

# **Environmental Sociology in Japan: An Overview of the Japanese Experience in the Aftermath of “3/11”**

***The Japanese Association for Environmental Sociology***

## **Introduction**

Japanese environmental sociology has roots that go back to the early 1960s, when it mainly focused its attention on the analysis of social mechanisms that produced pollution victims. This can be attributed mainly to the fact that Japan suffered from severe environmental disruptions (*kôgai*) in the 1960s and 1970s. A few examples of the disruptions are Minamata and Itai-Itai diseases, but the list continues endlessly. Researchers, therefore, conducted case studies occasionally accompanied by in-depth interviews with the intent of understanding the subjective reactions of victims as well as their protest activities and to uncover the mechanisms of societal and environmental disruption in local communities.

In 1992, the Japanese Association for Environmental Sociology (JAES) was founded with the participation of 53 researchers, and the late IIJIMA Nobuko (1938-2001),<sup>1</sup> a pioneer in Japanese environmental sociology, became its first president. Now with 600 members (as of March 2013), JAES has become the largest environmental sociology association around the globe. JAES members come from a wide range of backgrounds: researchers, teachers, students, and practitioners in many fields. The Association holds semiannual seminars each spring and autumn and publishes the *Journal of Environmental Sociology*, the world’s first journal devoted especially to environmental sociology.

## **What Has Been Discussed in Environmental Sociology in Japan<sup>2</sup>**

### **1. What Questions has “3/11” Raised?**

The massive earthquake that struck Japan on March 11, 2011, now referred to as “3/11,” was a disaster composed of multiple calamities: the huge earthquake and the huge tsunami that followed it, the chain of severe nuclear power plant accidents, and then the existence of a large area contaminated with radiation, as well as large numbers of evacuees. This severe compound disaster has raised a huge number of issues and questions, which can all be summed up in one: “Was the system we had until 3/11 a good one?” The question tells us that we must inquire into at a

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<sup>1</sup> Japanese names are given in the Japanese order: family name first, followed by the given name.

<sup>2</sup> The following is a translated and slightly modified version of an article by HORIKAWA Saburô (“Visualizing the Unseen, Voicing the Unheard: The Contributions of Japanese Environmental Sociology in the ‘Post-3/11’ Era,” *Journal of Environmental Sociology*, Vol. 18, pp.5-26; in Japanese). A part of the original article was translated into English, and adapted in its current form, by the Japanese Association for Environmental Sociology. The Association wishes to thank Prof. Horikawa for his generous permission, but responsibility for this English text (with any remaining errors) rests entirely upon the Association.

fundamental and deep level is the policy-making and planning processes themselves, not just the specific contents of policies and plans. Metaphorically speaking, the question may be not whether a particular nuclear power plant should be restarted, but in fact whether or not to “restart” the “3/11 System”.

How can environmental sociology respond to this question? The strategy that is proposed in this article is to reinterpret the question “Was the system we had until 3/11 a good one?” as “What does ‘suffering’ mean for environmental sociology?” Our accumulated works on environmental disruptions indicate to us that the understanding of harm and suffering is our most urgent task, and it leads us into an investigation of the first question.

## 2. Environmental Sociology and the Concept of Suffering

The development of Japanese environmental sociology has obviously been driven by the following question: “What is the aggregate suffering caused by environmental destruction?”

Stated thus, you may be surprised by the simplicity of the question driving Japanese environmental sociology. You may be inclined to say, “If there is environmental destruction, naturally there will be suffering; it is all very clear. What is more important here is to be able to outline the related issues of compensation, preventive measures, and recovery plans; for otherwise, would it not be meaningless?”

However, the case is quite the opposite, and suffering is never clear-cut and subdivided. If we listen to the voices of the victims themselves and consider, for example, how medicine, law, and economics have defined the suffering involved in Minamata disease, we would immediately understand that the plurality of answers to the question “What constitutes suffering?” has been a fundamental source of social conflict, with each academic field over the years stressing the validity of its own concept of suffering. Or to put it another way, the various answers to the question, “What determines the nature of suffering?” have distinguished one academic field from another, and at the same time defined the content of the respective academic fields. Thus, the substance and manner of our response to this question will reveal the true nature of environmental sociology.

## 3. What Has Been Discussed

How has environmental sociology described suffering? Will we be able to find similarities or trends in the answers to this question? As a number of papers have already provided an overview of the history of our subject, I will leave the details to these papers, and offer a concise description of the arguments advanced by major theoretical standpoints.

