# **Andscapes**

Concepts of nature and culture for landscape architecture in the Anthropocene

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#### **Abstract**

The effects of human activity have reached every square metre of the earth and beyond, e.g. through carbon or nitrogen emissions, which has led Nobel laureate Paul Crutzen to propose a new geological age, the Anthropocene. In parallel to many contemporary philosophers and scientists, this notion declares that the traditional, dualistic Western understanding of nature as something independent from human influence is obsolete. The Anthropocene needs new, unitary concepts of nature and culture. This article discusses two inspiring unitary concepts from Japan, seibutsu no sekei (world of living things) by Imanishi and fudo (milieu) by Watsuji. In a reflection on two landscape architecture projects it is shown that the profession is already well capable of designing in a unitary mode beyond simple dichotomies of nature and culture. This asset should be cultivated, and for this a correct use of terms is important. This is, however, difficult because the traditional meaning of nature is still very influential in professional communication, and the terms of the inspiring Japanese concepts are too abstract or complicated. Inspired by Kandinsky's idea of "and", the unitary concept of 'andscape' is proposed to integrate the ideas of Imanishi and Watsuji. By using the term 'andscape', a dualistic, divisive understanding of nature and culture becomes impossible; instead the focus is on the dynamic relations between humans, animals, plants, stones, water and all other elements in the world.

#### Introduction

Nature, ecology or landscape are important reference concepts for landscape architecture. Traditionally, all three were seen as the opposite pole to culture or humanity in a dualistic relationship. In terms of the latter two, this position has changed; ecology has been conceptualized as something cultural that can be designed by humans (e.g. Corner 1997; Johnson and Hill 2002), and a similar shift from the traditional understanding of 'landscape' has happened e.g. in recent definitions by J.B. Jackson as a man-made, artificial system (Jackson 1984, p. 156), or by the European Landscape Convention as "the result of the action and interaction of natural and/or human factors." (2000, §1) Such a more integrative understanding of ecology and landscape has also been proposed in landscape architectural theory (as well as philosophy) for some decades now (e.g. Meyer 1997) and serves as the foundation for new movements such as landscape urbanism or ecological urbanism. Yet nature, the most far-reaching of the three concepts, is still mainly understood in the traditional way, whether in professional or everyday discourse. Here, nature is seen as a counterpart to human culture, as something independent from human influence – a concept that has dominated the Western world since Aristotle. But is this a problem? Well, it would be if this type of nature – something independent from human influence – no longer existed. And this is precisely what many philosophers or scientists propose today. According to philosopher Zlavoj Zizek, "Today, with the latest biogenetic developments, we are entering a new phase in which nature itself melts into air: the main consequence of the breakthroughs in biogenetics is the end of nature. Once we know the rules of nature's construction, natural organisms are transformed into objects amenable to manipulation. Nature, human and inhuman, is thus 'desubstantialized', deprived of its impenetrable density" (Zizek 2008, p.49).

Out of a similar conception Paul Crutzen, the 1995 Nobel Chemistry Laureate, coined the term Anthropocene to characterize a new geological epoch to succeed the Holocene. Mankind has become the dominating force on the earth; even remote areas or the earth's atmosphere are influenced by elements like carbon or nitrogen emitted from human driven processes (Crutzen 2002). This radical notion of a new geological epoch is increasingly gaining acceptance [1] and one thought-provoking outcome is the recently started 'Anthropocene Project', a transdisciplinary international project running for several

years at the Haus der Kulturen der Welt in Berlin. The introductory statement of the curators explains their motivation to develop a new, non-dualistic concept of nature and culture, appropriate for the age of the Anthropocene very well: "Nature as we know it is a concept that belongs to the past. No longer a force separate from and ambivalent to human activity, nature is not an obstacle nor a harmonious other. Humanity forms nature. Humanity and nature are one, embedded from within the recent geological record." (Scherer/ Klingan 2013, p. 2)

The aim of this article is to contribute to this development of a new concept of nature in relation to landscape architecture. It starts with analysing and discussing two inspiring unitary concepts of nature and culture from Japan, an industrialized country which does not have a dualistic understanding of these terms. From the perspective of these two unitary concepts, two recent landscape architectural projects are discussed, one in Japan and one in Germany. Finally, a proposal is made of how the ability of landscape architecture to design in a unitary, synthetic way can be supported by a new term, one which would allow easier communication of the main Japanese ideas in a Western context.

# Japanese concepts for the relationship of nature and culture

According to the French cultural geographer and expert on Japan, Augustin Berque, "Japanese anthropologists would willingly agree with the notion that Japanese culture, like certain South-East Asian cultures and in contrast to China and Greece, does not oppose the human realm to that of nature." (Berque 1997, p. 56) To illustrate the origins of this overlap between the realms of nature and culture, I would first like to address three specifically Japanese factors in religion, art and cultural landscapes.

The ancient religion of Japan is Shintoism. Here, everything can become a deity (*kami*) – an animal, a tree, a mountain, a stone or a human being. There is no hierarchy or any other qualitative difference between these things (Shimada 2008, p. 63). It is also possible that humans turn into animals and vice versa, as expressed for example in a famous story about a female fox who became a beautiful wife and mother, but returned to the forest as a fox after her children noticed that their mother had a tail (Shimada 2008, p. 64).

