the case when the emotions are moved by seeing the natural scenery.

The following is a typical haiku by Basho.

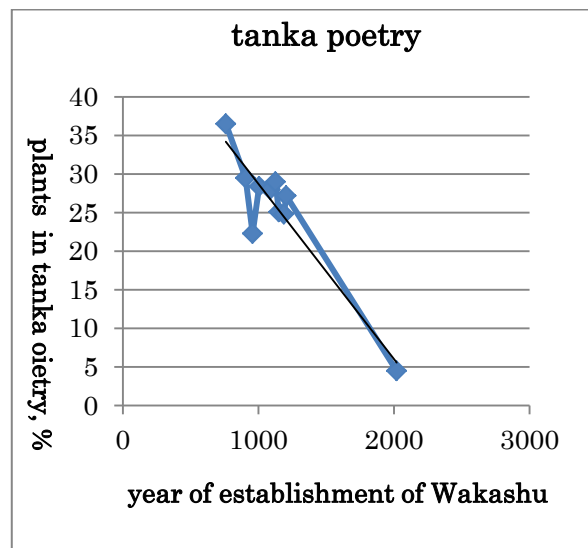
(B.Matsuo, Japanese haiku poet, 1644-1694)

"Coming through a mountain path,
 Somehow graceful
 Violets"

(Translation by L.P. Lovee)[12]

The meaning is as follows.

If you follow the mountain road, you will find purple violet flowers blooming alongside the road. The appearance that quietly announces spring is somewhat adorable



Graph 1. The number of plants sung in Japanese tanka collections.

(2) Affinity

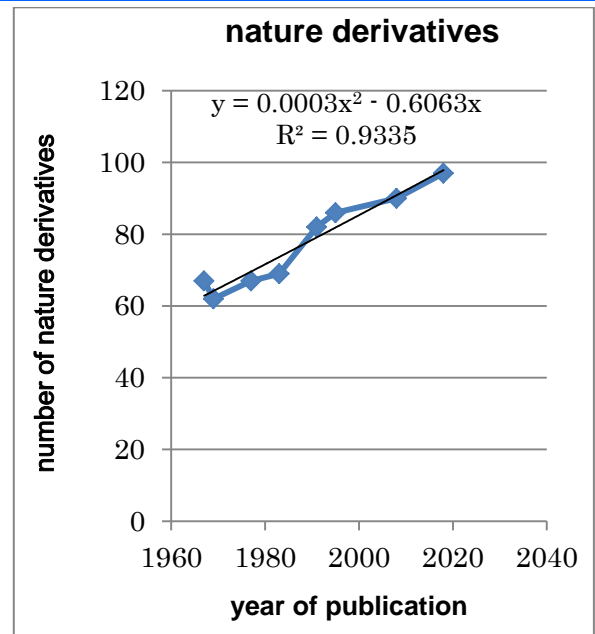
① The actual situation

The emotional closeness of animals and plants appears in the poetry. Graph 1 shows the number of plants written in Japanese tanka collections. Representative classical tanka collection, Manyoushu [13] (759, 4516 poems, 36.5% plants, 17.8% animals, 8th century anthology of Japanese poetry)

From Manyoushu to Modern Manyoushu [14] (4017 poems, 4.5% plants, 3.7% animals), each plot represents a published wakashu. As the number of plants decreases sharply, cultivation increases and diversity is lost [15]. The number of animals that have been sung has dropped sharply as well.

The degree of emotional understanding of nature is declining sharply. The main reasons for this are the development of transportation networks, large-scale logging, and environmental destruction due to industrialization. As a result, the significant reduction in flora and fauna reduces contact with natural flora and fauna. In fact, it has been pointed out that the extinction of animals and plants increases as the environmental destruction progresses. The number of extinct animal and plant species in the world is reported to be 0.25 from 1500 to 1899, 1 from 1900 to 1974, and 40,000 from 1976 to 2000 [16].

