Umwelt theory seen from the perspective of *fūdo* theory: Uexküll, Watsuji, and Imanishi on nature, harmony, and totality

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Abstract. This paper investigates the contemporary meaning of umwelt theory by comparing it with $f\bar{u}do$ theory. The Japanese term ' $f\bar{u}do$ ' is similar to 'umwelt' as it carefully revises how subject and object relate to each other. $F\bar{u}do$ theory was developed by Tetsuro Watsuji (1889–1960), a Japanese philosopher; Kinji Imanishi (1902–1992), a Japanese biologist; and Augustin Berque (b. 1942), a French geographer and philosopher. First, this paper investigates Watsuji's view of the place of 'self' in the environment and Imanishi's view of the place of species in the environment. Second, it compares how umwelt and $f\bar{u}do$ theories address problems related to the subject and environment, harmony, the concept of nature, and disciplinarity, pointing out the parallelism between the two theories. Third, this paper examines the relevance and interpretation of umwelt and $f\bar{u}do$ theories in contemporary academic discourse, with a focus on the concepts of harmony and totality.

Keywords: umwelt; $f\bar{u}do$; environment; nature; Jakob von Uexküll; Tetsuro Watsuji; Kinji Imanishi

1. Introduction

 $F\bar{u}do$ theory concerns the environment, as advocated by Japanese philosopher Tetsuro Watsuji (1889–1960) in the 1920s and the 1930s. Influenced by contemporaneous trends, including the philosophy of Martin Heidegger, Watsuji argued that $f\bar{u}do$ appears as a 'two but one' phenomenon between the subjective and objective sides of the environment. $F\bar{u}do$ theory did not used to be widely known in international academic circles, but it has sparked interest recently, and two English monographs (Baek 2016; Johnson 2019) on Watsuji's $f\bar{u}do$ thought have been published successively. In sustainability studies, the term ' $f\bar{u}do$ ' is recognized

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as representing the "entwined relations" between human beings and nature (Anderson *et al.* 2022: 71). *Fūdo* theory shares many commonalities with Jakob von Uexküll's umwelt theory. They emerged in the same time period and the views on the environment the theories hold are similar. Both deny a clear dualistic division between the subject and the object. While Watsuji's interest was limited to the world of human beings, Japanese biologist Kinji Imanishi (1902–1992) widened the scope of *fūdo* theory to include the world of all living beings.

Interestingly, from the 1970s and the 1980s onward, both umwelt and *fūdo* theories have undergone semiotic interpretations. Umwelt theory was investigated in the light of zoosemiotics and biosemiotics by Thomas Sebeok and several successive scholars (Sebeok 1989[1979]; Favareau 2010). *Fūdo* theory was interpreted as *mésologie* (mesology) by Augustin Berque, a French geographer and philosopher (Berque 1986, 2000[1990], 2010[1999], 2014, 2022). Although these interpretations have appeared independently, they display shared interests. In his book *Écoumène*, Berque (2010[1999]: 194–195, 199–200) referred to Jesper Hoffmeyer's biosemiotic interpretation of Uexküll's umwelt theory. Hoffmeyer, in his *Biosemiotics*, showed interest in Berque's approach, positing that Berque 2004 proposes a similar view to biosemiotics from the standpoint of philosophical geography (Hoffmeyer 2008: 38). However, this similarity has not yet been investigated further. Hence, this paper aims to recommence the dialogue between the two by comparing the theories of their original advocators.

Umwelt and $f\bar{u}do$ theories have undergone almost a hundred years of accumulation of knowledge and they have numerous beneficial implications for sustainability and environmental studies. By exploring their history and comparing them, this paper attempts to showcase a new way of reading them. Sections 2 and 3 of the article investigate Watsuji's theory and Section 4 concerns Imanishi's theory. Section 5 analyses parallels between Uexküll's umwelt theory and $f\bar{u}do$ theory and their characteristics. The conclusion explores their meaning in contemporary academic discussions.