Thus, in Shintoism there is no heavenly god who created man in his own image and set him the task of subduing the earth and dominating all living things (Bible, Genesis 1:27,28) - thus separating god, man and other living things - but rather flow and transition among them.

In Japanese art since the Heian period (794-1185), we find intense reflection on nature that has led to a cultivation of it. The capital was moved to Heian (present-day Kyoto) and many aristocrats had to leave their rural estates to live in the city. They became detached from the land, yet the socio-economic system freed them from working and offered plentiful time for reflecting on the elements of nature, which they did especially in poetry. According to Berque, a cultural codification of nature took place: "All the aspects of nobility's life at the court – poetry contests, clothing and the gardens – had their part to play. The contests, for example, often centred on the skill of 'associating things' around a given theme. And so, almost automatic connections developed between a particular season, a plant and a particular sentiment." (Berque 1997, p. 83) Through art and literature, these relations between human emotions and natural elements gradually spread to all levels of society and became a firm part of popular culture. This culturalization of nature is, for example, still evident today in the 'flower card game' (hana fuda) popular with Japanese children and beyond childhood, where associations between plants, animals and seasons have to be made.

A third factor that contributes to the culturalized perspective on nature in Japan is the *satoyama* landscape. *Satoyama* "denotes mountains, woodlands, and grasslands *(yama)* surrounding villages *(sato)* in Japan" (MEJ/ UNU-IAS 2010, p. 3). In Japan a relatively small proportion of the land area is suitable for agriculture and settlement. These areas had to be intensively cultivated, from the rice fields to the woodlands at the nearby mountain slopes. This was the environment for most Japanese people over centuries, and as results of human activity, Berque characterizes these *satoyama* landscapes as built environment, and "it is these landscapes which human beings could see before them and which have had the greatest influence on the Japanese vision of nature." (Berque 1997, p. 75)

These are just three of probably many factors contributing to a specifically Japanese, unitary concept of nature and culture. They illustrate the mindset for two major theoretical works from the first part of the 20th century, which formulate a Japanese

perspective of the relationship between nature and culture in clear opposition to Western scientific and philosophical concepts. These two books, one by a biologist, the other by a philosopher, should be discussed in detail.

### Kinji Imanishi's 'The world of living things'

Kinji Imanishi, born in 1902 in Kyoto, had a wide spectrum of interests. He was a biologist by training, a passionate mountaineer and also a visitor in the circle around the philosopher Kitaro Nishida at the Kyoto School of philosophy. All these concerns were formative influences in his seminal book 'The world of living things' (2002; Japanese original version *Seibutsu no Sekai*, 1941), for which the editor of the English translation, Pamela J. Asquith, chose the title 'A Japanese View of Nature'. Imanishi wrote it as a fairly young man in 1940, decades before he became the founder of Japanese primatology and later a famous anthropologist, because he was afraid he would die in World War II and wanted to leave a kind of record of his ideas.

From the beginning Imanishi makes it clear that the world of living things is a unified whole of discrete living things such as humans, animals or plants [2]. For him, the relations between the living thing and its environment are very important, and he concludes that organisms and environment are on the one hand different and on the other hand the same – something quite difficult for a Western intellect to grasp: "Although an organism is an independent system, in order to live it must first take in food from the environment and find mates there. Thus, it is clear that living things cannot live apart from the environment. In this sense living things are not self-contained independent systems that can exist on their own, but if we think of one system that includes the environment, now for the first time living things can be understood in a concrete form of existence. Living things that are considered apart from the environment are not living things in their reality. Here again I would like to stress that the outside world or environment does not precede the genesis of living things. Even these environments are part of this world and have grown and developed from one thing together with living things. In this sense, living things and the environment are originally of the same kind. [...] Our world is such that we cannot conceive of the existence of living things without the environment, nor can we conceive of environment alone without

presupposing the existence of living things. This must be our world." (Imanishi 2002, p. 25)

Thus, one foundation of his concept is the inextricable relationship between living things, e.g. humans, and their environment. The term 'environment' becomes questionable in the light of such a close connection – environment suggests a separate world that surrounds a living thing, but according to Imanishi the two spheres are inseparable. Due to this conceptual inconsistency, he introduces the concept of 'field of living' as replacement for 'environment' and stresses that "the field of living does not mean merely a space for living but is a continuation, a living extension, of the living thing itself." (Imanishi 2002, p. 27) So each living thing, be it plant, animal or human, extends into a field of living, which in turn becomes also part of the living thing – a reciprocal relationship. This is a radical thought which renders a dualistic understanding impossible. It has fundamental consequences for such basic relations as that between humans and their food, as illustrated in the following reflection by Imanishi: "If we are courageous enough to regard food candidly as an extension of our body then it is not at all contradictory to think that there is an extension of life in the food. [...] The relationship between food and living things is not one of biology or taxonomy, but of direct affinity of body to the living things. Because food is an extension of their own body, living things recognize their own food; this means they in fact recognize themselves." (Imanishi 2002, pp.28-29) Such an understanding of a close physical and emotional connection between us and our food is highly relevant today – it could serve as a call to rethink our contemporary relation to food, where plants or animals are often produced by industrialized agriculture with questionable ethical standards.