### *(1) The Spectrum of Suffering: Theory of the Social Structures of Suffering*

Though it is difficult to pinpoint the day when environmental sociology first began to take shape in Japan, if one were asked to specify its initial theoretical stage, the answer would be the theory of the social structures of suffering that appeared in the 1970s.

Iijima, the first president of JAES, was long concerned with pollution and health issues such as Minamata disease, as well as occupational accidents. She revealed through empirical research that

suffering is not merely a personal problem affecting individuals, but experienced also by the families and local communities surrounding the affected individuals. It was Iijima's theory of the social structures of suffering that enabled us to understand that suffering should not be understood merely in terms of individuality, but as a multilayered spectrum that begins with the individual but extends throughout the local community. In other words, the objective of Iijima's argument was to oppose the general tendency to understand suffering as if it were confined solely to a person's body. Conceiving Iijima's concept of suffering as suffering in the broad sense, encompassing more than merely the bodily suffering of an individual, recent research has paid close attention to the process of the suffering experience, focusing on the neglect of suffering, and generating a theory of offence and suffering that understands both suffering and offence in the broad sense envisioned by Iijima.

In addition to these contributions, the theory of the social structures of suffering focuses on one's consciousness as the primary determinant of suffering. While the expression "fake patients" used by offenders against sufferers is indeed a problem, Iijima's claim that "in some way, what is more problematic is the sufferers' *unawareness* of their own suffering" (Iijima, 1984, emphasis added) draws attention to the fact that suffering caused by pollution, for example, cannot be determined solely through medical diagnosis, but has a subjective component as well, and depends further on an awareness of what the sufferer's society conceives as illness. This viewpoint, which enables us to see that depending on the group to which the sufferer belongs, the sufferer may not recognize his/her suffering, may help us uncover suffering in company towns, for example, or suffering that tends to be overlooked due to socially accepted notions. Thus, its theoretical contribution is considerable.

How then has the theory of the social structures of suffering described suffering? In addition to the foregoing, I would draw readers' attention to Iijima's words: suffering that cannot be seen by others and thus is not able to be understood by others, is yet in itself suffering. The underlying reasons for Iijima's claim that suffering spreads from individuals to the local community in overlapping layers may be seen to lie in her conviction that the gradual destruction of the sufferer's existing relationships, due to his/her bodily suffering, is the most essential characteristic of the suffering sustained by the sufferer. And by now it should be obvious that while this suffering may be unrelated to medical diagnosis or the seriousness of the symptoms, it has a decisive meaning for the sufferer him/herself.

## (2) Distribution of Suffering: Benefit and Victimized Zones Theory

The theory of benefit (*jyu-eki*) and victimized (*jyu-ku*) zones suggests that the manner in which suffering due to pollution, for example, is distributed determines the construction of the problem, related decision making, and even the style of communication among the concerned parties.

Consider the pollution caused by the *Shinkansen* ("bullet train") as an example. In contrast to the victimized zone of the *Shinkansen*, which is highly focused and limited to the area alongside its tracks, the benefit zone, those enjoying only its advantages, is shallowly but widely distributed across the entire country of Japan (far reaching benefit zone vs. narrowly focused victimized zone). This situation immediately presents us with the question, "Is it just to have a highly limited area

experience serious suffering, so that the nation as a whole can enjoy the benefits?" The point here is that when those in the benefit zone and the victimized zone are detached, a shared recognition of the problem itself is difficult to achieve, making any resolution of the problem even more difficult. Regardless of how much effort is made by the victims of *Shinkansen* noise pollution in joining forces, launching a campaign, and demanding a resolution of their problems, their actions produce a shallow effect, leaving their suffering largely unacknowledged. In addition, decision-making at the local government level ultimately leaves the people in the victimized zone fixed in a structurally disadvantaged position as a minority, because such governmental jurisdictions and the distribution of the suffering rarely overlap. The theory of benefit and victimized zones thus offers a subtle means to understand the difficulties in solving problems through the democratic decision-making system described above. As such it offers a tool which, on the one hand, allows us to recognize that depending on the manner in which suffering is distributed, the very existence of a problem may be hidden from those in the benefit zone, and the conditions for resolving the problem may be altered. While on the other hand, this may itself provide us with the means for resolving the problem.

