

TRADITIONAL VIEW OF NATURE AND NATURAL RESOURCES MANAGEMENT IN JAPAN: SUSTAINABLE DEVELOPMENT AND GEOGRAPHICAL THOUGHT*

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With the adoption of the term 'sustainable development' in the social sciences and humanities, the spate of literature on environmental issues produced by geographers and historians of geographical thought has come up with some confusing if not at times rather dangerous kinds of understanding or interpretations of the term. This partly derives from the ambiguity of the concept itself, and partly from a reversed historicism or what might be termed 'anti-geographicism'. According to these writings, in order to enhance the meaning of place, local knowledge is undergoing re-evaluation in connection with 'local' sustainability, and environmental problems and their geographical differentiation are presently being considered in the context of the unilinear devolution of the history of mankind. Here can be found a kind of pessimism regarding technical progress on the one hand, and faint or even hidden aspirations towards a kind of cultural revolution under a totalitarian or eco-fascist regime on the other. In this paper, first of all the ambiguity of the concept of sustainable development is examined, after which follows analyses of some geographical discourses treating the confused or incorrect interpretations of the concept.

1. *Ambiguity of the Concept of Sustainable Development*

In 1972, the UN Conference on the Human Environment took place at Stockholm, resulting in the founding of the United Nations Environment Program (UNEP), and two years after that, a UNEP symposium was held at Cocoyoc. By that time the concept of sustainable development and the term sustainable development itself had become permanent fixtures in the environmental lexicon and were routinely used in world-wide debates on the pros and cons of environment on a global scale. 1972 was also marked by the issuing of the report of the Club of Rome, *Limit to Growth*, in which the term 'sustainable' as in 'sustainable development' was used. The general reaction of developed countries to the report as a whole was one of pessimism as it led them to feel that economic growth had to be sacrificed. Yet the report struck an optimistic note when it stated that 'It is possible to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future. The state of global equilibrium could be designed so that the basic material needs of each person on earth are satisfied and each person has an equal opportunity to realise his individual

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human potential' (Meadows et al. 1972).

As it is, since the adoption of the term 'sustainable development' in the early 1970s, two propositions have persisted in calling attention to themselves in the debates on environmental problems on a global scale. One is the conventional understanding of sustainable development based on the supposed trade-off between environmental concerns and economic growth in zero-sum terms. The other, which emerged in the 1980s, is referred to as the paradigm of ecological modernization (Harvey 1996a, 1996b), apropos of which, the Bruntland Commission Report of 1987, *Our Common Future*, is considered to constitute a representative statement (Campbell and Heck 1997). Whereas the policy implication of the first proposition is that regulatory measures should be imposed by the state only in the case of market failures by means of *ad hoc* and *ex post facto* measures (FitzSimmons et al. 1994), the second proposition or alternative view involves a thesis in which technical innovation assumes a central role, emphasizing a win-win example of ecological control or a positive-sum-game (Hajer 1995). As matters now stand, profit-making environment-related industries and advanced environment-sensitive technology are part of the economic reality of a number of developed countries (Lohmann 1993).

As the introduction of the Bruntland Commission report of 1987 puts it: 'The concept of sustainable development does imply limits -- not absolute limits but limitations imposed by the present state of technology and social organisations on environmental resources and by the ability of the biosphere to absorb the effects of human activities. But technology and social organisation can be both managed and improved to make way for a new era of economic growth'. (WCED 1987). A strain of optimism prevails in the last sentence, harking back to the Club of Rome report of over a decade earlier though the underlying premises were quite different. But in fact this wishful statement brings to mind two fundamental problems which inevitably arise whenever and wherever discussions on sustainable development take place in the world. The first stems from the situation in which the leaders of the North are becoming increasingly wary of competition from a developing South with regard to the use of resources and waste sinks -- at least so the South believes. In consequence, the North demands the setting up of global environment management under the slogan of sustainable development. Involved here then in the first problem, are the different attitudes and methods of resolving problems with regard to sustainable development, where developed and developing countries are concerned (Adams 1995). From the point of view of the South, sustainable development is a demagogical slogan masking green imperialism and globalization the imposition of the parochial interests of the globalized local of the North. In other words, in this instance the global does not represent universal human interests but a particular local and parochial interest that has been globalized (Shiva 1993, Lohman 1993).

