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The Formation of a Sustainable Rural Area

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1. Introduction

Scholars of agricultural science, when studying rural areas for economic activities, ecology, and social life, analyze rural areas based on their own discipline such as agricultural economics, ecology, or sociology. It is inevitable for them to make observations from the viewpoint of their own field of expertise. However, when doing so they risk overlooking the totality of real society. Society can show its significance on the basis of our total understanding of social phenomena. Unrelated to the differentiation of academic disciplines, the reality of our daily life has totality, where we are not merely an homo-economicus, naturalist, or social existence. We live in an integrated world which has three main aspects: economy, ecology, and life. Rural areas in Japan are facing severe problems with the outflow of younger generations to urban centers, a retreat of agriculture, and the devastation of villages. Therefore it is very important for us to reconsider our actual situation and the direction of rural development. It is often said that consumers should recognize the importance of agriculture and that producers should try to realize sustainable agriculture. Above all, rural areas should be formed as a sustainable place for a total life, which is fascinating especially to the younger generation. The formation of a sustainable rural area is the most important issue facing us today in Japan. This paper is a philosophical study on the rural area and its place in our total life.

2. The Concept of Area

S. Kiuchi says that the concept of area has five formal characteristics. An area: 1) is a part of the earth's surface, 2) has peculiar relations to other places, 3) has spatial spread, 4) is distinguished from other areas, and 5) is a part of a larger area. The concept, however, has no pro-

found content [11, p. 83]. The academic study on area was originally developed in Germany, following the establishment of geography. The important idea of German geography is spatial—organisms (Raumorganismus). The earth and each area are recognized as an organic whole or an organic living thing by many geographers, such as Richter who comes from the viewpoint of theology or teleology, Humboldt, from natural geography, and Ratzel, from human and political geography. They all understand an area as having an organic existence [11, pp. 85-87]. Ratzel in particular, stands clearly for the idea of spatial-organisms. According to his idea, a nation, a specific area, or a city, can grow by combining its differentiated functions or organs such as traffic, communication, marketing, etc., just like a living creation grows by organizing each functional organ by the nerves and blood vessels [18]. La Blache (Vidal) of France develops Ratzel's idea further to present the hypothesis called environmental "possibilism" that states that human beings can reconstruct nature actively by using technology and, in this definition, nature is passive. He considers that the object of geography is to make clear each area's characteristics and its principle of unity [3].

The idea of spatial organisms is, however, criticized by Hartshorne, who makes three main points about area: 1) It has no clear boundary, 2) its contents are not fixed, and 3) it grows unlike a living creation [7]. The main trend of area study in the United States is "uniform region theory" that divides the complicated surface of the earth into homogeneous zones, for the convenience of each discipline, according to subjects such as climate, lay of the land, distribution of peoples, land use, and so on. In this case, the mystique of organism is removed and an area's partition is subordinated for the purpose of study. This method of study is undoubtedly effective within the range of each specific purpose.

Through our awareness of environmental

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issues, however, the ecological perspective has increasingly become influential in all fields of science. For example, from his ecological standpoint, J. Lovelock has presented his "Gaia-hypothesis" that the earth is also a life system which has a self-stabilizing function [13]. This idea is one type of spatial-organisms. Further discussion is needed regarding this hypothesis, as it is clear that the view of the modern sciences on humanity and nature have been confronted by their limits. In the modern sciences a human being is recognized as an existence who, by modern technology, can change nature without limits. However, humans can only secure their existence by taking the point of view that human beings have not only a technological existence, using technology to change nature, but also a natural existence, whereby they live together with nature symbiotically. Humans are, "at once both active and passive."

An area, of course, is not a living creation in the strict sense of the word, but it is formed by a strong unity of functional cooperation by each organization. On this basis of organisms, uniform region theory can also play a role in its own limited meaning.

As we have seen, according to the history of area studies, the point of view of this paper stands basically on the side of a prolongation of spatial organisms. However, it is not closed like a living creation, but open to other areas. I will use the term "area" to refer to "an economically, socially, and autonomous space unity of human activity in which we produce something and live out our daily life."

I wrote previously that modern society is in search of total value, which consists of economic, ecological, and life value. Agriculture and rural areas, owing to their various characteristics, can offer all three of these to citizens. I posited that agriculture is a "multi-value industry" and a rural area is a "multi-functional space" [26] [27, p. 15]. For rural inhabitants, the realization of this total value, so to speak the realization of "human life" [20], is the goal of area formation. I will call such an area a "sustainable rural area." I will explore these thoughts from three aspects: 1) A rural area is a place for production (economic activity), 2) a rural area is a place of ecological unity, and 3) a rural area is a place of daily life.

