

A Japanese Tradition of Study on Agricultural Ethics: A Critical Review of the Academic History of “Philosophy of Agricultural Science”

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1. Introduction

The purpose of this paper is to review the Japanese tradition of study on the philosophy of agricultural science and rearrange it in the line of ethical perspective from an ethical perspective.

The field of agricultural ethics has attracted increasing attention from agricultural scientists as well as moral philosophers. It is partly because development of agricultural technology requires us to make a rules for introducing new technology. It need hardly be said that there is still continuing controversy over GMOs (genetically modified organisms) everywhere in the world. The issues around surrounding rBST (recombinant bovine somatotropin) and BSE (bovine spongiform encephalopathy) are also commonly disputative. These topics push us to step into the ethical sphere.

Other somewhat traditional issues that need ethical consideration are the ones of use of pesticide and the decline in the number of small farmers and/or family farms and so on (Thompson, 1995, 22-32). The most celebrated of all works in the critical literature of pesticide is Rachel Carson's *Silent Spring*. In the recent Japanese experience, pesticide residues on vegetables imported from China got into the popular news in 2002. The latter issue relates to the development of agricultural labor-saving technologies. The need for the amount of agricultural labor has been decreasing constantly because of the development of agricultural machinery and chemicals. As a result the rural areas have lost their population engaged in agriculture and lost the rural culture maintained by those who lived there. If the number of people in agriculture decreases, the agrarian ideal and agrarian virtue fostered in them would weaken and disappear in the whole society as a whole (Zimdahl, 2006, 8).

Another reason why agricultural scientists have increased their interests in ethics is more pragmatic. The educational courses for engineers in Japan's universities started recently to introduce an international standard of engineering education program that requires engineering ethics. If a program course for engineering in the department of agriculture is introduced, it must prepare an ethical program. A few books were published for this purpose in Japan (e.g. Mizutani et al., 2007; Soda et al., 2006).

The field of agricultural ethics is expected to play a great role in adjusting the gap between the development of agricultural technology and the public acceptance of it. For considering this role from a transnational perspective, we must illustrate what has been argued on in agricultural ethics in each country and compare them. At the beginning of this process we will try to review and introduce the scientific efforts dedicated to agricultural ethics in Japan and locate them in the broader context.

2. The Chair of “Philosophy of Agricultural Science”

The chair of “Philosophy of Agricultural Science” was established at in the Department of Agricultural and Forestry Economics at, Kyoto University in 1952. It

was the first and is still a unique research unit that takes a philosophical approach to agricultural science in Japan's universities. The term of "Philosophy of Agricultural Science" was introduced to Japan in 1932 when a German agricultural scientist, Krzymowski's book was translated into Japanese by a professor of the Department for the first time. This tradition was one of the reasons for the establishment of this chair. In addition, there was the a trend to establish a new departments named "Comprehensive Agricultural Science" in the Faculties of Agriculture in the short period just after wartime in Japan, influenced by the US educational policy adopted in the land grant universities. It seems to have pushed forward the establishment of the kind of the research unit that would try to analyze problems comprehensively.

According to the commemorative publication of the Faculty, the missions of the chair are:

- (1) to analyze the essential character and the reality of agricultural production, and
- (2) to analyze the specific character, methodology, the integrated system, and the goal of agricultural science (Editorial board of 70th anniversary publication, 1993, 395).

A critical attitude on the every subject is also a unique character of the research unit. A lot of scholars who have various interests and disciplines have graduated from the school. They gathered and studied there, and went on grew up to be rural economists, anthropologists, and sociologist as well as philosophers.

Although we can find various disciplines among the graduates, no one seems to identify oneself as a moral philosopher or ethicist. However, former professors of the chair have been engaged more or less in the ethical study. WThen we would like to concentrate on these pioneers and derive some implications in the light of ethical aspects.

3. Three Professors of the Chair

For more than 50 years, four professors succeeded one after another as the chair of "Philosophy of Agricultural Science". Two of the four wrote a book, each titled *Philosophy of Agricultural Science*, one of which was translated into English (Soda, 2006). This paper focuses especially on the previous three professors, except the current chairlatest who might is be still developing his system of philosophy. We will try to explain the three stages, using depending on the above-mentioned Soda's book properly as a basis.