On the other hand, according to Graph 2, the use of "nature" is increasing. This graph shows the number of derivative words related to "nature" that appeared in the Japanese dictionary "Kojien" [17] from 1968 to 2018. The increase in natural language derivatives indicates an increasing social need to use them. As long as the natural sciences continue to explore nature, scientific terms and derivatives will increase. As the mechanism of "nature" is elucidated and technological developments such as medical information, transportation, and information processing of artificial intelligence progress, the conceptual understanding of "nature" as a social necessity will deepen. However, there is concern that the deviation from the real nature will increase and the rich emotions obtained from nature itself will be lost.



Graph 2. The number of derivative words related to "nature"

② Affinity with nature

According to a natural environment survey, the more familiar the environment is, the less likely it is that environmental destruction will occur [18].

A questionnaire survey was conducted on 124 Japanese university students in their 20s to investigate the relationship between their affinity for places and the removal of illegally dumped waste.

As a result, the linear approximation shows a high linearity with a coefficient of determination of 0.8278 for the relationship between familiarity with familiar places and long-term residential areas and the removal score of illegally dumped waste. This suggests that if respondents are familiar with the location, they tend to remove illegally dumped waste. The reasons for removing illegal dumping in the area where the respondents live are embarrassing, 10.53%, bad impression, 25.26%. Affinity, 28.4%, appearance, 12.6%, neglect, 23.16%. Intellectual motivations such as shame, image, and appearance are less dominant than intimate motivations. Respondents' motivation to eliminate illegal dumping is not based on social factors such as shame or

image, but on their sense of familiarity with geographic areas such as location. Survey results show that environmental protection is more effective than intellectual activity when increasing affinity.

2) Consciousness observation

Self-observation

Consciousness is generally divided into preconscious, conscious, and unconscious [19]. Each is defined as the following symbolic process. The conscious layer is realistic and linguistic, the unconscious is distorted and fixed, and the preconscious is a figurative and free symbol.

The free work of the preconscious process contributes to creative activity. Consciousness includes a sense of solidarity that goes beyond the individual's consciousness. This is the consciousness of striving for freedom, philanthropy and equality. This consciousness arises from meditation, and deep emotions and empathy inspired by others. Deep emotions are a very primitive and candid sense of solidarity between nature and its components. Empathy creates a sense of self sharing with others. Under this state of consciousness, it causes a sense of self-sacrifice and service to others. This consciousness creates a sense of unity with everything.

3) Model of nature

This model is created from the natural characteristics that we can observe. If nature extends to everything that is not created by humans, the world of nature ranges from elementary particles to the universe, the heart of the body, the brain, the mind, and the realization of ideals.

(1) Appearance of nature classification

Each natural region has the relationship shown in Fig. 1.

(2) Outer nature

Areas directly related to nature, including body organs, systems and functions.

It's an accurate design, but it also needs to be modified for disasters, illnesses, choices, and so on.

(3) Inner nature

Area of the mind classified into intellect, emotion and volition.

Area in charge of planning and planning related to the convenience and progress of daily life. It is a source of science motivated by curiosity. Science has the power to apply by analyzing natural systems, but lacks the altruistic ideals responsible for the results, such as the development of nuclear weapons.

(4) Deep nature

Areas for planning the realization of ideals (justice, freedom, philanthropy).

Fostering an ideal requires conscious effort by free will. This ideal itself is not immutable, and becomes more universal as the understanding of "nature" progresses intellectually and emotionally.

←
Science (Curiosity)
 :to Outer Nature from Inner Nature

←
Moral law for Natural Environment
 :to Outer Nature from Deep Nature

Nature1 : Outer Nature	Mind Trans- ducer	Nature2 : Inner Nature	Spirit Trans- ducer	Nature3 : Deep Nature
(Natural World (Body etc.))	(Brain etc.)			(Ideal, Pure Con- science , Ethics)

→
Inspiration (Impression, Empathy)
 :to Deep Nature from Outer Nature

→
Observation (Research)
 :to Inner Nature from Outer Nature

Fig.1 Conceptual diagram of the whole of nature

If we define a natural creation as non-artifact, its typical creations are our external natural world and

our internal physiological system and spiritual world. The spiritual world is the world of the mind and has the functions of knowledge, affection, and will. The mind is expressed through the brain (this is called the Transducer function). The effects of the mind have also been observed in animals other than humans [6-7]. Observations of the outer world (Natural World, Outer Nature) including the body are projected onto the inner world (Inner Nature) to evoke curiosity that motivates science, and from the inner world (Inner Nature) to the outer world (Outer Nature).