The second of the two problems concerns the criterion of what is socially desirable, which has now been added to two other criteria pertaining to the ecologically viable and economically feasible (Ekins 1993). Environmental writings at times would have us believe that when all is said and done, sustainability is an ecological concept, hence it would be feasible to align discussions on it along the technocentrism-ecocentrism axis of environmentalism (O'Riordan 1983). The arguments at the extreme ends of the axis reflect two diametrically opposed viewpoints. Supporters at one end assert that with technical progress having reached the point where nothing is impossible (cornucopian technocentrism), a basis has been formed for the achievement of the greatest possible degree of economic growth and profit. At the other end,

adherents voice their belief that anything short of drastic and far-reaching economic and social transformations, involving zero-growth or local self-sufficiency with regard to communalist ecocentrism, would be ineffective in bringing about sustainability. It is true that a large number of authors sounding off on the subject of sustainable development propose rational solutions to environmental problems such as better environmental planning, clean technologies and so on (accommodating technocentrism) (Eblinghaus and Stickler 1996).

Moreover, what position is occupied on the technocentrism-ecocentrism axis is determined by the disciplinary and professional interests of the people concerned. Some economists of the conventional school, for example, judge a society to be sustainable from the viewpoint of whether the latter continues to grow and whether its investments and profits in the market economy continue to increase. But these criteria apply to industrial societies, thus automatically relegating agrarian societies to a position of backwardness and non-sustainability. The advances in medical materials and techniques and overall physiological knowledge have persuaded people concerned with medicine and public health that the human condition is far closer to being sustainable than it ever has been. Utopian idealists are convinced that it is the modern industrial societies that are unsustainable, and turn towards the constructing of archaic, agrarian communities that fit in with their own mystic and nostalgia-tinged notions of what is sustainable. Political and social scientists wax voluble on institutions or societies or what have you that they claim are sustainable; but the key factor underlying the sustainability of these organizations or ruling groups is their ability to inveigle the public into supporting the powers-that-be, enabling the latter to reconstitute themselves and continue to cling to power (Worster 1993).

It is clear that every position on the technocentrism-ecocentrism axis is also inextricably bound up with an ethical value judgement. Such a judgement involves on the one hand, an evaluation of desirable conditions for the physical environment, with the evaluation being deeply affected by the evaluators' conceptions regarding nature, and on the other, the adoption of a spatial scale selected for consideration from among different scales such as the global, national, regional or local village community. The spatial scale itself involves a very political or ethical issue because the selection of a spatial scale inevitably has the effect of concealing a social inequality and other spatial problematiques, which proceed to get uncovered under examination on another spatial scale (Smith 1993). Thus it is clear, as demonstrated above, that the concept of sustainable development and sustainability is indeed an ambiguous one. In order to avoid confusion as much as possible, we here define sustainability as the capacity of a society to reproduce itself, materially and culturally, at least for the next few generations. It is thus necessary to specify the spatial scale of the society in question and to show what that society means to do about its material and cultural reproduction; and again, what that society finally decides to do is strongly influenced by its concept of nature and culture. The limit is set at two or three generations not only for practical purposes but because, for human beings, in the management of natural resources, matters have always been considered in terms of the next few generations; the perpetuation of their society beyond that and into eternity was and still is a matter of religious faith. With these reservations, we should be able to say that the sustainability of, for instance, a village which maintains a stable population and regenerates the inhabitable environment is valid, though harming sustainability on a global scale by consuming, for instance, electricity generated from power stations utilising nuclear energy or fossil fuels. For on the global scale, in the contemporary world, it is impossible to say for any

location within a developed country or for any industrialised country as a whole that human activities are sustainable. This is especially true when we take into account the fact that every place is more closely connected than before, not only through commodity flow but also through the increased mobility of labour forces and capital. In Japan today, many remote mountain villages are said to be sustainable, but their economic well-being is indirectly sustained by Japanese capital investment abroad in countries where the regulations pertaining to environmental pollution are less strict, or by the lowness of the wages paid to foreign labourers in Japan. Moreover, the budget of the village is generally strongly bolstered by an income transfer from the central government which naturally relies on tax revenues from many unsustainable economic activities.

2. *Contradictory Traditional View of Nature in Japan*

It is a fact that the 'humanistic' view of nature or the anthropocentric understanding of environment derives from Western cosmology, which juxtaposes culture and nature. European modernity heralded the coming into being of the independence of the human spirit in the Age of Reason, releasing it from its long-standing dependency in relation to God; or in other words, human beings were liberated from God by their attainment of the control of space which God had previously created and hitherto governed, according to the traditional Judaeo-Christian cosmology. In contrasting the East, in this instance Japan in particular, to the West, certain aspects relating to the conception of nature in Japan require clarification. In difference from the Western concept of 'nature', which is perceived as being the antithesis of culture or artifacts, the Japanese terms *shizen* or *jinen*, now used as translations of the Western term 'nature', originally stood for that which was spontaneous and/or for the primary way of existence of things, whether they be natural things or artifacts. Upon occasion, the term *shizen* appears to correspond to the Western conception of 'nature' but even so, it is never quite identical. When referring to the visual appearance of nature, the term *fukei* that more or less corresponds to the Western term 'landscape' is often used. But *shizen* is at no time conceived of as simply being the physical environment *per se* that is subject to human action, with human beings being thought of as the highest creation of God destined to have domination over all things. Where traditional pantheistic and shamanistic Japanese cosmology is concerned, it is not possible for that sort of hierarchical order to exist. A wide variety of deities are identified with various aspects of nature, sun, moon, mountains, wind and so on. In Japanese mythology, numerous divinities are constituent elements forming the natural landscape; all elements of the natural landscape are equated with one or other deity. (Senda 1992).