1) The '*agricultural science of production*': Sukekata Kashiwa (1907-2007)

Professor S. Kashiwa, the founder of the chair, held it from 1952 to 1971. The third professor O. Soda named the basic idea of Kashiwa's philosophical system the '*agricultural science of production*' (Soda, 2006, 39).

Japan experienced a serious food shortage after World War II, so agriculture and agricultural science were expected to play an important role in of supplying food during in this period. The Basic Law on Agriculture, established in 1961, regarded agriculture genuinely as an industry. The policies based on the Law strove would strive to enhance the efficiency of agricultural production and, as the result of it, the farm income. It was the time when agricultural chemical inputs increased in order to enhance the productivity regardless of the unintended side effect on the natural environment, as mentioned at in the beginning.

The contents of the book *Philosophy of Agricultural Science* written by Kashiwa consist of three parts: (I) the history of agricultural science, (II) the character of agriculture as an object of scientific study and (III) the character of agricultural science.

In the part I, he reviewed the German tradition of agricultural science in the main and started from with Albrecht Daniel Thaer (1752-1828) who was identified as a founder of agricultural science. After explaining the Thaer's scientific system from the viewpoint in the view of technological and managerial aspects, the book went forward to describe the following further development of the field in the the above two aspects.

In the part II, Kashiwa defined agriculture as "human activities intended to realize higher economic value by rearing and raising crops and livestock that have vital lives, which are thus intentional activities" (Kashiwa, 1987, 150). Thus Kashiwa "locates the realization of economic values at the core of his theory" (Soda, 2006, 42), so Soda identifies his standpoint as the '*agricultural science of production*'. As Soda also says, his standpoint would rather accurately reflect the expected role of agricultural science at that time.

The character of agriculture as an industry is analyzed from the comparison with the manufacturing industry in several aspects, which includes the notions of time, space, work, and land. For example, activities of agriculture need a seasonal work and must obey biological cycles that crops and livestock intrinsically involve. In terms of On the labor organization, the farm labor is difficult to be organized formally and rationally because a lot of obstacles against it accompany the processes of growth and reproduction of biological life bodies for crops and livestock (Kashiwa, 1987, 261).

An What is interesting piece pertaining to in the part from the view of ethical concern is that he Kashiwa designed coined a new term "*syokubun* (occupational duty)", which indicates the future relationship between humans and land ownership (Kashiwa, 1987, 303). According to the agricultural development theory, the landowners become to be just rent takers in the capitalist agricultural system, where the function of farm management is separated from the land ownership. However, Kashiwa He doesn't think it this is the final stage in the development of the idea of land ownership, however. He insists that there must be the a next stage where the land ownership would become a duty to play a social role of in feeding social needs society as well as a right. He named such kind of the landowner's sense of responsibility as *syokubun* (occupational duty). It concerns an ethical standard of for farmland owners and there is some a possibility to develop these notion to be adapted for the present situation, though he mainly focused on the production side of agriculture.

In the part III, he identified agricultural science as applied science under the tradition of Neo-Kantianism, one school of which distinguished sharply between natural science as nomothetic and cultural science as idiographic. N The natural science that has a nomothetic nature would be free from values or subjectivity. C The cultural science that has an idiographic nature would regard values as underlying the perception. He located applied science in the middle of these two poles. He argued that values are deeply concerned with applied science as the pursuing goals of it in contrast to cultural science where values are regarded as the means for perception (Kashiwa, 1987, 320). This placement of agricultural science as applied science has been taken over in the studies of the succeeding professors.

2) The '*agricultural science of life*': Keiichi Sakamoto (1925-)

Professor K. Sakamoto succeeded and held the chair from 1971 to 1989. Professor

Soda named the basic idea of Sakamoto's philosophical system the '*agricultural science of life*' (Soda, 2006, 45).

We can also understand his standpoint easier when taking into account the social background context of his age. The period from the 1960s to early 70s is often called "the age of public environmental pollution (*Kogai*)". Four The notorious four incidents that deteriorated human health, social relations, and the natural environment occurred in the 60s in Japan. Carson's *Silent Spring* was translated into Japanese in 1964 and caught some popularity, but the interest on in the book was promoted by a shocking and enterprising novel *Complex Pollution*, written by a Japanese novelist Sawako Ariyoshi in 1974-75. She accused such problems as pesticides, chemical fertilizers, synthetic detergents, synthetic food additives, nitrogen oxide from automobiles and so on, all of which were seemed to be bioaccumulating in the ecological environment.