1) A rural area as a place for production (economic activity)

In Japan, agriculture used to be the main industry in rural areas, but now agricultural production is only 2 to 3% of GDP. In a primarily agricultural prefecture, agriculture contributes about 20%, and the average agricultural income of a farm household is 14% of its total income. Agricultural production needs a large space for its growing fields causing the rural landscape to be widespread. However, rural areas are rapidly converting to industrial or general economic space.

The Tango area of Kyoto prefecture in Japan, where I have a research field, has an organic association of many industries; for example, factory, commerce, agriculture, forestry, fisheries, Tango-crape as a regional industry, tourist enterprises, etc. This economic space unity has been termed "multi-industrial complexity" or "regional industrial complexity" denoting a union supported by social activity [21].

The Tango multi-industrial complexity has its own regional labor market combined with the market of other big city areas. Tango-crape, as well as agricultural, forestry and fishery products, and others are distributed mainly in the Kyoto, Osaka, and Kobe city markets. The beautiful coastline of Tango is a feature of tourist enterprises which have combined with markets from all over the country. The regional economy of Tango has its own autonomous and unique unity combined widely with other areas.

Until now, cities and factories have been regarded as opposition to rural areas and farms. The idea of a rural area is occasionally anti-city and anti-industry [32, p. 101]. We can see the process of Japanese modernization after the Meiji-period as a process of separation or confrontation between city and country, or industry and agriculture. In the period of high growth after World War II, rural inhabitants often rejected urbanization and industrialization near their area. They believed that industrial development would destroy cooperative rural society, bringing pollution to their environment. Aoki has stated that economists thoughtlessly applied the classical physics concept of time and space to economics. This means that modern economics has ignored the concept of area, and is concerned only with in-

dustry as its research object [1, pp. 9-10]. Now, however, rural areas cannot survive economically only by agriculture and without industry. In the period of high growth, farmers, especially the younger generation, were forced to live as a part-time farmer or to leave their community to find a job in the city. Watanabe says that the idea of anti-city or anti-industry defines only self-sufficient areas and shuts out industry as an abominable presence in the autonomous space. He further asserts that acceptance of workshop space in a small city or town surrounding rural areas by a nation would build up the highest level industrial state [32, p. 121].

2) A rural area as a place of ecological unity

Each rural area is also an ecological unit. Forest, rivers, lay of the land, weather, and many creatures form a unique ecosystem to each area. However, each area had already maintained an original ecosystem before the arrival of human beings. Today's situation of human society was created under the influence of an ecological environment, but then humans artificially reconstructed nature around them according to their will.

A rural area has a common forest behind each village in order to secure fuel. The forest supplied abundant water for the farmer's fields and prevented terrible flooding. Rural areas have continued to cooperatively manage their natural resources even in the present day capitalistic society. Tamanoi says that the old rural community carefully managed natural resources in its area according to the customs of a non-market society, and maintained a sustainable relationship between man and nature [32, Kamisato, Introduction]. Sustainability of society is assured by an adequate management of the ecosystem and symbiosis with nature. Industrialization of agriculture, however, has destroyed the traditional relationship, such as symbiosis and circulation, between man and nature. The rapid increase of population and mass consumption of food has brought an agriculture expansion of management, specialization, mechanization, and promotion of a "monoculture," along with repeated cultivation, "chemicalization" (the use of chemical fertilizer and agricultural chemicals), automating of water management, and a segmentation of water circulation by modernized drainage

systems and the use of various facilities [9]. This whole chain of agricultural change (the industrialization of agriculture) is indivisible. These changes often disturb the ecological system, pollute the atmosphere and rivers, destroy animals, insects and plants, and bring bad influences on the environment for human life.