After proposing this general relationship between individual living things and their field of living, Imanishi develops the concept of several layers on which individual living things are organized. He calls them, in order of growing complexity: species society, synusia, synusial complex and finally the whole community of the world. These layers need not be explained in detail here; the main point is that life is shared in and in between these layers. This leads Imanishi to his crucial conclusion that all life is social life and that sociality is the structural principle of the world (Imanishi 2002, pp. 42-46). He sees the world as an "ultimate society, composed of the individual, species society, synusia and

synusial complex" and concludes that "this kind of territorial community of all living things is nature as we see it, [...] it is the only whole community of living things" (Imanishi 2002: 60ff). Within this integrative, 'societal' understanding there is no possibility of separating a human realm from the rest of the world, e.g. animals or plants. Our focus should thus shift: away from differences towards the relations within a unitary world of living things structured by sociality.

# Tetsuro Watsuji's 'Fudo. An anthropological reflection'

A second important Japanese book arguing for an integrated concept of nature and culture is 'Fudo' by Tetsuro Watsuji (1935). Watsuji was a philosophy professor with an extremely broad range of interests. His many publications on art, literature, theatre or history exposed him to contemporary charges of dilettantism, which he shrugged off with the ironic reply that he was not a specialist scientist (Fischer-Barnicol/ Ryogi 1992, p. VIII). Many people today consider 'Fudo' a work of literary art (cf., p. XV).

Fudo means 'wind and earth' and is often translated as climate, which is far too simple. In the first paragraph of the introduction, Watsuji starts with a broader definition of it as "the climate, weather, geology, soil, relief, landscape etc. of a land" (in: Berque 2004, p. 394) and continues that these aspects could be called the "natural environment of man" (Watsuji 1988: 1). Yet, his scope becomes much broader and he uses the whole first chapter ('Basic theory of fudo') to explain that *fudo* is not only the natural environment but rather the complex relationship between natural and cultural elements.

He describes the possibility of two different points of view regarding the relationship between humans and their natural environment. The first sees the natural environment (or climate in the broad sense) as a set of objective circumstances in relation to humans, who are external to it, and thus both are discrete entities. This is also the traditional understanding of ecology, as Berque points out: "Ecology, a modern natural science, made environment its object of study. It made it so as an object, that is, something out of which human subjectivity is abstracted. Even if this object is by essence relational (ecosystems, trophic links ...), it is as much as possible independent from the point of view of the observer; in other words, detached from our existence; and it is so inasmuch

as it is scientific. For ecology, the environment is something objective, which exists in itself and which can be measured." (Berque 2011)

This view of objects as detached from humans is inappropriate in Watsuji's view, and the rest of the book is entirely devoted to a second possible perspective. *Fudo* integrates humans and their environment and expresses a dynamic unity in space as well in time. If we translate *fudo* just as climate this is almost impossible to understand, because climate too easily suggests an exclusively natural, meteorological factor. Thus, I will follow Augustin Berque, who translated *fudo* as 'milieu' (Berque 1997, p. 40; Berque 2004). Humans, animals, plants, stones, rain, etc. exist in a certain milieu. Not the objects themselves but their relationships are the foundation of a milieu. Each human being and all other things are the producers and at the same time the products of a specific milieu. Each individual is important; nevertheless, if it ceases to exist the milieu changes but continues (Watsuji 1988, p. 7ff). Because of this relational character of our temporal and spatial existence, Watsuji proposes *aidagara* (in-betweenness) as a central characteristic of human existence (Watsuji 1992, p. 9 [3]).

To summarize the meaning of *fudo*: not man or culture on one side and nature or environment on the other; together they create a continuously changing milieu. For Watsuji, this condition of 'being in a milieu' or 'milieu-ness' (*fudosei*, translated by Berque as 'mediance' (2004, p. 389) is so central for us as human beings that he proposes *fudosei* as "the structural moment of human existence" (Berque 2004, p. 389 [4]). In other words, the dynamic relations between us and the other elements of the world are the foundations and the drivers for our life, and these relations happen in a milieu, i.e., *fudo*.

# A unitary concept for the relationship between nature and culture

Reflecting now on the concepts of both Imanishi and Watsuji, we see that they offer a unitary perspective on the relationship between humanity and nature. The decisive impulse of both concepts is to shift attention from the opposing pairs to the relationship(s) between them. As Berque summarizes, the milieu or *fudo* is **both** natural **and** cultural, **both** subjective **and** objective, and **both** collective **and** individual (Berque 1997, p. 116f; emphases MP). This means that the poles are still there; they are not

completely blurred as in a hybrid [5]. It is not about opposing, but connecting. The same is true for Imanishi's world of living things, in which the various things have an independent existence but the distinctions are not as important as their relationships in the field of living (Imanishi 2002, p. 1; 27). In summary, we can say that the central ideas of Imanishi and Watsuji are almost identical – they differ on their key terms, 'sociality' and 'in-betweenness', but both terms emphasise the focus on relations. These concepts are useful for the Anthropocene Age, because from their perspective we can never speak only about nature or natural elements but have to consider the whole milieu or field of living things, including human beings and much more.