Sakamoto tried to establish the a system of values for the restoration of agriculture in opposition to the system of values in the industrialized society (Sakamoto, 1977, 259). He searched for the new system of values through referring to various issues such as environmental pollutions, agricultural education, depopulation in remote areas, the movement of organic farming movement, westernization of diet and so on. While facing up to the fact that all the values of agri- and rural culture had been devalued by the dominant values of industrial society, he resulted in a simple principle of "*life*", which guides not only agriculture but also the whole society to the a happier circumstancecondition. According to his theory, the holistic realization of human "*life*" is equal to the maximization of total human welfare (Sakamoto, 1989, 19).

"The human "*life*" is a value as well as an entity, a subject as well as an object. It has both the objective reality that a living subject perceives as an object, and the subjective and the value concerned reality that a living subject for existence feels and is inseparable from itself" (Sakamoto, 1989, 4-5).

This is the core part of his philosophical manifestation of "*life*". Although he mentioned the ecological value of environment, we could point out that his interest is confined chiefly to the anthropocentric sphere. This standpoint seems to be affected by the contemporary limitation at his age and the fact that he was born in a rural village in the north peripheral of Japan, so he might be deeply involved in enhancing the human welfare.

He wrote a short article on the method of agricultural science, though he is the only professor who didn't write a book titled *Philosophy of Agricultural Science* of the three. He defines agriculture and agricultural science in it as follows.

"Agriculture is the a self-directed and intentional human activities in order tothat serves to acquire the materials and information inevitable necessary for to the conservation, contentment, and flowering of the human '*life*', through rearing and raising crops and livestock, which are is the a part of the whole life system based on ecosystems."

"Agricultural science is the systematic accumulation of scientific knowledge and empirical skills, which that aims to increase the effectiveness of agriculture and to realize the human '*life*'" (Both in Sakamoto, 1994, 82).

The above definitions show that he Sakamoto constructs his system of thought from the core concept of "*life*" vertically, so to speak, vertically. We could recognize his way of thinking that all objects to be thought must be thought conducted in the light of a simple principle, in this case, "*life*". We will return to this point when comparing it with the

way of thinking of the next professor O. Soda in the following section.

The core concept of “*life*” of his Sakamoto’s system could be easily extended to be the an ethical standard of for those engaged in all fields of agricultural production including agricultural science, because he insists all concerned to agriculture should obey this standard fundamentally.

3) The '*agricultural science of ba*', or the stage where total value is pursued in a given locality: Osamu Soda (1939-)

Professor O. Soda succeeded and held the chair from 1990 to 2003. Professor Soda named his own system the '*agricultural science of ba*' (Soda, 2006, xix). Though the Japanese term of *ba* means a place or space in general, it is used in his book comprises as having the following four components: (1) a logical space that three major values – economic, ecological, and life values- ought to be pursued in harmony, (2) a dynamic and formative place that is continuously shaped and reshaped to solve newly arising problems, (3) regionality or placeness subject to natural and geographic conditions and (4) an everyday concrete lifeworld where face-to-face relationships predominate (ibid., xix-xx).

Most Japanese rural sociologists agree that Japanese rural society changed from the state characteristic of the productivist era to that of the post-productivist era in 1990s (Tachikawa, 2005, 11-12). According to the Tachikawa’s scheme of analysis, we could approach the transformation from both the viewpointgazes of government policies and consumers. Japanese rural policies began to promote the use of externalitiesexternalization of agricultural activities in addition to the production function. For example, the first policy of agri-tourism, which has been called *Green Tourism* in Japanese administrative terms, was introduced in 1992 by the Ministry of Agriculture, Forestry and Fisheries. Concerning to the viewpoint of the consumer gaze, the first magazine that guides readers into the rural life started in 1987 and the TV programs positively representing to represent the rural life affirmatively increased in the late of 90s.