These characteristics of the theory draw our attention to the respective distributions of the benefit and the victimized zones, and to the way in which they are distributed, but may obscure the actual factors involved in the suffering itself. However, the theory makes clear that, in the case of the *Shinkansen*, for example, the noise and vibration that disrupts or halts the watching of a television program or an ongoing conversation is itself the cause of significant suffering, more than the actual decibel level of the noise. The description of suffering presented by the theory of benefit and victimized zones thus offers an alternative viewpoint to that of the decibel supremacist; however, it must be acknowledged that its main interest lies in spatial and temporal configurations, and the connection between benefit and victimization, rather than in describing the realities of suffering itself.

### (3) *Uncovering the Logic Underlying Our Way of Life: Life Environmentalism*

Life environmentalism, conceived of as a reference point for addressing environmental issues, was formed by sociologists studying confrontations between governments and residents over public works. The reference point implicit in life environmentalism is the entire horizon of the empirical world that is at the basis of ordinary people's forms of life, and this enables us to perform analyses based on the logic that preserves people's way of life. Life environmentalism indicates not merely the standpoint of the approach, but its methods as well.

At the site of an environmental problem, where there is a general tendency for the viewpoints of the involved person and his/her society to be neglected, this logical structure aids in determining the validity and legitimacy of a given position of the ordinary person who has control over the environment. The two counter-positions addressed by the argument were natural environmentalism, which claims that humans should have no impact on the natural environment, and modern technicism, which holds that environmental problems will eventually be resolved through technological means. When we look back on the modernization of Japan, in which public works provided by central government offices had an enormous impact on local communities, it would

appear that life environmentalism has been successful in exposing the reasons why residents and/or ordinary people were able to oppose or support such public works, and had the right to voice their opinions.

How then has life environmentalism described the actualities of suffering? As evidenced by the careful and sustained fieldwork conducted in the area around Lake Biwa, the primary interest of life environmentalism has been to uncover the methods devised and employed by ordinary people in order to coexist with the environment. The strength of the approach appears to reside in recording the local physical techniques employed in order to live and cope well given the local environmental carrying capacity, more than in exploring the suffering hidden in the midst of real environmental problems that involve serious bodily suffering. In other words, life environmentalism has attempted to view developmental initiatives, such as public projects, from a relative perspective based on ordinary peoples' everyday lives.

#### *(4) Dilemma as a Mechanism of Environmental Destruction: Social Dilemma Theory*

Social dilemma theory approaches complex situations involving rational contradictions. In terms of environmental problems, such rational contradictions are the mechanisms that cause the degradation of the environment as each individual chooses the most rational course of action based on his/her own self-interest. The origin of the argument lies in what Garrett HARDIN called "the tragedy of the commons." What one thinks best for oneself, ultimately degrades one's environment. Whereas if one puts a priority on the environment, one may well end up looking like a fool. This is the underlying dilemma in question. Although Hardin's argument has been criticized, the social dilemma theory based upon it is valuable in demonstrating that rational calculations and reasonable judgments do not necessarily lead to behavior beneficial to the environment. Social dilemma theory is important because it illuminates the structure of such a problem, which cannot be properly understood or dealt with solely according to individuals' moral judgment. For ordinary citizens the range of choice is limited, and they are often caught up in this environmental degradation mechanism regardless of their intent.

Social dilemma theory has been developed and applied in a detailed empirical study on consumer behavior, which proposed a new dilemma model called the offensive social dilemma model that expands the concept of dilemma by borrowing ideas from the theory of benefit and victimized zones, and refines the mathematical sociological model.

What has all this sophistication offered to social dilemma theory in terms of describing suffering? Social dilemma theory has been developed to understand the mechanism that causes such suffering, rather than the suffering itself, and does so by presupposing the existence of a stable and understood concept of empirical suffering.

#### *(5) Untangling the Task Sharing System: Commons Theory*

Most would agree that the commons theory has recently been gaining support, as it elucidates the task sharing system by which local residents cooperatively maintain and manage their natural environment.

The root of “commons” lies in the historic land utilization structure in England. Included in this concept is both the traditional system of cooperative land management and utilization, and the natural environment itself, which is utilized in the system. It may be said that the primary interest of commons theory is to study this cooperative task sharing system and to reveal how one can thereby protect the natural environment. In this light, we may see that commons theory views the natural world through the lens of ownership and management. In its descriptions of numerous actual examples of local residents cooperatively managing land in various parts of the world, it explores the varying concepts of ownership and the relationship between people and the land, emphasizing that the modern right of ownership is merely one such variation.