The profession of landscape architecture could also be inspired by these two Japanese terms. Fudo and seibutsu no sekei and their translations could serve as an alternative to the outdated traditional concept of nature, which is simply no longer correct in the new situation of the Anthropocene. And it is important to use terms correctly - Confucius emphasized 2,500 years ago that the correct use of terms is of highest importance because language has to be in accordance with the truth of the things (Confucius 1893, XIII). Yet, even if 'world of living things' and 'milieu' express the new truth of things in the Anthropocene it is highly unlikely that these terms will make it into everyday professional discourse, especially in the West. In France, for example, Augustin Berque proposed 'milieu' 20 years ago, and although he is widely read by French landscape architecture academics [6] 'milieu' has not become an influential term [7]. If we imagine the term 'milieu' in English or German, it is also unlikely that it will have the power to serve as a guiding term for landscape architecture because it is too abstract. Similarly, 'world of living things' is too unwieldy to be successful. To communicate the underlying ideas of the Japanese unitary concepts of nature and culture we need another term. As an alternative, I would like to make a proposal inspired by a short article by the Russian painter and art theorist Wassily Kandinsky called 'und' ('and' in English) from 1927. Being ahead of his own time, he considered the preceding era dominated by 'either-or' thinking and argued for a new era characterized by 'and'. He criticized the specialization and separation of professions and approaches in the 19th century and argued for an integrative perspective: "A new beginning consists of recognizing relations. More and more it becomes evident that there are no 'special' questions that can be recognized and solved in isolation, because everything is connected and interdependent. Moving

onwards from this beginning means discovering further relations and using them for the most important task of humankind – for development." (Kandinsky 1927, p. 107ff; translation M.P.) His hope was for a synthetical approach in theory and practice that would lead to the creation of synthetical works. With this argumentation Kandinsky is very close to the ideas of Watsuji and Imanishi. Transferring Kandinsky's meaning of 'and' to a new conceptual term suitable for landscape architecture and beyond, I would like to propose the term 'andscape' as capable of integrating the main ideas of Imanishi's and Watsuji's unitary concepts of nature and culture, i.e. their non-duality and emphasis on relationship. In terms of content, it does not add anything new compared to fudo or seibutsu no sekei, yet the term 'andscape' has two advantages: it is less abstract and complicated than 'world of living things' or 'milieu', and its consonance with 'landscape' easily connects the concept of relationality to landscape architecture. To summarise: 'andscape' has the potential to serve as a conceptual term to address and communicate the synthetical, integrative character of landscape architectural design when transcending out-dated dualisms. Two landscape architectural projects - one in Japan and one in the West – should illustrate how we can understand 'andscapes'.

#### Old Fisheries Experiment Station, Mizumoto Park, Tokyo

Located on the northeastern margins of Tokyo in Katsushita ward (one of the 23 city districts of Tokyo), at 92 hectares (228 acres) Mizumoto Park is one of the largest parks in Tokyo. It is laid out along the Koaidame flood control basin, which was dug 280 years ago to protect Edo (Tokyo's name until 1868) but which has lost its function today. Before the area became a park in 1965 it was mainly rice paddy fields, and the name of the park (*mizu-moto* means water source) comes from the fact that it served as the source for irrigation (www: TMPA). Water is still a dominant feature of the park and many people (and birds such as kingfishers and great egrets) fish along the water edges. For our discussion on unitary design concepts integrating nature and culture, we concentrate on a site in the eastern part of Mizumoto Park called the Old Fisheries Experiment

Station. This area, covering 9.5 ha, was built after World War II for research on freshwater fish farming and contained many rectangular concrete basins. In 1997 the research facility was moved to another ward in Tokyo and the land became part of Mizumoto Park. Tokyo Metropolitan Government invited five offices to present ideas for the site, and Aishokubutsu Landscape Planning Office led by Norihisa Yamamoto was chosen as designer [8].

The main programmatic goal of the client for the transformation of the Old Fisheries Experiment Station was nature conservation. This Western term might surprise, but it shows that there are also Western, dualistic influences in Japan despite its unitary traditions described above. After its opening towards the West with the beginning of the Meiji period in 1868, Japan absorbed many Western ideas. Most of them were so different from Japanese culture and language that new words had to be coined. This was also true for the Western understanding of nature as something opposed to culture – here, the word *shizen* was invented [9]. And exactly in this Western sense the primary goal of the park was expressed as protection of *shizen*. Nevertheless, the following project description will show that although this dualistic word is used, the reality is not an 'either-or', but an 'and'. This already becomes evident in the three key concepts of the design:

- "1. To preserve and cultivate endangered wild life, both plants and animals, in a waterfront environment.
- 2. To create a waterfront landscape in which every visitor can feel and experience changes of the season.
- 3. To build a system in which every visitor can interact with, experience, and learn about riparian life." (JILA 2008, p.18)

Only the first might be related to *shizen*, while the other two also include the human perspective (with the second one as a typically Japanese motivation, because the seasons play a very important role in the human-nature relationship, see for example the *hana fuda* game mentioned above), thus a separation of nature and culture was never really an issue. On a tour with Yamamoto through the project, he also did not speak of *shizen* but rather used *han-shizen* (half nature). Thus, this nature conservation project is half nature

and half culture – quite paradoxical from a Western view. Analysing the project, we will see that Yamamoto does not place 'half nature' and 'half culture' in opposition but integrates them, so it is reasonable to call the design an *andscape*. The use of *han-shizen* as an alien appropriation of the Western concept exemplifies the lack of appropriate terms for synthetic designs even in contemporary Japanese landscape architecture.