Trade liberalization and international specialization of production has accelerated the industrialization of agriculture in each country and disturbed the global ecological system. Countries which export agricultural products promote large-scale development and the industrialization of agriculture. In the United States the necessity of low input sustainable agriculture (LISA) is necessary for agricultural management, however plunder agriculture continues to accelerate. V. G. Dethier says that the chemical energy of agriculture inputs 5 or 6 times as many as calorie as it yields in the output of food in the United States, and 3 times in England [5, p. 309]. Modern industrialized agriculture has become an energy drain. Countries which import agriculture products, such as Japan in which the prices of agricultural products are comparatively high to international market prices because of the disadvantages of Japan's natural conditions for production, steadily increase the import of foods and its agriculture output declines remarkably. The principle of comparative advantage (or, the principle of comparative costs) behind the theory of international specialization is based on the ignorance of regional difference such as natural conditions. Therefore, areas where agriculture is in decline because of disadvantageous conditions can avoid the effects of diseconomy. However, lost are the effects of economy of agriculture that have non-economic functions such as the prevention of flooding, formation of beautiful landscapes, and purification of the air. An agricultural trade system, in which economic efficiency has taken precedence over the protection of the environment and human life, will pollute the ecological environment of both import and export countries [25].

The economy priority system of contemporary society has caused a vicious circle of mass-production - mass-consumption - mass-scrap in advanced countries, and society has lost the relationship symbiosis and circulation

between man and nature in both areas, rural villages and cities. The socioeconomic idea for formation of an area system which emphasizes the importance of the ecological viewpoint has become an academic property. Y. Tamanoi insists that each area is an ecological unit and that the standard of community is based on its unique economy as a living environment of human beings. He started a movement for regionalism in Japan in the 1970's which aimed to realize autonomy and independence for each area [29, p. 57] [30]. It has become an academic common recognition that an ecosystem unit is most stable under a situation based on the complexity of nature's variety, and the maintenance of cyclic relationships between man and nature is the basic requirement for formation of sustainable communities. Hisashi Nakamura also says that circulation, variety [23, p. 129] [10, p. 167], and mutuality are the three basic concepts to realize a true community [16, p. 27]. This ecological idea was established at the beginning in the area of economics promoted by Tamanoi and Koh Kamisato in Japan [31].

We should, however, carefully avoid the point of view of "ecotopia" [28, p. 279], based on a superficial way of thinking as an opposite idea of modern science and technology, that places human beings in the position of power to convert and conquer nature. Therefore, a "modest management of nature" [5] is a modern, important issue.

3) A rural area as a place of daily life

Rural areas are also the place of daily life for inhabitants in the sense that daily life is a mix of social and cultural human activities excepting activities of production; for example, shopping, a family talking after dinner, recreation and dressing up, trips, sports, hobbies, and other social activities of the community. H. Bergson suggests a difference between the real time of human daily life and mathematical time [2]. O. F. Bollnow considers that experienced space (*der erlebete Raum*) is important as opposed to scientific or mathematical space which is based on the concept of uniformity. A real place as an experienced space of inhabitants in their daily life should be regarded as important in a study of area. Human beings relax and feel secure at their identified individual place, room, house, community, etc. Therefore, "human being is place." "Wohn" in

German means pleasant, satisfaction, pause, stay, and so on. A human being confirms his real existence by the relationship with his house, plaza, shrine, Buddhist temple, mountain, forest, river, and roads which combine these things, and with memories of his life history and human relationships combined with those things around him [4, p. 17].

In modern society, the small space set aside for living, because of the sharp rise of land prices in the city or depopulation in rural areas, drives us to be afraid and unstable. Bollnow said that if we lose our ease, we will collapse upon ourselves.

Rolph describes modern economics as having no "sense of place" [19, p. 77], on the contrary, it pursues the renouncement of such sense to realize economic productivity at a higher level. This "placelessness" means that the fundamental characteristics of modern society change from the variety of place to a standardized landscape, and from a system of experiences to that of concepts.

From this point of view, we can understand that human beings have a strong desire to be joined with meaningful places as it is the nature of real human existence.

We should creatively form our area in order to pursue total satisfaction and happiness, beyond an economic happiness. Bollnow says that area as an experienced place is not neutral on values. The inhabitants in each area are in pursuit of their own hopes and values [4, p. 112].

4) Formation of a new place for total life

As we have seen, each area is not only a place of production, but also a place of ecological unity and daily life. Until now, we have given priority to economic values and, as a result, face environmental and life quality problems. The core answer to all of our questions is that our modern society should pursue harmoniously three main values: economic values, ecological values, and life (social and cultural) values, to realize a total value (total welfare). I have pointed out the importance or reason of existence of agriculture and rural areas which play various roles as places of plural valuable production activity and as a plural functional space.