2. Tetsuro Watsuji and his book Fūdo

In this section, after the brief explanation of the term ' $f\bar{u}do$ ', the structure of the contents of Watsuji's book $F\bar{u}do$ is analysed. The word ' $f\bar{u}do$ ' has its roots in ancient China.² According to Morohashi's *Daikanwa jiten* [Sino-Japanese Grand

² 'Fūdo' is Japanese pronunciation. Its Chinese pronunciation (modern standard Chinese) is 'fēngtū', whereas the Korean pronunciation is 'pungto'. All are written in the same Sinogram characters (which are not phonetic signs but ideograms) as 風土. In East Asia, the Sinogram

Dictionary], one of the most authentic Sinogram dictionaries in East Asia, the word already appeared in the Chinese historiography *Guoyu* [Discourses of the States] (Morohashi 1943: 338). The exact year of the completion of that book is unknown, but as it compiles and records the deeds and speeches of the rulers from the Zhou dynasty (c1046–256 BC) to dynasties in the Spring and Autumn periods (770–453 BC), it is argued that it was edited in the 5th–4th centuries BC.

The term ' $f\bar{u}do$ ' consists of the words ' $f\bar{u}$ ' ('wind' or 'air') and 'do' ('soil' or 'the earth'). In a materialistic interpretation, wind represents the air, whereas soil represents the earth. However, in addition to such connotations, ' $f\bar{u}$ ' has the meaning of something perceived by human beings. The wind is invisible and helps us sense air flux; hence, the wind represents human perception. 'Do', on the contrary, represents solid ground on which humans are standing.³ Regarding the meaning of ' $f\bar{u}do$ ', based on examples of Chinese literature and documents from the 5th to 8th centuries, Morohashi's dictionary states that the term signifies both the natural aspects of the environment, including land and climate, and those of humanity, including agriculture and folklore (Morohashi 1943: 338).

Tetsuro Watsuji elaborated it as a philosophical term. Watsuji was a leading philosopher of early-20th-century Japan and a member of the so-called 1.5th generation of Japanese modern philosophy after Kitaro Nishida (1870–1945), the founder of the Kyoto School of philosophy. Although he was not Nishida's pupil, Watsuji was invited to Kyoto Imperial University by him as a lecturer, and he served there for nine years before returning to Tokyo Imperial University as a professor. His main intellectual scope was vast; his voluminous publications – his *Complete Works* (Watsuji 1991–1992) consists of 27 volumes – cover not only philosophical topics but also history, aesthetics, and religion.

Watsuji is famous for his elaborations on the $f\bar{u}do$ theory; in Japan, the notion of $f\bar{u}do$ is connected to his name. When you consult the Japanese dictionary, under the entry ' $f\bar{u}do$ ' you will find Watsuji's name (Nihonkokugodaijiten dainihan henshu iinkai, Shogakukan kokugojitenhenshubu 2001: 699). He elaborated the theory intensively in the 1920s and 1930s. Although Watsuji did not mention

character is used as a *lingua franca* in written language. Although pronunciations are different, the traditional meanings and connotations of these three terms in the three languages are almost the same. These terms have been used in these languages as part of ordinary vocabularies.

Interestingly, the term 'umwelt' has a structure similar to the term 'fūdo'. The prefix 'um-means 'something around the subject'. As already mentioned above, 'fū' means 'wind', and wind is something that exists um or herum, namely around a subject. Uexküll calls objective reality 'Welt' (world) and the subjective reality 'Umwelt' (Uexküll 1928: 228). In this vein, Uexküll's notion of the umwelt and the East Asian term $f\bar{u}do$ are guided by the same idea. This point is discussed in more detail in the following sections.

the name of Uexküll anywhere in his works, investigating the historical context reveals that Watsuji's $f\bar{u}do$ and Uexküll's umwelt theory developed in a similar intellectual environment and there are parallels between them, as discussed in Section 5 below.