The design of the Old Fisheries Experiment Station is characterized by fine differentiations on many levels. In terms of access, almost half of the area is fenced off and only open for visitors in the daytime, with a guard at the entrance. This is mainly necessary to protect the area from anglers; fishing is hugely popular in the rest of Mizumoto Park but not conducive to a high diversity of fish life. In the area inside the fence there is a formal and functional differentiation from west to east: In the west the former concrete basins have been completely removed and their edge replaced by different forms of gabions. To increase biodiversity a range of riparian zones has been created, in which the plants grow in organic shapes – but most of the visible constructed elements like the gabions are set in straight lines. When asked why he did not use an organic form for this, Yamamoto said that the pre-fisheries situation was a flat landscape with rice paddies in rectangular shape and thus straight lines were appropriate for those types of landscapes. In the middle of the fenced zone, a quadrangular area of 40 x 40 metres covered by a net sets a strong contrast - small, elevated concrete basins from the former station have been kept and are used for breeding goldfish, for sale at certain events. This is followed by an area to the east with newly constructed concrete basins. The purpose was to create situations with different depths of water to present a broad variety of water plants and fishes. These basins are designed for easy accessibility and serve very well for educational purposes. Directly adjacent, two small rice paddies show how rice can be grown without using artificial fertilizer and pesticides. The final elements in this row, in the eastern corner, are six concrete basins of the Old Fisheries Experiment Station, kept in their original state as historical reference – since they are neither beautiful nor have a high ecological value they express how strongly cultural factors are also valued in this transformed landscape.

The fenced part is additionally demarcated to the south by a canal in which lotus plants grow. Outside the fence, we find another transition of different park elements. In the west is a wildlife area where access has been made difficult. Instead, comfortable viewing

platforms have been designed with wooden screens and viewing holes at different heights for watching birds, including kingfishers. South of this, in an area directly adjacent to a sports field of Mizumoto Park, six former basins have been transformed into a 'pleasure lake' with comfortable paths and wooden decking to be close to the water. It follows the central area with a new parking lot and a visitor centre. East of it there is a hundred-metre stretch of three formally straight basins in which lotus plants should grow. The final two basins to the east contain the endangered species of *Euryale ferox* (fox nut). Interestingly, this plant had already started to grow in the old fisheries experiment station due to the ideal water depths, so the basins have not been changed in the new design.

Construction work on this new part of Mizumoto Park lasted from 2000 until 2006. Concurrently, a complex management and maintenance structure for the site was established within which the Mizumoto Park Authority, several citizens groups and the landscape architecture office of Norihisa Yamamoto as coordinator form a committee. In terms of maintenance, for example, a volunteer organization controls the sometimes excessive growth of plants like *Typha angustifolia* or catches all the fish in one basin every few years to sort out non-native species, while other groups are responsible for the management of the rice paddies. This public-spirited involvement shows how well the new park is integrated in the surrounding communities.

Reflecting on this project, we perceive a rich interplay between water, plants, animals and humans. The designers created diverse situations that allow for different degrees of biodiversity, emotional contact or open space use. In some areas plants and animals have priority and human access is limited, sometimes by clear demarcations as fences, sometimes by subtle design measures. Then there are areas where features rather like theatrical stages have been designed for plants and animals, especially fishes, to be studied by the visitors. Finally, there are areas where species life is less diverse and open space use by humans has priority.

Thus we can find a highly diverse 'world of living things' within a fairly small site. The Old Fisheries Experiment Station is an 'andscape' where relationships between humans, animals, plants and other things rather than the objects themselves are decisive. You cannot separate them – the plant and animal life benefits from the human maintenance

that sustains a high biodiversity, while conversely humans enjoy emotional and physical contact with real, living things. This integrative perspective is also Yamamoto's personal view; when asked about his goals for the project, his strongest point was to give children opportunities to experience plants and animals – perhaps the most fruitful relationship between humans and other living things.

To summarise, the Old Fisheries Experiment Station is a very good expression of the unitary Japanese concepts of nature and culture as *fudo* or *seibutsu no sekei*. This integrative approach can be seen in a very small 'andscape' in the central area of the project where only native species are allowed (Fig. 9). Here, climbing plants grow close to a guardrail. While in a comparable nature protection zone in the West such native climbers should grow 'naturally' – either they make it by themselves or should give way to stronger plants – Japanese people from the site's volunteer group are supporting them by sticks and weeding around the base: a wonderful expression of sociality among living things ... and I wonder what we can learn from this for medium- or large-scale landscapes in the Anthropocene.