Soda was much involved much in the process of post-productivism. He has persisted maintained that agriculture is an ‘industry with pluralistic values’ (Soda, 2006, 52) and advocated the multi-functionality of agriculture, facing up to the libertarian pressure of importing agricultural products. Moreover he was designated as a member of various committees run by the central government. One of the most important positions was a chairperson of the Rrural Ssociety Ssection in the governmental committee discussing the problems of food, agriculture and rural areas. The discussion in this committee served the basic information when as a base for the government established *The Basic Law of Food, Agriculture and Rural Areas* in 1999, which is the first formal law of targeting the problems of rural areas in post-war Japan.

As I mentioned above, the main concept of his Soda’s system of thought is *ba*, or regionality or placeness, where economic, ecological, and life values are maximized comprehensively. He says “the goal of modern agricultural science is to maximize total welfare by overcoming the intrinsic difficulties of achieving (those) comprehensive values” (ibid., 48), which must be realized in the *ba*. The *ba* is not a just abstract notion. He assumes that *ba* is identified with ‘local communities’, the basic unit of which is a small/medium town and rural village complex rather than a simple rural village community (ibid., 53).

Whether his notion of *ba* is real or ideal, it is noteworthy that he emphasizes the

sustainability of local communities of which agriculture is a part rather than agriculture itself as a name of philosophy of agricultural science. He describes that “agricultural science must be framed as the science of local region”, “since agriculture is inseparable from issues of regionality” (ibid., 263). It is true that most agricultural practices need the open-air space and good agriculture could be realized if total welfare is maximized.

However, his theory seems to pose some questions for us. In the first place, although the comprehensive values would be realized in a particular regionality, we cannot assume a priori harmony there without any conditions. He, of course, noticed the problem and explained his *ba* as ‘*ba* of conflict’ or ‘*ba* of problems’ in some parts. At the same time, however, he continued that the *ba* would be ‘of problem solving’, ‘of liberation’ and ‘of better living’ because the people there struggle to solve the difficulties (ibid., 54). This logic doesn’t help us to understand the realization of comprehensive values in the *ba* without any conditions. Strictly speaking, it seems tautological.

Concerning to the ethical aspect, it is difficult for us to find something to be an ultimate ethical standard of agriculture in his system of thought. He indicates the three standards of value, that is, economic, ecological, and life values, but they are located not vertically but horizontally in the same level. Therefore there is no ultimate value on which we can use as a base to build each part of the system. It is rather important for his theory to coordinate those values than to derive norms of behavior from it and he doesn’t mention how to coordinate them realistically. The only way for us to move forward is to suppose that they are presumed to be of harmony; assume the pre-condition of harmony or that; they are harmonized; harmonization occurs through a the black box of people’s struggle.

Soda’s method could take us over to the farther another consideration. The French philosopher, M. Foucault discussed the transformation of knowledge at a time near the beginning of modern social science (Foucault, 1966). Comparing the logical scheme of François Quesnay, who is famous for the author famous for being the author of *Tableau Economique*, with that of Adam Smith, who is a founder of modern economics, Foucault argued that the formation of logical schemes changed from the knowledge from that of the horizontal ‘table,’ which analyzes the relationship between notions on the same level, to that the knowledge of the vertical order, which analyzes the whole from the a simple ultimate factor. According to this Foucault’s frame, Soda’s frame of thinking could be identified with somewhat a retreat into the history of knowledge. It may be understood easily when compared with the logical scheme of former professor Sakamoto.

4. Toward a Transnational Dialogue

The Soda’s ‘retreat’ might be identified in another way, by looking from along the trend of ethical study, however. This is the first point for bridging Japanese achievements on agricultural ethics to the world context. We are able to see his tendency to emphasize the local communities as a response to the increased interest on in communitarianism, which is related to the virtue ethics. The virtue ethics was restored, as you know, by A. MacIntyre, who criticized the deontology traced back to Kant and the consequentialism famous as the character of utilitarianism. The virtue, defined in the dictionary as “behavior showing high moral standards”, is ethically originated in Aristotle’s work, but it is difficult to find a common definition in the history of ethical studies (Oba et al., 2006, 641-643). MacIntyre says if the core

conception of virtue is to be understood, three stages in the logical development of the concept have to be identified: background accounts of “a practice”, “the narrative order of a single human life” and “what constitutes a moral tradition” (MacIntyre, 1981, 186-187). If we focus on the former two stages and suppose assume ethically good practices and one’s own narrative order as commonly accepted, it is obvious that both are embedded in the context of a particular communities, because there is no criteria without any agreement supported by a certain community (ibid., 221).