However, such a task sharing system does not appear out of nowhere or in accordance with some pre-established harmony. It is achieved through often painstaking debate involving the weighing of values and consideration of whose rights are to be valued more than others. It also comes about after resolving difficult questions regarding publicness and legitimacy, questions regarding what people deem to be the appropriate manner for the exercise of rights. For this reason, it is easy to understand the expansion of commons theory into theories of publicness, legitimacy, and policy.

These characteristics of commons theory suggest also the manner in which the theory approaches suffering. Its emphasis on the structure of task-sharing rather than suffering, and on understanding the nature of ownership rather than offence, defines both the theory and its contributions. In terms of the classic distinction between the sociology of environmental problems and the sociology of environmental coexistence, the commons theory is typically adopted more frequently in the latter field.

#### *(6) Restoring the Integrity of the Relationship: Social Linkages Theory*

Social linkages theory, an important contribution of environmental ethics to environmental sociology, must also be included in this list not only because of the theory’s theoretical contribution to environmental sociology, but because in a sense it is a successor to life environmentalism.

To summarize, social linkages theory is a theoretical standpoint defined by the following question: How can the integrity of the relationship between human society and the natural environment be restored or renewed?

KITÔ Shûichi describes the relationship between mankind and nature using the concepts of *nama-mi* and *kiri-mi*, which might be translated as an embodied and connected relationship (*nama-mi*), in contrast with a relationship that is fragmented, disconnected, and alienated or remote from nature (*kiri-mi*). Needless to say, the former implies integrity in the relationship. The latter describes the situation in which the network comprised of humankind’s societal and economic linkages and cultural and religious linkages to nature is “fragmented and remote,” leaving humans connected only to a small portion of nature, in a fundamentally incomplete relationship. Kitô, who finds the partialness of and weakness in the relationships to be a source of environmental crises, introduces a relational concept, the concept of the outsider. How might the disconnected and alienated body be restored through the mediation of an outsider? The concept of the outsider offers a

viable viewpoint for examining issues concerning the preservation of nature.

As is evident in its idealized concepts of a *nama-mi* and *kiri-mi*, and in the way its argument is so constructed as to fuse these concepts once again, the social linkages theory seems to say nothing in regard to suffering itself. Yet, we should not be quick to perceive this as a shortcoming.

### **What Has Not Been Discussed**

The theoretical standpoints and concepts incorporated into environmental sociology are not limited to those described above<sup>3</sup>, but let us proceed nonetheless.

Our initial question was, “How has environmental sociology described suffering?” The summary of environmental sociology has provided us with a general picture permitting us to pose a further question: What aspects of suffering have not been described by environmental sociology? Or, what has been overlooked by environment sociology?

At the outset, it should be noted that there are few theoretical standpoints that directly question what suffering actually is. Certainly, the theory of the social structures of suffering has questioned what suffering is, by strongly contrasting environmental sociology with other academic fields. The theory has undoubtedly suggested that much broader and more serious suffering exists, in fact, than has been indicated by medical diagnosis and the compensation system. Yet, such arguments as those put forth by life environmentalism and the social dilemma theory seem more interested in exposing the kinds of social relationships and structures that increase suffering, or make it difficult to be alleviated—assuming the existence of a stable and understood concept of suffering—than in examining actual suffering. This of course is a reflection of an inherent characteristic of sociology as a study of social issues.

When we consider the realities of the period following the catastrophic earthquake in March 2011 with an eye to the next probable disaster, we are confronted with the question, “Should we not have pursued means that would allow us to discuss suffering itself much more vigorously?”

Let us first, for example, consider the problem of the sufferer’s unawareness of their own suffering pointed out by Iijima (1984) and introduced above. What she tried to suggest was that a more important problem facing those who would unite and take action as sufferers is whether or not such individuals consider themselves as sufferers; or in other words, whether or not they deem themselves to belong to the victimized zone. If so, then who will determine whether a given region is within the victimized zone? Is this the responsibility of researchers, of the individuals themselves, or are there guidelines that can define it objectively? As we can see, when we rephrase the question and ask who will determine whether or not a given region is within a beneficiary or victimized zone, the theoretical difficulties latent in the model become apparent. This is a major point that must be addressed if the otherwise lucid and cogent arguments of the benefit and victimized zones theory are to be further refined. In addition, we are still waiting for explicit measures supporting a direct investigation of suffering. Such measures may include the articulation of new concepts or new

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<sup>3</sup> Research on environmental movements and environmental justice, and the knowledge generated by such research, should not be omitted, but cannot be introduced here due to space limitations.

combinations of existing standpoints; the precise direction of such work is yet unknown, but the obstacles before us are very clear.