Watsuji established his *fūdo* theory in his book *Fūdo*: *Ningengaku teki kousatsu* [Fūdo: An Anthropological Reflection] (Watsuji 1962[1935]).⁴ In the preface of the book, he explains that he wrote the book partly because he wanted to react to Martin Heidegger's *Sein und Zeit* (1927) (Watsuji 1962[1935]: 1). He read Heidegger's work while in Germany as a visiting scholar of the Japanese Ministry of Education between 1927–1928. Soon after that he returned to Japan where he gave lectures on this topic at the University of Tokyo in 1928/29. Also, in 1929–1935 he published several philosophical papers on the topic in *Shiso* [Thought], one of the most prominent Japanese philosophical journals.

One of the reasons why Watsuji went to Germany was the close relationship between the philosophical worlds of Kyoto and Germany, especially regarding Edmund Husserl and Heidegger in southwestern Germany. Several colleagues and students of Watsuji's at Kyoto Imperial University, including Hajime Tanabe, Kiyoshi Miki, Shuzo Kuki, and Tokuryu Yamanouchi, befriended, or studied under, Husserl or Heidegger (Yusa 2002: 181). Nishida did not go abroad in his lifetime, but he corresponded with Husserl – their letters can be found in Nishida's complete works and Husserl's collection of correspondence (Elberfeld, Arisaka 2014: 17–18). Watsuji met neither Heidegger nor Husserl while he was in Germany, but he and Heidegger were of the same age – both were born in 1889 – and they might have shared a similar *Zeitgeist*.

In his book $F\bar{u}do$, Watsuji criticized Heidegger for overemphasizing temporality and individuality as human existential problems. In contrast, Watsuji emphasized the importance of spatiality and human interdependency. However, what he wanted to achieve in the book was more than merely criticism of Heidegger. In $F\bar{u}do$, he wished to establish a new method for understanding the subject and the environment. He himself called his standpoint ' $f\bar{u}dogaku$ ' – 'gaku' means 'discipline' or 'science' in Japanese; hence, he wanted to create a new science of $f\bar{u}do$ or $f\bar{u}dology$.

To be a cornerstone of a new environmental science, his book provides three frameworks: first, to philosophize the notion of $f\bar{u}do$ (Watsuji 1962[1935]: Ch. 1); second, to apply it to the typology of human characters according to climatic

⁴ Hereafter, reference to and citations from Watsuji's $F\bar{u}do$ are based on the Japanese version. Its English translation is found in Watsuji 1971[1935], but it is a partial translation and lacks the translation of Ch. 5 of the original Japanese book. Augustin Berque translated the book into French (Watsuji 2011[1935]).

environments (Watsuji 1962[1935], Ch. 2, 3, 4); and third, to position the $f\bar{u}do$ theory in the history of philosophy (Watsuji 1962[1935], Ch. 5).

As for the philosophizing of the notion, it will be investigated in detail in the next section, but at this point Watsuji's basic standpoint should be outlined. At the very beginning of the book, he underlines a distinction between *fūdo* and nature.

What we call $f\bar{u}do$ hereafter in this book covers the following categories concerning the environment: climate, weather, quality of soil, geological character, physical landscape, scenery, etc. From the ancient time, it has also been called a *suido* (water and soil). Certainly, we can point out that behind such usage, there must be an ancient worldview on nature, which grasps nature as an environment for human beings, and thinks that it consists of soil, water, fire, and wind. Yet, in this book, we problematize it not as 'nature' but as ' $f\bar{u}do$ '. We must say that we have a significant reason for this. (Watsuji 1962[1935]: 7)⁵

Here, he clearly distinguishes $f\bar{u}do$ from nature. He criticizes naturalism, which regards nature in the natural scientific sense as the only true nature. He says, "It should be questioned whether $f\bar{u}do$ as a reality in everyday life can be seen as a natural phenomenon or not." (Watsuji 1962[1935]: 7) What is seen as a natural phenomenon itself is an interpretation which regards a particular phenomenon as natural. There already is a lens that interprets ordinary everyday experiences as natural phenomena.