#### Old Nidda-Meadows Airfield, Frankfurt

Germany is good example of a country where the binary concept of nature and culture is still very influential. It is manifested for example in the 'building law', which differentiates between built and unbuilt area. The built area (i.e., culture) comprises cities, towns and villages where the ground is organized by land use and zoning plans. If something new is built here, natural elements need hardly be considered (except for trees in some cities). By contrast, if something is to be built in the unbuilt area (i.e., nature), it is always evaluated on its 'impact on nature and the landscape', which has to be compensated by an impact mitigation regulation according to German nature conservation law. To explain the underlying principle in a simple way, if a city wants to extend into the unbuilt area with a new residential area of 10,000m², then first the ecological value of the impact area is assessed by a specific method to quantify the loss. The compensation thus calculated could result, for example, in a requirement to design an area of 2,000m² with a very high ecological value, which could be on the site or somewhere else. In a practical example from a German city, this compensation is a grove of native shrubs along the northern edge of the proposed residential area, as a

buffer zone to an adjacent small brook. To guarantee the long-term ecological gain the grove is fenced off, and any crossings between the new residential area and the brook are forbidden – a strict separation between a natural area and cultural area. The same principle of eco-calculation is applied in Germany for anything built in the unbuilt area, e.g. roads, railway tracks, wind turbines or pigsties. This law has many positive effects; it impedes urban sprawl or supports biodiversity. Yet, there is also criticism because those new 'natural' areas are monofunctional and exclude humans. Some ecologists already warn that this approach might lead to a decreasing acceptance of nature conservation (Hoekstra 2013). Thus, there is a search for more integrative design solutions where the money from impact mitigation regulation also leaves the possibility to create multifunctional open spaces which integrate nature conservation. A good example for this is the Old Nidda-Meadows Airfield, which we researched as a best practice project in an ongoing research project on this subject [10].

The park of the Old Nidda-Meadows Airfield in the Northern fringe of Frankfurt is a former American military airport, transformed by GTL landscape architects [11]. It opened in 2003 and serves as an important stepping stone in Frankfurt's green belt system. Nature conservation was an important consideration in this park because a large proportion of its construction funding came from impact mitigation processes in the surrounding areas. Even so, GTL was able to avoid a monofunctional opposition, of nature conservation areas without humans and open spaces for people without ecological significance. Three areas are particularly interesting in the ways they create interesting milieus of humans, plants, animals, stones and water. At the western end of the former runway, only a narrow strip of asphalt was kept as a path, while the rest was partly broken up partly removed. Plant succession was allowed to start, and in the beginning goldenrod and other perennials came up, since 2010 poplars, birches and willows have dominated, while the next succession phase is still unknown. This area is very accessible through asphalt paths and re-used concrete slabs, which are stacked in some places as elevated viewing platforms, and park users can experience the dynamic plant processes at close hand. Nearby was the former helicopter parking area, a huge area of concrete. This site was chosen as an experimental site where plant succession should be studied by the scientists of Frankfurt's old-established and highly regarded Senckenberg Institute. Together with the landscape architects of GTL, it was decided to crush the concrete into different fractions and sort them into square areas according to fraction sizes. There are squares with very fine material as well as squares with larger slabs. The area is

also influenced by water. A former brook which was piped during the airport years runs beneath the park surface, and this pipe was accidentally broken during construction of the park. It was decided to accept and not rectify this damage, resulting in a deliberately unmanaged spill of water into the area. Together, these influences set the stage for an unforeseeable development of biotopes. Here, and also in the adjacent asphalt area described above, no maintenance is allowed. The area has become popular with biology teachers and there are often guided tours for school classes. The third area with a synthetic approach is the huge 'Butterfly Meadow' along the river Nidda. Most of the year it is heavily used by people for sports and leisure, but this is not allowed during the breeding season of meadow birds. To increase the number of plant and animal species, the meadows are mown only twice a year.

To summarise, this project has turned a former airport with very low biodiversity into a place with many new manmade biotopes. The relationships between people, animals, plants, water or soils are guided by the landscape architects on a sliding scale from intensive to extensive and with different foci on perceiving, learning, neglecting or playing - an 'andscape' in its best sense.

# **Conclusion**

The notion of the Anthropocene calls for a change in our understanding of nature, as it implies that the human influence has reached every corner of the earth and beyond; there is no nature left in the sense of something uninfluenced by humans. New ideas for a unitary concept of nature and culture to replace the outdated dualistic understanding are necessary. Japan offers some inspiring concepts in this quest. Due to specific conditions in terms of religion, art or cultural landscapes, Japan never developed a dualistic concept of nature and culture like in the West. On this non-dualistic foundation, Watsuji and Imanishi developed their sophisticated concepts of *fudo* and *seibutsu no sekei* in the first half of the 20th century. Both argue that the world should not be seen as an opposition of natural and cultural elements, but as an intricate web of elements in dynamic relationships. This integrative understanding of the previous antagonists, nature and culture, could not only prove productive for the Anthropocene in general but also for landscape architecture in particular. It should motivate landscape architects to design

complex relationships between all elements of a project, keeping in mind Imanishi's dictum that sociality among all living things is the structural principle of the world. This is still difficult to realize in the Western world, because the word 'social' belongs to the human realm. Sociality in Imanishi's sense comes close to Kandinsky's synthetical approach as proposed in his 1927 article 'and', where 'and' replaces 'either-or'. Built on this notion, the term 'andscape' is proposed, a term which could transfer this relational concept to landscape architecture.