Rural societies totally pursue these three values in order to reorganize or create them. However, most of them struggle desperately to

overcome the contradiction between such values. This formation process is the real situation of society regarding the place of human life. Many scholars insist on bringing together two elements of the values, such as a unity of economy and ecology, a unity of economy and life, or a unity of ecology and life. These points of view should lead us finally to a unification of all three elements.

The area as a place of human daily life is, at the same time, a place of formation, creation, unification, and history. I have paid attention to the totality of human life since recognition of the idea "Industry-, Life-, and Garden City" (Industrie-, Wohn- und Gartenstadt) by R. Schmidt in 1912, who is famous in the history of space planning in Germany [22] [24]. He started space planning on the basis of an idea "for human life instead of factories." After the industrial revolution, man changed the meaning of his existence to only work 8 or 10 hours a day as a laborer. He lives 24 hours every day and has basic three desires: to work, to live, and to amuse himself. Here "to live" means our daily life activities such as shopping, meals, walking, maintaining friendships in the community, and so on. His idea is a matter of course, but scholars have not recognized it. The object of Schmidt's regional planning was the Ruhr industrial area of Germany at the beginning of the 19th century where there was a non-controlled or destructive developing process of industrialization and urbanization. Such processes ignored the totality of human life and man's basic desires for work, life, and amusement. Sunlight was lost and green spaces retreated. The factories were arranged from the standpoint only of the principles of economic efficiency. R. Schmidt argued for the preparation of a comfortable residential quarter which was divided from the industrial area, and for green and recreation space to be 25% of the city, further calling for little gardens (Kleingarten) behind the houses, an extension and widening of roads for residential areas, and laws for the restriction of private land dominion in order to realize these plans.

These ideas of R. Schmidt were influenced by many social thinkers. For example G. Fourier (1772-1837) believed that a human being has 12 basic passions and he criticized modern society which disturbed the full expression of these passions. He formulated a

plan to realize his idea as a cooperative community, calling it "Phalange," where human beings would be able to have a varied daily life; for example working in industry and agriculture, hunting, fishing, enjoying pleasant meals, conversing with family and friends, and activities with art and religion [6].

P. Kropotkin (1842-1921) said that modern industrial society acquired many economic benefits by the division of labor; however, it also led to the loss of many other values. He emphasized the social profits of "combination," such as the combination of physical and spiritual work, and agriculture and industrial work, for each person. Each member of society should be a peasant and a factory worker at the same time, along with a scientific knowledge combined with technology. This is just the desire of civilized nations, he stated [12].

These ideas were an influence on the work, "Garden City of Tomorrow" [8] by E. Howard in England, which expounded further on the regional planning method of R. Schmidt in Germany. W. Leiss said, in his work "Limit to Satisfaction," that both economic systems, capitalism and socialism, endeavored and competed for economic growth in order to obtain material satisfaction, but such satisfaction is a mere partial economic or past one. He claimed that our main subject in the future is to pursue total satisfaction which will introduce us to various possibilities for human life [14].

Polanyi insists that a modern market society judges all of life according to the measure of economic sufficiency. Such society based on economic determinism oppresses the essential values of our human life and misleads us to recognize homo-economicus as a real human being. We should liberate ourselves from this narrow economic viewpoint into a broad sense of society [17].

This genealogy of ideas on human life suggests to us the totality of daily life, ambiguity of life space, and the importance of the study of area. As we have seen, the limits or problems of modern economic systems and technology are pointed out in such concepts as "a non-circular social system," "placelessness," and "a one-sided view" of human daily life.

Science philosopher T. Maruyama acutely pointed out the importance of the concept "reversion to daily lifeworld," which means the change of real knowledge from a narrow mod-