Watsuji argues that $f\bar{u}do$ is represented as a human character because the inside and outside of human existence, or its subjective and objective sides, are inseparable. People living in the same environment have similar characteristics; every environment has its typical human characteristics. This is a phenomenon of $f\bar{u}do$. He demonstrates it using three examples: the monsoon, the desert, and the pasture. In the $f\bar{u}do$ of monsoon in East Asia, where natural force (including typhoons and a humid climate in summer) dominate and agriculture necessitates cooperative work, the passive tendency of human mentality is apparent. In contrast, in the $f\bar{u}do$ of the desert in the Middle East, the individuality of human beings is conspicuous; experiencing thirst in the midst of the desert or under piercing sunshine, an individual must confront God as an individual. This $f\bar{u}do$ of the desert gave birth to monotheism. This typology is based on Watsuji's experience of a voyage by a ship from Japan to Europe via the Indian Ocean on his way to Germany in 1927.

⁵ The English translations from Watsuji, Imanishi, Uexküll, and Kant's works are mine (M. T.). As for Watsuji's *Fūdo*, I have consulted Geoffrey Bownas' English translation (Watsuji 1971[1935]).

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In $F\bar{u}do$, Watsuji wanted to position his theory in the context of the history of Western philosophy. In Ch. 5 of $F\bar{u}do$, he points to the works of Herodotus, Thucydides, and Hippocrates as the origins of $f\bar{u}do$ thought. However, his main focus is on the works of Herder, Kant, Fichte, Hegel, and Marx – thinkers of the late-18th- to early-19th-century German idealism. Wastuji argues that Herder began $f\bar{u}do$ logy by problematizing it as a 'science of mind' (seishin kagaku teki) (Watsuji 1962[1935]: 205). He values Herder highly because he "does not distinguish mind from nature" (Watsuji 1962[1935]: 220). For Watsuji, the history of thought on the subject and environment in Germany is a reaction to Herder's problematics. Interestingly, all the works he mentioned in his historiography of $f\bar{u}do$ thought were written by European thinkers. The term ' $f\bar{u}do$ ' came from ancient China, but Watsuji had a desire to position his $f\bar{u}do$ theory in the history of Western thought.

Hence, in the book $F\bar{u}do$, Watsuji aimed to establish a new philosophical discipline which (1) analyses human being's existence in terms of space; (2) can contribute to the understanding of the typology of human characteristics; and (3) can be positioned in the history of Western thought.

3. Fūdo as a form of self-understanding: Philosophical structure of the fūdo phenomenon

In this section, the philosophical structure of Watsuji's $f\bar{u}do$ theory is analysed in detail. How did Watsuji philosophize the concept of $f\bar{u}do$? First of all, he distinguishes the ordinary usage of the term from that of the philosophical one. In the ordinary sense, $f\bar{u}do$ signifies a relational aspect of the environment to human beings. A Japanese dictionary defines ' $f\bar{u}do$ ' as:

Climate and condition of soil in the place. Natural condition. State of the place. Especially $f\bar{u}do$ means the environment, which affects its people's characters and culture. (Shinmura 2008: 2423)

In this citation, the dictionary emphasizes that $f\bar{u}do$ influences people. However, Watsuji argues that this is not the true $f\bar{u}do$. He claims:

It is often said that human beings are not only influenced by the $f\bar{u}do$, but also human beings in turn work on the $f\bar{u}do$ and transform it. [...] But such a view does not catch the true nature of $f\bar{u}do$. (Watsuji 1962[1935]: 14)

In the ordinary sense, the environment and human beings are in a mutual relationship. Hence, people tend to think that $f\bar{u}do$ and human beings are also in a mutual relationship. In contrast, Watsuji declares that this is not true. The relation between $f\bar{u}do$ and human beings cannot be represented using the term 'mutual'. The notion of 'mutual' presupposes the division between $f\bar{u}do$ and human beings in the first place, whereas Watsuji claims that $f\bar{u}do$ and human beings are not separated.