The discussion of the two projects from contemporary landscape architecture has shown that the profession is already fully able to operate from a unitary perspective and design 'andscapes'. Although the Japanese project goes deeper in terms of sociality among all living things, as shown in the detail of the supported native climbing plants, there is no fundamental difference in terms of a unitary perspective between East and West – both projects express an extraordinary capability. There are many more projects that could be identified as 'andscapes' – Lower Don Lands in Toronto by MVVA, Fresh Kills Park in New York by Field Operations, Parque del Agua in Zaragoza by aldayjover/ Dalnoky, Qunli Stormwater Park in Haerbin City by Turenscape, etc. This performance of a unitary approach to nature and culture is an asset in the Anthropocene, where scientists and artists are still searching intensely for new concepts to replace vanished nature. Landscape architects should promote this ability by using the correct terms in their reflections and communications. This means at least two changes in the professional debate as well as in design practice. Firstly, the word 'nature', in its oversimplified meaning of something independent from humans, should no longer be used. This will be difficult to get used to and can only be a long-term goal, especially because nature has so many positive connotations and we use it very often for our professional communications (a search for 'nature' on the website of the American Society of Landscape Architects alone turns up 4,300 hits, and for 'natural' 6,200 hits). However, the disappearance of the traditional concept of nature is not only unavoidable if we accept the notion of the Anthropocene; it might also lead to advantages if we perform a second change. Once the two simplified superblocks of nature and culture have fragmented into several elements we shall have an opportunity to consider the full complexity of the 'andscapes' instead of using overly simplified old notions like 'This is a natural area' or 'This is kept in a natural state'. We always should address the specific elements of an

existing or proposed open space – the oak, the skylark, the child, the granite, the goldenrod, the immigrant, the wind etc. This makes the understanding and description of a milieu much more precise than the simplified subordination to the two big blocks of nature or culture. But addressing the elements of a milieu is only the first step, because we have learned from Watsuji and Imanishi that the relationships between the elements are decisive – their sociality or in-betweenness (*aidagara*). Thus, as landscape architects it is our task to consider, for an 'andscape', the elements as well as their relationships – we could interpret 'landscape architecture' as 'designing an adventure of relationships'.

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#### **Endnotes**

[1] "In 2008, the Stratigraphy Commission of the Geological Society of London decided, by a large majority, that there was merit in considering the possible formalization of this term: that is, that it might eventually join the Cambrian, Jurassic, Pleistocene, and other

such units on the Geological Time Scale." (Zalasiewicz et al. 2010, p. 2228) This process will take many years and its ambitiousness makes the outcome uncertain.

- [2] Imanishi includes also non-living things in the world of living things: "If you are concerned with differences, then mankind, animals, plants and non-living things are all different. However, if you look at the similarities, then these are all part of this world and exist by the same basic principle of existence. There is then no reason to confine 'life' only to living things, but we can say that there is nothing without life and wherever things exist there is always life." (Imanishi 2002, p. 20) Thus, non-living things have life hard to understand from within a Western logical framework. Yet, it is obvious that minerals or water as non-living things feed living things and that they cannot be separated from the relational community of the world of living things.
- [3] Sometimes I have to refer to the German translation, because the English one is not accurate. Berque, who translated *Fudo* into French, goes so far that he recommends avoiding the English translation by Geoffrey Bownas. (Berque 2011)
- [4] Berque gives an interesting further explanation for the word 'moment'. It should be understood as 'momentum' as "a power of moving produced by the combination of two contrary (or different) forces, as in mechanics. In Watsuji, this means the dynamic unity of that which dualism has opposed: the human subject on the one hand, objective environment on the other hand." (Berque 2004, p. 391)
- [5] Edgar Morin has characterized this relation as *uniduality*, a fitting characterization for this unity of dual poles (Morin E. 1999. Seven complex lessons in education for the future. Paris, United Nations Educational, Scientific and Cultural Organization, p. 23ff)
- [6] Berque contributed to the theoretical discourse on landscape as editor of 'Cinq propositions pour une théorie du paysage' (1994) and 'Mouvance II Soixante-dix mots pour le paysage' (2006) or with his book 'Ecoumène : Introduction à l'étude des milieux humains' (2009).
- [7] As a reason for this failure, French colleagues mentioned to me that milieu is not something visual or something you can design, it is quite abstract and expresses 'only' a specific condition.

- [8] In 2008, the project received an award from the Japanese Institute of Landscape Architecture
- [9] It is beyond the scope of this article to describe the complex meaning and the history of the Japanese correspondence to the Western concept of 'nature'. Berque (1997, p. 135ff) has a good chapter on this subject in which he mentions that "countless studies have already been devoted to the subject."
- [10] Research project by the author, will be added after the peer review process
- [11] The Old Nidda-Meadows Airfield received the 2005 German Landscape Architecture Prize, the most prestigious professional award in Germany

# **Figures**

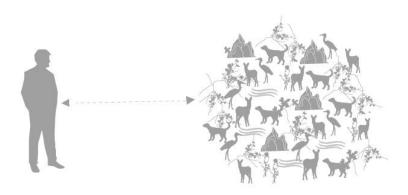


Fig. 1 (© Martin Prominski/ Christiane Kania)

The traditional concept of nature in the West: Nature is something beyond human influence, humans and culture are external – a dualistic concept

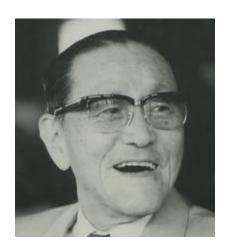


Fig. 2 (© Junichiro Itani)