Second, let us consider whether the theory of the social structures of suffering has been fully developed. As noted earlier, the theory is typically evaluated as the first theoretical framework proposed in Japanese environmental sociology, and is deemed a fully developed theory. But is it so? Or, on the contrary, has it simply been left largely unchallenged and incompletely examined. Iijima constructed her model using a compilation of case studies from the 1960s and 1970s, but these were based on food poisoning, occupational accidents, and pollution problems. Later on, Iijima herself attempted to adapt the concept of suffering to accommodate global environmental issues. However, possibly owing in part to her untimely death, it seems that the model has been largely left as it was, neither fully developed nor revised.

The work by IWASAKI Nobuhiko et al. (1999) is, for example, a valuable study produced after the Great Hanshin-Awaji Earthquake Disaster of 1995; but has environmental sociology truly absorbed, learned from, and expanded on this study? Although we are witnessing new movements arising, if we incorporate natural disasters such as earthquakes and volcanic eruptions as well as incidents such as terrorist acts into the basis of the concept of suffering, what effect would this have on the shape of the theory of the social structures of suffering? In addition, long-term study of the process of recovery from disasters is undoubtedly indispensable. Having endured the events and aftermath of 3/11, perhaps it is time for us to undertake a theoretical reexamination and renovation of the theory of the social structures of suffering based on wide-ranging empirical knowledge gleaned from different time periods. Environmental sociology has successfully developed a number of means to describe suffering. However, even at such a time following the unprecedented suffering due to the tsunami and the catastrophic nuclear power accident it seems we still lack a truly adequate understanding of suffering.

Third, we must consider whether we are still right to employ the offender - sufferer structure as an underlying basis of environmental sociology. As discussed earlier, environmental sociology has traditionally appealed to this model as a fundamental framework for inquiry. However, in the case of some environmental problems (e.g., noise pollution) the offender-sufferer relationship itself becomes the focal point of debate. A damage claim stating that the sound of a piano is noise may well not be understood at face value, but instead would most often lead to an endless and meaningless dispute. What we see here is a dispute concerning whether or not an offender-sufferer relationship has been established due to sound, and a serious conflict situation occurs even before reaching the stage of describing the relevant realities of suffering. In short, what may be needed, more than analysis based on some presupposed offender-sufferer relationship, is a viewpoint that allows us to reexamine the very presumption of the offender-sufferer relationship itself. In this respect, it may be said that theoretical standpoints such as those of life environmentalism and the social linkages theory have considerable potential to describe phenomena that are poorly understood in terms of the offender-sufferer relationship. If this is the case, then the relationship between these various theories and the theory of the social structures of suffering should itself become the focus of more discussion. Furthermore, the differences and similarities between such approaches and those that have not

employed the term “suffering,” such as the sociology of historic environment preservation, should also be examined.

Fourth, we must ask whether we, as environmental sociologists, have been sufficiently involved in the issue of nuclear power and renewable energy. With regard to renewable energy and energy policy, we have seen special feature articles published in Volume 8 of the *Journal of Environmental Sociology* (2002), and have made efforts to deepen our discussion of these topics, as well as pursuing dialogue with other academic fields. Studies have also been done on the issue of nuclear energy. These are undoubtedly among the first studies that should be consulted when examining the 3/11 system and envisaging the future after 3/11.

Yet we seem unable to refrain from asking whether all this has been enough. Even with the warnings emerging from the diligent academic efforts of these researchers, the Fukushima Daiichi Nuclear Power Plant accident could not be prevented. In this respect, it seems that the only means for us to envisage what lies ahead after 3/11 is for us to become aware of our *collective* responsibility for possessing more than 50 nuclear power plants in this country of Japan, which was itself the first victim of nuclear bombings.

### Contact Information

Office of the JAES

C/o University Coop Support Center

Attn: Mr. IDE Fujio

3-30-22 Wada, Suginami-ku, Tokyo, 166-8532, Japan

Telephone: +81 3 5307 1175

Faxsimile: +81 3 5307 1196

Website: [http://www.jaes.jp/jaes\\_en/](http://www.jaes.jp/jaes_en/)

E-mails: [office@jaes.jp](mailto:office@jaes.jp) (Office)

[irc@jaes.jp](mailto:irc@jaes.jp) (International Relations Committee)