Watsuji does not consider the environment as an objective thing. Rather, he thinks that when we are in the environment, we are already coupled with the environment; thus, there is primarily no clear distinction between the subjective and the objective. He adds that when we perceive something, we are already outside our 'self' (jiko)⁶ (Watsuji 1962[1935]: 9). If we feel cold, the coldness itself does not exist inside our 'self'. If we regard our 'self' as a mental entity which exists inside us, the 'self' cannot feel the coldness outside the 'self' because the 'self' keeps staying inside us. Still, we can feel coldness outside our 'self'. As far as we can feel the coldness outside our 'self', that 'self' must already be inside the coldness outside the 'self'. In this sense, when we perceive something, our 'self' already exists outside the 'self'. This is the basic structure of $f\bar{u}do$. In explaining this, Watsuji refers to Heidegger's emphasis on existence's 'outside-ness (ex-sis-tere)' (Watsuji 1962[1935]).⁷

Hence, the 'self' and the environment are not separated. If we are outside already, to feel cold means that we are already in the cold. The 'self' that feels cold inside the self and the 'self' that feels cold outside the 'self' are the same. It is not the two distinct 'selves'. Those two selves are 'two but one' and may be seen as a contradiction. Fig. 1 illustrates such a state. The 'self' which is 'two but one' cannot be properly represented as a figure because of its contradictory nature. However, as will be shown below, Watsuji sees it not as a mere contradiction; rendering Huayan Buddhist terminology, he describes such a state as 'sousoku furi' (mutual identification and non-separation) (Watsuji 1962[1935]: 15) and thinks of it as a fundamental condition of human beings.⁸

⁶ Here, I use the term 'self' as a noun, rather than a pronoun. The problem of the 'self' as a noun is discussed in Uehara 2006. Philosophical implications of the 'self' in Japanese philosophy are discussed in Davis 2020.

⁷ Despite Watsuji's reference, the term 'ex-sistere' does not seem to appear in Heidegger's Sein und Zeit (Heidegger 1972[1927]).

When using the four-cornered logic, or *catuskoti* in Buddhist terms (Buswell, Lopez 2014: 172), the problem discussed here can be written as the following four propositions:

⁽¹⁾ being in the outside (A);

⁽²⁾ being not in the outside $(\neg A)$;

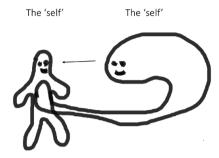


Figure 1. The 'self' looks at the 'self' from outside the 'self'. Modification of the figure in Terada 2023: 52.

"When the 'self' is outside the 'self', there, the 'self' confronts the 'self' from the outside", says Watsuji (1962[1935]: 9). Specifically, he calls it 'self-disclosure' (*jikokaiji*) (Watsuji 1962[1935]: 9). In being implemented through this mechanism, our seeing of our 'self' and being seen by our 'self' are acted by the identical 'self'. In addition to 'self-disclosure', Watsuji (1962[1935]: 22), also calls it 'the form of self-understanding' (*jiko ryokai no kata*), arguing that "such kind of self-understanding is not to understand our 'self' as a subject, which can feel coldness and hotness or can appreciate beauty of flower" (Watsuji 1962[1935]: 11). Rather, this self-understanding appears as "an act of creative and free construction of our 'self' (*wareware jisin no jiyunaru keisei*)" (Watsuji 1962[1935]: 12). The phenomenon of *fūdo* as a 'form of self-understanding' is a contemplation as well as a practical act.

This may be thought to be not a structure of the environment but a structure of consciousness. However, consciousness and the environment are closely related and mutually embedded. When a human being exists in the world, human existence already presupposes the fact that it has a body and consciousness. In this vein, $f\bar{u}do$ is not a theory of the environment but a theory of human existence.

⁽³⁾ being both in the outside and not in outside $(A \land \neg A)$;

⁽⁴⁾ being both not in the outside nor not not in the outside $(\neg(A \lor \neg A))$.

The third is a contradiction, whereas the fourth is not a contradiction. In present logic studies, the standpoint that admits this fourth state is called 'dialetheism'. The Buddhist logic, or the exact standpoint of the historical Buddha, relies on such a view (Priest 2019: 17). Watsuji was interested in Buddhist philosophy; his doctoral thesis (Watsuji 1962[1927]) was on the philosophy of Early Buddhism.

⁹ This view relates the problem of gaze with consciousness and self-awareness. Danish philosopher of phenomenology Dan Zahavi calls it the 'reflection theory of self-awareness' and positions John Locke's theory described in *An Essay Concerning Human Understanding* (1690) as its origin (Zahavi 2020[1999]: 17).