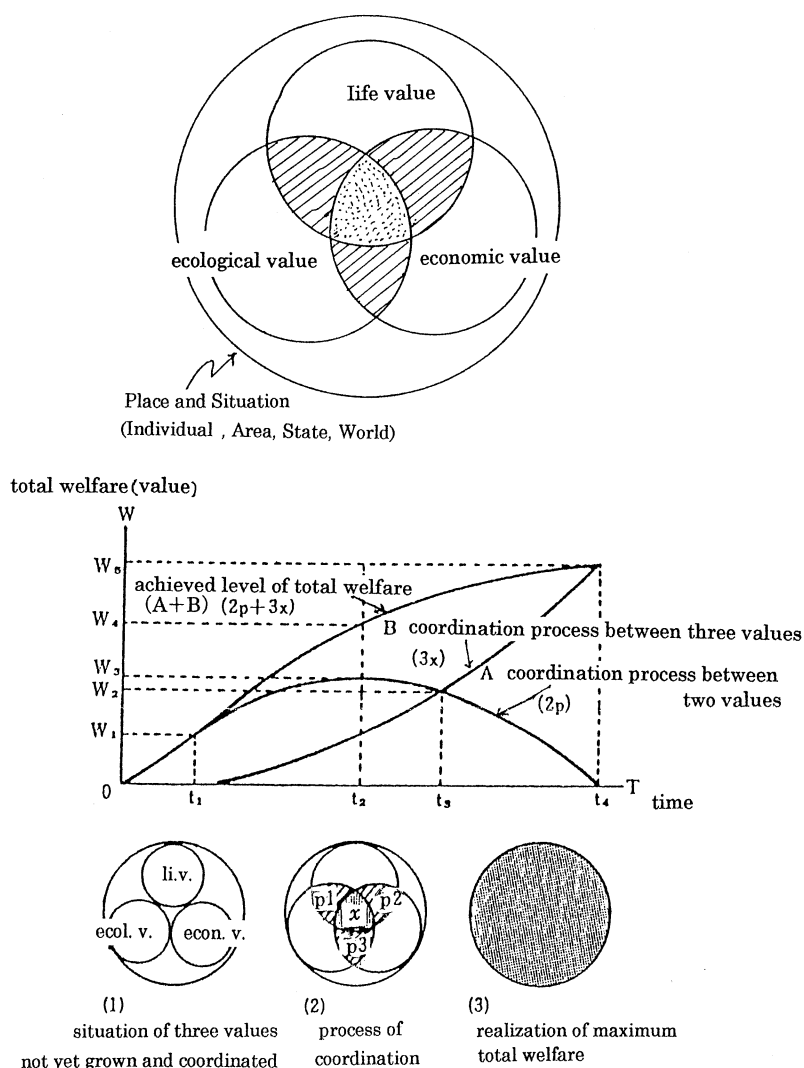


Figure 1 The formation of sustainable rural area (harmonious pursue of total values)

(Soda; On Japanese Rice, Iwanami Shinsyo 1989. p 216. Soda, Ohara; Agricultural Thought in Japan, Fumin Kyokai, 1996, pp. 326-7.)

The relationship of these three main values are shown and explained in the figure. 1) Each of the three values face its own problems which need to be coordinated. The process of growth for each value and its coordination with the other values is regarded as the process to increase total welfare. 2) The process of coordination appears, at first, as that between two values (expansion of part p_1 , p_2 , p_3 , and curve $A = 2p$). 3) Next, the process of coordination appears as between the three values (expansion of part x , and curve $B = 3x$). 4) The achieved level of total welfare (value) is shown as A plus B (part p + part x , and curve $W = 2p + 3x$). 5) The lower part of the figure shows (1) the situation of the three values not yet grown and coordinated, (2) the process of coordination, and (3) the realization of maximum total welfare (value).

ern scientific knowledge to life knowledge and experience knowledge, in order to conquer the limits or problems of modern society. Modern scientific knowledge regards experience knowledge as prejudiced and the daily life-world" is exactly the meaning of area [15].

The daily "lifeworld" in an area can also be expressed in other words, such as "daily life-size society," "acquaintance society," or "common cultural society," where we can communicate directly with each other, have a mutual dialogue, and perform cooperative acts. A true urgent sympathy of the inhabitants will be easily born in order to solve the problems in the community. In such a community, excessive economic rationalism regarding the process of industrialization and urbanization will be checked by nature around the community, so that it will be not only used but also protected as an ecological environment and a place of "life rationality." Furthermore, non-economic rationality will be regarded as an important issue. Thus, an area forms the place for human life with variety, stability, and sustainability.

3. Pursue of Total Values in a Area

Each area, as we have seen, pursues total value or three main values (economic, ecological and life value) for daily human life (Figure 1). These three values have a trade-off relationship with each other in our advanced industrial society. Life value or life quality cannot improve without an improvement of economic value. If, on the other hand, economic value are preferred, then the environment will be polluted and our life will lose latitude. The preference for ecological value is to force a fundamental change in our life style and to introduce strong controls on economic activities. However, we need to realize these three main values (total value) harmoniously at the same time and move beyond our many difficulties. This is the most important issue which each area faces to form a sustainable life place [26].

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