We can recognize Soda’s standpoint in the line of the virtue ethics, because he presumes the local communities where the contested three values must be harmonized with each other in the light of some moral norm of the community, though he never mentioned the process of harmonization. Therefore, there are some potentialities in his system if we combine it with the view of communitarianism, which makes us change our treatment of his achievements from ‘retreat’ to ‘progress’.

The second point worth considering is concerned with the purpose of agriculture. A weed scientist R. Zimdahl extended his academic field to agricultural ethics and regarded the utilitarian goal of producing abundant, safe food and fiber as the most fundamental ethical standard among agricultural scientists (Zimdahl, 2006, 64-65). Although he criticizes the utilitarian standard that causes the environmental degradation in agriculture, he recognizes that the utilitarian ethics persistently prevails among the agricultural scientists as a source of justification for their acts. P. B. Thompson also identifies productionism, that is, “the assumption that agriculture is good and worthy human activity to the extent that it is successful in the production of food and fiber”, as “the obvious and undeniable basis” (Thompson, 1995, 47-48).

In contrast to those American scholars who emphasize the productionism, Japanese scholars mentioned in this paper have been moving to the negligence of neglecting the production role of agriculture. This contrast may strongly reflect the differences of the industrial significance of agriculture between the two countries. The USA is a food exporting country and Japan is a food importing country. The food self-sufficiency rate of Japan has decreased from 80% in 1960 to 39% in 2007. The central government established some policies that would make the rate higher, but most of them are held in vain up to this day. It seems as if there is no intention in the government and even in the people themselves to produce sufficient food in our own land. In short, the Japanese government and the Japanese people seem to have given up onto feeding by ourselves. It might be more practical for the scholars after the 1970s in Japan to focus on the other aspects of agriculture than the role of feeding people.

However, the current situation dictates the need to we have to go beyond the domestic condition and engage in to the global dialogue, however. In the discussion of GMOs, its supporters advocate introducing to introduce and developing GMOs in order to feed the an increasing population under the conditions of the a deteriorating global environment. If we wish to take this argument into our ethical consideration, we have to include the ethical goal of feeding people in our thoughts toward of agriculture.

Besides the difference of in socio-economical conditions, there must be the a difference of in the cultural and historical backgrounds between Japan and other countries. This is the third point to be discussed. P. B. Thompson argues that American agrarianism “offers something missing from libertarian, egalitarian, and utilitarian political philosophies” in his article, that gives a lesson from *The Grapes of Wrath* (Thompson, 2007, 175). He derives from reading the novel an agrarian ethical sphere, which was related to the thought of Jefferson, supported by the principle of reciprocity

and characterized by the notion of place. He concludes that political ideals of rural Americans who seem conservative should not be understood in terms of liberal and neo-liberal philosophy but in terms of the agrarian alternative. He argues, for example, “we are able to see rural conservatism as being grounded in something other than a libertarian conception of property right”; “the agrarian conception of property entails an obligation to help neighbors in their time of trial” (ibid., 176).

Such an agrarian mentality is apparently related with communitarian moral thought, for the mentality that Thompson refers to is understood as a norm of behavior behavioral norm that is common in the any particular community. The task of seeking out norms shared in the particular group is familiar with sociological study. In terms of an ethical perspective, to find out what people should do in the community is the same as to focus on the descriptive ethics.

Then Next, we have to undertake the task with of illustrating the moral thought of Japanese farmers, which Soda missed in his scheme by assuming the preestablished harmony of the three contested values within the black box of local communities. If the moral thoughts of farmers in each country are discovered, we could argue whether there is a common agrarian thought in the world or not. To those ends, In order to one facet of the goal, our study group is planning to research and compare on an international level comparison of how the the farmer-consumer relationship as it appears in the trade of special agricultural products such as organic foods. When we have achieved success to do it, made progress in this research, we would promise to present the results at the next IRSA congress.

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