By introducing the term 'ningen', a Japanese word that refers to human beings with an emphasis on interconnectedness, Watsuji (1962[1935]: 15) argues that human beings should be seen not as individuals but as societal entities. Human beings are individual and collective. It might be thought that it is not possible for a substance to be one and many at the same time. However, at the base of human existence, there is such a state similar to a contradiction, he argues (Watsuji 1962[1935]: 15). Watsuji calls this state a 'movement of the absolute negation (zettai hiteisei no undou)'10 and adds that "such a movement does not happen without having a body with subjecthood" (Watsuji 1962[1935]: 15). This utterance shows Watsuji's criticism of the mind–body dichotomy, which deprives subjecthood of the body and regards the body as a mere object (Watsuji 1962[1935]: 17).

Watsuji criticizes the ordinary view which regards $f\bar{u}do$ as an equivalent to an objective environment. He thinks that although such a banal view observes human beings from the outside, the phenomenon of $f\bar{u}do$ is the phenomenon of human self-understanding and as such it is not observed from the outside but rather only seen in the inside. In this view, $f\bar{u}do$ is thought to be a system in which the observer is already a part of it as a 'self' and the relationship between the system and the self is questioned.

To sum up Watsuji's $f\bar{u}do$ theory, the following points can be brought out: (1) It approaches $f\bar{u}do$ from the viewpoint of the 'self' and cognition. (2) It revises the distinction between the inside and the outside of the 'self' and by doing so, it is the revision of dualism of the subject and object. (3) In the theory, the separation of the body from the mind is criticized. The body is treated as a fundamental 'place' of the $f\bar{u}do$ phenomenon. (4) Also, it denies natural scientific naturalism. (5) The $f\bar{u}do$ phenomenon is proposed to be a type of oneness but is presented as 'two but one', a state similar to a contradiction.

4. Extension to the world of living beings

In this section, the development of $f\bar{u}do$ theory by Kinji Imanishi is analysed. Watsuji's original $f\bar{u}do$ theory did not include the world of non-human beings. Kinji Imanishi filled this lacuna. Imanishi started out as an entomologist¹¹ and

¹⁰ Watsuji does not mention Kitaro Nishida's name here, but Watsuji's usage of the words 'the absolute negation' (*zettai hiteisei*) reminds us of Nishida's notion of 'absolute contradictory identity' (*zettai mujunteki jiko douitsu*) (Nishida 1949[1939]).

¹¹ His expertise was on mayflies, and there are 18 species of mayflies whose scientific names bear Imanishi's name, including *Ecdyonurus tigris Imanishi*, 1936; *Ecdyonurus kibunensis Imanishi*, 1936; *Epeorus hiemalis Imanishi*, 1934; *Epeorus aesculus Imanishi*, 1934, and others

broadened his view onto ecology, primatology, and evolutionary theory. He was also a philosopher of biology and one of the founders of the Kyoto school of primatology (Asquith 2002). Although he himself did not call his standpoint $f\bar{u}do$ theory in his lifetime, at present his views are treated as an important part of it (Berque 2010[1999]: 197).

We cannot find Uexküll's name in Imahishi's *Complete Works*, which comprise 13 volumes (Imanishi 1974–1994); however, as we will see in detail below, the similarity of Imanishi's theory to Uexküll's is apparent and widely acknowledged (Yamagiwa 2023: 154).¹²

Imanishi's main interest lied in the problem of the whole and the part of the world, which consists of human beings, living beings, and things. In doing so, he wanted to find a way how to analyse the subject and environment in a single framework. He approached the problem of order in the world in terms of its origin, co-existence, and evolution. For him, the world was nature, and unlike natural sciences, he wanted to have a true method to analyse nature as it is.