A situation such as this may be considered one in which humans are in conformation with nature. It represents the fundamental difference of the concept of nature between the West and the East, specifically Japan¹, and as such has given rise to a good deal of discussion. However, it would be dangerous to solely emphasize the aspect of conformity to nature when interpreting

¹ Shintoist cosmology differs somewhat from the Confucianist and Taoist cosmologies of China, according to which heaven, or T'ien created, and always remains in command over, all human beings and all things. Heaven's prerogatives being what they were, at no time has there ever existed a hierarchical order of things, whereby human beings were placed at the top above everything else; it might be that in following the way of heaven, human beings would find themselves in a state of conformation with nature.

the man-nature relationship in the East; or at least to do so would result in a one-sided interpretation. For, at the same time, in daily life everywhere in the world, including the East, man finds it necessary to shelter himself from hostile physical elements or to modify various aspects of nature by constructing embankments against floods or by improving the quality of cultivated land and domestic animals in order to increase the agricultural output. Even in archaic society, it sometimes happened that, depending on the social relationships engendered by productive activities, the accumulation of mining sludge, for example, in copper- or gold-mining settlements was detrimental to the health of the inhabitants, who thus found themselves far from being in conformity with nature. Here, it is necessary to understand in what way traditional or indigenous concepts of *shizen* were compatible with human practices involving sheltering from, modifying and controlling nature in the course of daily life and productive activities. A comprehensive explanation is needed to explain these apparently contradictory human practices with regard to nature.

Another point for consideration is that, in the Japanese tradition or indigenous form of nature worship, 'natural' things were divided into various orders of the sacred kind and various orders of the secular kind. Where the sacred kind are concerned, there is no one deity representing nature *in toto*, or water *in toto* or land *in toto*. Instead there are individual gods and goddesses for individual mountains, rivers, wells and so on. At the same time, the distinction between things sacred and things secular; and also the distinction amongst things sacred, implied certain geographical demarcations marking off what was not counted as sacred. Narrow water canals for example, which bring water to the paddy fields are completely under the villagers' control and totally without spiritual connotations and thus have never been objects of worship. But large rivers, the sources of which are located far away, and which from time to time cause disastrous floods are highly sacred objects of worship. Apropos of the matter of what is and what is not sacred, Senda cites an interesting case from an eighth-century Japanese literary classic. A certain family of landowners (*gozoku*) appropriated a field for their own use and angered the god thereof, who appeared to them and tried to prevent them from cultivating the field. The family drove the god away, marked a spot with a post at the border between the field and a mountain and built a shrine there, indicating that the land on the mountain side of the shrine was the territory of the god, and the land on the field side of the shrine was the territory of the villagers. Many villages were located at the bottom of valleys, and so, as a result of similar demarcations agreed upon by the inhabitants and the deities identified with the mountains, shrines were generally located on foothills or at the edge of a plateau. In other words, the fringes of mountainous land became the border between sacred areas and human-owned areas, or the border between the land of the living and of the dead (Senda 1992, Abe 1995). Sacred rivers, remote mountains or forests surrounding the *genius loci*, being objects of worship, did not belong in the sphere of the humble day-to-day activities and productive practices of the inhabitants², but they were always there to be referred to or turned to in times of trouble. This type of worship centering on nature deities was practised not only by country village people but also urban people. In the old bird's-eye view maps of Japanese cities, for each city there were always specific mountains delineated in the background, in the case of Edo, Mount Fuji or Mount Tsukuba, which were considered to be

² In the world of the shamanist Shintoism of Japan, there also exist house gods as reported by folklorist Kunio Yanagita. Here I consider only the elements of nature that become objects of worship.

sacred and also constituted kinds of landmarks. The geographical demarcation set up by the landlord and his family in the story thus did not signify a demarcation between the sacred in general and the secular in general, but between a specific deity and a specific social group.