On the other hand, in the deep emotions and empathy caused by the natural world, when consciousness is awakened, generalization of consciousness that transcends the boundaries with nature occurs (a state that transcends oneself and others). Here, it is represented as a spirit transducer that transforms into a mental function that distinguishes the current consciousness from the unconscious. When deep nature works, it leads to the realization of environmental morals, ethics and ideals. Another way to drive a spirit transducer is meditation. In either case, the realization of the ideal requires a free will motivation to do this.

III The future of mankind

There are some parts of nature that are inconvenient for survival.

1 Mankind will not stop fighting the inconvenient nature

This is to protect yourself from hunger, illness and disasters. Mankind continues to improve the inconvenient natural environment (nature) to avoid suffering.

1) The desires of humankind are endless. Confidence in science continues to grow, spurring advances in science.

2) In the past, the power of religion dominated the behavior of mankind, but when the science that emerged instead gained trust, mankind unconditionally follows science.

2 Continuation of nature exploration

Technology, the result of the natural sciences, has unconditional trust in science itself to save humanity's predicament and meet its needs.

3 Science continues to advance because nature is an endless treasure trove.

4 Human beings act without knowing the unknown effects, so the side effects of science and the destruction of the environment continue. As science develops and has a major impact on the natural world, humankind will be extinct on its own.

5 There is a key to delaying the time of human extinction. It is to have a world view for nature and to protect the morals of the natural environment.

6 What to do and what not to do

1) How to use free will follows the rules of nature.

It's like a car obeying traffic rules. This is because the source of free will is the creation of nature, but the improvement and use of experience and knowledge is left to the individual.

2) In order to fulfill an individual's wishes for nature, it is necessary to utilize the curiosity that is a call from nature. Curiosity does not always directly evoke deep emotions and empathy, but it does increase the likelihood of that opportunity.

3) Realization of an ideal based on a view of nature

Ideals are always corrected and modified by following the rules of nature. It is necessary to maintain a view of nature that follows the rules of nature. Also, the rules of nature are not always recognizable by us.

There is no choice but to follow the cognitive process by utilizing intellect, sensibility, and consciousness.

4) Symbiosis with the unknown

Knowledge and experience are not useful for dealing with the unknown. As environmental destruction progresses, it will be difficult to deal with infections caused by unknown viruses and bacteria, and troubles in space development with different natural environmental conditions. Advances in science are equivalent to opening Pandora's box. We don't know what kind of troubles is waiting for us. We need to

keep an eye on the situation by exploring the path of symbiosis rather than a hasty response.

Discussion

To understand nature, 1) research analysis as material understanding (1) observation (2) analysis and logic as research 2) emotional understanding (1) intimacy (2) incorporate into life. In addition, 3) resonative understanding includes (1) consciously assimilating with nature (2) emotion and empathy 4) in order to understand the wisdom of nature beyond human knowledge and experience (1) accidental utilization. (2) There is sympathy as a response to the unknown.

Material understanding is mainly a scientific method to clarify the material composition and its mechanism that compose nature. Although it is a material understanding, it is a fragmentary, partial, and chronological understanding that makes full use of analysis, experiment, and logic. We aim to understand nature by deriving objective facts using the measurable and reproducible nature of individual natural phenomena.

However, it is difficult to understand nature as a whole through individual natural phenomena. For example, even if the law of mechanics is derived from each phenomenon, the relationship between the law and other laws and the meaning of the law in general natural phenomena including the survival of living things are not clear. Emotional understanding is an artistic creative activity such as poetry, painting, and composition that is influenced by natural phenomena. Resonant understanding is when you find a purpose in life by being fascinated by the magnificent mountain ranges, the vast universe, and the lively wild animals and plants. I often feel awe in the natural world.

Resonant understanding is more directly linked to the purpose of life than emotional understanding, but both are understandings of nature by experiencing nature by putting it in the natural world both physically and mentally.