In his first book, *Seibutsu no sekai* (*The World of Living Beings*; Imanishi 1974[1941]), he already fully established his viewpoint on the world. The book has five chapters, entitled "On similarity and difference", "On structure", "On environment", "On society", and "On history". By glancing at them, one can see that there is no particular word that indicates that it is a book on living beings. It begins with the problem of similarities and differences between things in the world and proceeds with the problem of the structure, form, and function of living beings. It is a highly theoretical book, which seems to be more about philosophy than biology. ¹³ The reason why the book is constructed in such a way is because Imanishi wants to analyse the world of living beings in terms of the problem of our worldview.

The reason why we can distinguish similarity and difference in things in this world has deep roots in the fact that the things that construct the world have

(Ishida 2002: 155-160).

¹² Imanishi was eager to absorb contemporary European scientific thoughts. Pamela Asquith, an anthropologist and a historian of Japanese anthropology who translated Imanishi's work into English, investigated Imanishi's library and notebooks closely, arguing that Imanishi absorbed Western sources including "themes [...] that lost their central place in Western science" as far as he could reach and developed these in his own way in the next 40 years (Asquith 2015: 203). It is probable that Imanishi knew Uexküll's theory even though he did not mention it. Asquith claims that because of Imanishi's unique commitment to Western sources, the investigation of the actuality of his theory in the context of contemporary science is important.

¹³ The structure of the book is similar to Uexküll's *Theoretische Biologie*; significant portions of the first chapters of *Theoretische Biologie* are dedicated to the philosophical problem of space (*Raum*) and time (*Zeit*), referring to Kant (Uexküll 1928, Ch. 1, 2).

been differentiated and developed from the One. We ourselves neither emerged suddenly nor came from other world, hence we are not strangers to this world; we ourselves must have experienced the differentiational and developmental process of the world, and such experience must have been embedded in our body without our awareness as such. (Imanishi 1974[1941]: 12)¹⁴

In the citation, he argues that all the things in the world are differentiated and developed from the One and hence they have similarities and differences. What should be noted here is that he argues this in terms of cognition. He thinks that through similarity we can cognize things. For Imanishi, cognition is not a mere mental function but a way of commitment to the world. He posits, "to cognize is not a mere knowing, but a kind of act of making things into his or her own belongings. By cognizing, we can treat things as our extension." (Imanishi 1974[1941]: 56)

As cognition is a practice between the subject and the environment, the subject's perception of the environment is regulated by such a relational structure. Imanishi says, "As far as living beings can cognize, the environments appear as the environments for those living beings. Such environments are the contents of those living beings' worlds (*sekai no naiyo*) as well." (Imanishi 1974[1941]: 59) This utterance indicates that Imanishi thinks that the multiplicity of the environment comes from the multiplicity of the subjecthood.

Imanishi argues that the environment and the living beings are one:

It was not the case that there had already been an environment or an outer surrounding at first, and, then, there emerged living beings afterwards. Environment is, like living beings, a part of this world, which had developed from the One. In this sense, environment and living beings must be the same thing. (Imanishi 1974 [1941]: 53)

This oneness between the environment and living beings implies that the environment is already the subject. Specifically, the environment is already inside our body because we cannot change our body at will. If we could change our bodies freely, it would be under our control. However, as the basic structure and form of the body cannot be controlled by our will, the body belongs not to us but to the environment. Imanishi (1974[1941]: 67) says, "Our body should be regarded as a part of the environment." He describes this as follows: "Environmentalization of subjecthood is subjectivization of the environment, and subjectivization of the environment is environmentalization of subjecthood." (Imanishi 1974[1941]: 146)

¹⁴ In translating the original Japanese text of *The World of Living Beings* into English, I consulted the existing English translation by Asquith *et al.* (Imanishi 2002[1941]). The same applies below.

According to him, a subject and its environment cannot be separated; thus, there is no clear boundary between them.

From this viewpoint, he explains how living beings position themselves in this world as individuals and as a collective. Because all the things come from the One, all the living beings in the world co-exist harmoniously by their nature. Imanishi calls the co-existence of living beings 'sumiwake' in Japanese (Imanishi 1974[1941]: 95). 'Sumi' is a verb which means 'to live' or 'to habitate', whereas 'wake' means 'to share'; hence, 'sumiwake' is literally translated as 'sharing the habitation'. His theory of sumiwake is explained briefly in the fourth chapter "On society" of *The World of Living Beings* and analysed in detail in his second book, Seibutsu shakai no ronri (The Logic of Society of Living Beings, Imanishi 1974[1949]). In the book, Imanishi himself calls sumiwake 'habitat segregation' in English (Imanishi 1974[1949]: 65).