The extension of secular land was backed by the collective consciousness of territorial possession on the part of the village people. This is an important point in the consideration of the history of indigenous geographical thought in Japan. After 1873, in order to introduce the modern land tax system, many common forest lands of the village community became privatised, and even in the cases where they were co-owned by village members, they were always liable to taxation by the Meiji government (Fujita 1992). Numerous cases occurred of the 'tragedy of the commons' (Hardin 1968), that is, destruction of forest land and grassland, co-owned or collectively leased from the state, consequent upon the lost collective consciousness of territoriality, resulting in the pursuit of a selfish individualism and over-exploitation. The abolishment of the commons and the establishment of a modern land ownership system at times resulted in fierce conflicts between factions of a village community, conflicts unquestionably deriving from the property externality inherent in the forest and grassland (Roberts and Emel 1992, Smith 1990). As detailed analyses of the conflicts reveal, the main reason for the deterioration of forest resources in former commons in Japan was not so much the 'tragedy of the commons' as it was the differentiated access to forest resources among individuals and among social groups due to the commoditification of forest land. In other words, the meaning of forest land has undergone a sea-change from the ecological space of the village community to an ordered, regulated and legalized space of the nation-state (Nakajima 1998).

It could be misleading or at least one-sided to idealize pre-industrial village communities as sustainable with their harmoniously achieved division of nature into the sacred and the profane, where each individual had equal access to the commons, thus realising sustainability. Feudal Japan was divided into several fiefdoms and the fiefdom was politically and economically structured and in the class-divided village community, there existed diversified social groups which represented the different interests, those of *han* or fiefdom governments, those of merchants of nearby towns and so on, and the conceptions of natural resources of each social group were not the same.

As mentioned before, there already existed mining villages in ancient and mediaeval times as well as the Early Modern period. When mining activities were conducted either on the communal level or by a very limited number of village craftsmen, the resulting sludge did not constitute a problem, since precautionary measures were adopted at the village community level to curb possible harmful emissions from the sludge, though the measures themselves caused the transformation of the physical environment. During the feudal period under the Tokugawa regime, copper and gold mining and steel-making from magnetic sand were in most cases, conducted directly by the shogunate government or by the *han* authorities. In this case, the mercantile interests of the remote local intruded into a local community living on the basis of what was practically a subsistence economy. The inhabitants or the sustainability in general of that community ran the risk of incurring harm by the mining and manufacturing activities controlled by outside interests; to the latter, the health and well-being of the village were secondary concerns. The same thing could be said for forestry resource management; though the production of timber on a market economy base was limited to certain areas advantageous for the marketing of timber destined for Edo and Osaka. Deforestation was already practised in these areas that were sometimes so excessively exploited that the fief authorities grew

alarmed and began to take over the direct management of forestry, as happened in Kiso, Central Japan (Fujita 1995). Instigated by the *han* governments, reforestation in grasslands and forest land enclosures (originally broad-leaf forests) by means of coniferous trees, however, threatened the practices of the villagers who relied on grassland and forest land as sources of compost, fuel and construction material.

The demarcation between the sacred and the profane can take on a more complicated form especially when more than one agent of demarcation of the profane side exists. When a nearby mountain or river of a village community is designated as sacred by a remote urban community or the ruling class residing in a remoter area outside the village, the latter and its environs become subject to conservation and extension to accommodate cults and pilgrimages. This has often resulted in jeopardizing the productive interests of the community living in the area. The frequent imposition on behalf of outside interests, of the spatial division between the sacred and the secular meant, where those interests were concerned, a spiritual and aesthetic representation of landscape (Luginbuhl 1992), but where the local was concerned, the negation of 'ecological' nature and the forfeiting of sustainability. In the contemporary world, this sort of 'tragedy of sacred areas' is easily found in the designation of national parks or natural beauty conservation areas.

3. *The End of the Sustainability Myth?*

As we have discussed above, the understanding of the concept of sustainability and the resulting human praxis in the environment is determined in great part by the conceptualization of nature. Even in the world of mythology or traditional cosmology, spatial scales were products of social practices. Local sustainability was realized in connection with the traditional conceptualization of nature only when that spatial scale corresponded to the collective sense of territoriality. The contemporary concept of sustainability is the product of a global-local nexus (Taylor, Watts and Johnston 1995), but historically, the problem of sustainability always existed in the nexus of various spatial scales. Where the imposition on a community of the interests of an exterior locality -- a locality which if not actually globalized, has greatly extended the scale of its activities -- is concerned, the traditional and indigenous concept of nature is one thing, and sustainability is another. The analyses of actual environmental issues in the light of historical considerations of environmental thought have certainly brought about many fruitful results (Tissier 1992); but at the same time, the history of geographical thought pertaining to the environment should be considered in the context of actual problematiques of environmental issues.

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