Also, regarding the understanding of the wisdom of nature, science continues to analyze and reconstruct the constituents of nature through experiments, but the intellect of nature, which is equivalent to the intellect of human beings, has been clarified.

For example, development of a computer using the activity of a neuron network, artificial intelligence, and the like can be mentioned. Nature creates the brain and free will and fosters curiosity in the quest for nature. Mankind tries to improve the natural environment by exercising free will by utilizing curiosity.

Free will can cause environmental destruction, but nature also gives us the opportunity to control it.

We need to be interested in accidental events in order to deal with unexpected situations.

In addition, it is necessary to design a system that can handle not only coexistence with unknown viruses, bacteria, and organisms, but also unpredictable situations.

There are various organisms in nature, and organisms are intended to preserve and expand species, but the details of biodiversity and environmental networks are not clear. Instead of ignoring or eliminating each organism in order to prevent environmental destruction, I would like to respect its existence and work together to build a better natural environment network.

REFERENCES

- [1] the NPO Association of Institute for Intelligence Communication (NPO AIIC).
The NPO AIIC Myxomycete Research Center, and Slime Mode Museum; Ichihara, Chiba, Japan.
- [2] S. Kato, Effective utilization of the slime mold museum to environment protection activities and economic effects(Jpn), Chiba Keizai Univ. Treatise, Vol.56. pp.55-72,2017
- [3] S. Kato, The meaning of natural environments provided from observation of *Physarum*

- polycepharum* (Jpn), Chiba Keizai Univ. Treatise Vol.58, pp97-114,2018
- [4] S. Kato, The moral law for natural environment- Morals to protect natural heritage, material and life heritage-Journal of Multidisciplinary Engineering Science and Technology.1 Vol. 8 Issue 8, August , pp.4401-14410, 2021
- [5]J.C. Eccles, Evolusion of the Brain : Creation of the Self,Routledge,London,1989
- [6]P.Chauchard, Physiologie de Conscience, Presses Universitaires de France,1941
- [7] S.Kato, Galvanotaxis of the Plasmodium of Physarum Polycephalum
Integral Biomathics: Tracing the Road to Reality
Subtitle: Proceedings of iBioMath'2011-Am, San Jose, CA, USA, iBioMath 2011-Eu, Paris, France and ACIB '11, Stirling, UK , Editors: Plamen L. Simeonov, Leslie S. Smith, Andrée C. Ehresmann
- [8] The new standard encyclopaedia and world atlas, Odhams Press Limited, London,1932
- [9] R. Harder, Plotins Schriften, Neubearbeitung mit griechischen Lesetexten u Anmerkungen I-V. 1956-1960
- [10] E. F. Codd, A Relational Model of Data for Large Shared Data Banks, Communications of the ACM, Vol. 13,No. 6, pp.377-1970
- [11] C. Hilty, Gluck, Dritter Teil, Hinrichs'sche Buchhandlung, 1907.
- [12] J. White, K.T.Sato ,575 The haiku of Basho, The Buddhist society trust, 2019 [13] A.Satatke, et al. collation eds, , Manyoushu (J), Iwanami Shoten, 2013
- [14]Nihonkajin Club, Gendai Manyoushu (J). Tankakenkyusha,2020
- [15] E. Nanaumi, et al, The action to plants in Manyoshu and anthology of Japanese poetry compiled by imperial command during Heian period(J), J. Jpn, Soc.Reveget. Tech.39(1),74-79,2013
- [16] N. Myers, Sinking ark, A new look at the problem of disappearing species- Pergamon Press, Oxford,1979
- [17] I. Imade, Kojien(J), 1968 ~ 2018, Iwanami Shoten,
- [18] S.Kato,The mind-body problem and activity: Is intelligence useful in environmental protection activities? 2012 International Conference on Environmental, Biomedical and Biotechnology. IPCBEE vol.41 IACSIT Press, Singapore, pp.99-107,2012
- [19] L.S. Kubie, Neurotic distortion of the creativity process, Univ. of Kansas Press, Lawrence,1-52, 195
- [20]J. Soc. Biophysics ed, Biophysics of the Brain and of Mind(J), Kinokuniya Shoten, 1997