Kinji IMANISHI (1902-1992)

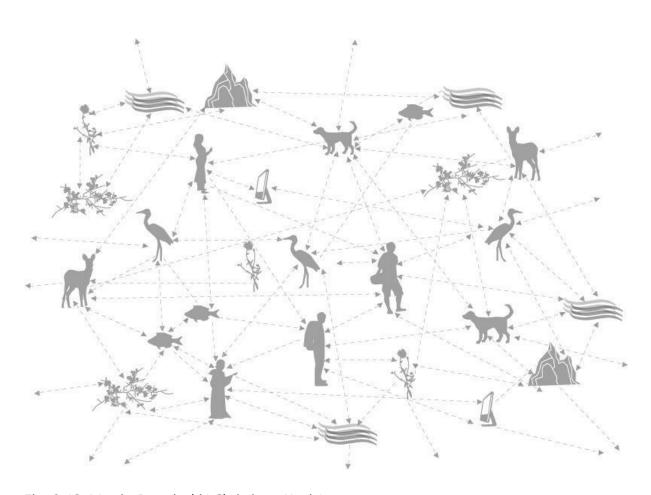


Fig. 3 (© Martin Prominski/ Christiane Kania)

The world of living things (*seibutsu no sekei*) by Imanishi: Humans, animals, plants, rocks, water, etc. are all part of a dynamic web of relations; an exclusive role for humans is not possible. The world of living things is structured by sociality – a unitary concept.



Fig. 4 (© Ediciones Sigueme)

Tetsuro WATSUJI (1889-1960)

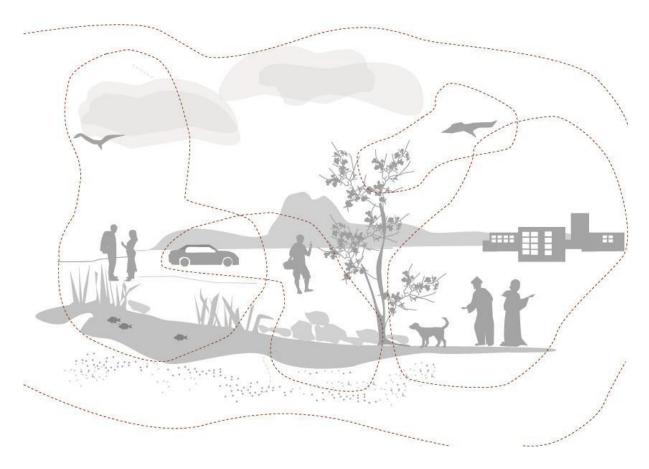


Fig. 5 (© Martin Prominski/ Christiane Kania)

Fudo by Watsuji: The world consists of an unlimited number of milieus in different dimensions. The foundations of a milieu are not the objects, but their relations. Each milieu is an open web and overlaps with other milieus. Isolation of humans from a milieu is impossible because of its relational character. Thus, Watsuji proposes 'in-betweenness' (aidagara) as a central characteristic of human existence – a unitary concept.



Fig. 6 (© Norihisa Yamamoto/ Ai-shokobutsu)

Location of the Old Fisheries Experiment Station in Mizumoto Park (plan upper right) and the situation before (plan bottom left) and after the transformation (centre)





Fig. 7 a+b (© Norihisa Yamamoto/ Ai-shokobutsu)

Situation at the Western edge of the Old Fisheries Experiment Station before (above) and after the transformation (below).





Fig. 8 a+b © (Norihisa Yamamoto/ Ai-shokobutsu)

Situation at the centre of the Old Fisheries Experiment Station before (above) and after the transformation (below). At the bottom, we see the quadrangular area of 40 x 40 meter, covered by a net, where small, elevated concrete basins from the former station have been kept and are used for breeding goldfish. Above comes the area with newly constructed concrete basins which have different depths of water to present a broad variety of water plants and fishes, followed by the two rice paddy fields with educational purpose. To the right is the channel with lotus flowers which demarcates the fenced off area (left) from the area with unlimited access (right).



Fig. 9 (© Martin Prominski)

An example of a small detail which expresses the attitude of 'sociality among all living things' (Imanishi): In the central area of the project where only native species are allowed, climbing plants grow close to a guardrail and the Japanese people from the site's

volunteer group are supporting them by sticks and weeding around the base. This human 'impact' on the growth of native species in a nature protection zone would be unimaginable in the West – here, such native climbers should grow 'naturally' – either they make it by themselves or should give way to stronger plants



Fig. 10 (© Martin Prominski)

Only a narrow strip of the former runway has been kept as a path. The rest of the asphalt has been crushed and the surfaces are left over for succession processes. In the back concrete slabs are stacked to form a viewing platform.



Fig. 11 (© Martin Prominski)

In the former parking area for military helicopters, the concrete was crushed to different sizes. Together with an deliberately uncontrolled water influence from a broken pipe underneath, a framework of different site conditions is given for an unforeseeable development of biotopes



Fig. 12 (© Martin Prominski)

Many school classes visit the park to learn about ecological processes and relations.



Fig. 13 (© Martin Prominski)

Adjacent to the remaining runway, which is used for skating etc., is the butterfly meadow. An important connection for pedestrians and cyclists is designed as an elevated path.