The theory of *sumiwake* seems to be similar to the niche theory in biology but is different from it in that it presupposes a kind of universal unity behind the individual living beings. For Imanishi, the environment is the aggregation of things that have the same one origin; hence, *sumiwake* is a phenomenon enabled by this oneness between living beings and their environment:

One of the basic principles of living beings must be the avoidance of unnecessary conflict and the quest for a better equilibrium. If those which have similar characters construct a society, its members can gain desirable equilibrium in it. When such societies exist in the same habitat, member societies have conflicts of interest on the one hand, but these societies are compatible with each other on the other hand. (Imanishi 1974[1941]: 96)

Imanishi argues that species are the agents who coexist in a habitat and calls this *sumiwake*. When species coexist in a habitat, Imanishi calls the individual species, which creates habitat segregation, 'a coordinated society' (*doishakai*). For him, a species is already a society. The most notable point of his habitat segregation theory is that it presupposes the real existence of species and, hence, the real existence of coordinated societies. He is a realist regarding species. He says: "The numbers of the species equal numbers of societies." (Imanishi 1975[1967]: 5)

From this perspective, he focused on evolution in the 1970s–80s. During that time, he successively published several books including *Watakushi no shinkaron* (My Theory of Evolution; Imahishi 1975[1970]), *Daawin ron* (Treatise on Darwin; Imanishi 1993[1977]), *Daawin wo koete* (Beyond Darwin; Imanishi, Yoshimoto 1978), and *Shutaisei no shinkaron* (Evolution Theory of Subjecthood; Imanishi 1980).

In those publications, Imanishi criticizes the populational thinking of main-stream Darwinian biology. Also, he negates the concepts of natural selection and survival of the fittest. Instead of those notions, he invented the term 'shushakai'. 'Shu' means 'species' and 'shakai' means 'society'; hence, the literal translation of 'shushakai' is 'species society'. Imanishi (1974[1949]: 96ff.) himself proposed the term 'specia' as a non-Japanese scientific term for 'shushakai'. 15

As already mentioned, Imanishi was a realist as regards species. He thinks that if individual living beings exist, the species that consists of individual living beings also exists. The reason why he thinks so is the following:

When life emerged on Earth 3.6 billion years ago [...] many high molecules transformed into individual living beings. At that moment, what emerged was not only many individual living beings, but also groups that consisted of those individuals. In other words, together with many individuals, the societies of the individuals emerged simultaneously. [...] If so, individuals and species societies should be regarded as the 'two but one [futatsu nishite hitotsu no]' thing. Neither of them comes first. They emerged simultaneously. (Imanishi 1984: 107–108)

As seen in the citation, Imanishi's realism of species is a logical consequence of his view on the emergence of life. He applies this view to evolution. He argues that, as species and the individual are 'two but one', seen from a long time scale the change at the species level and that at the individual level must be treated as a simultaneous phenomenon, as a whole (Imanishi 1975[1970]: 212). As for the cause of the changes in the individual and the species, he argues that the individual and the species change by themselves. He denies the mechanism of natural selection. For him, this was a problem of subjecthood (*shutaisei*) or a type of agency.

Furthermore, Imanishi claims that all substances on Earth occupy their own space. He thinks that they are structured in space, and they have a tendency to keep such spatial structures stable. However, at the same time, things are in temporality, and temporality has a tendency to collapse such structures; structural change is unavoidable in a world that has time. As far as living beings live in space and time, they should adopt temporal change by means of changing the body. This change in the bodies of living beings is not caused by something, but is already structured by the fact that they live in space and time. Phenotype change is already embedded in all species. Imanishi posits that it is the same phenomenon as the ageing of individual living beings and a type of *jiko undou* (auto-movement).

¹⁵ As for the non-Japanese scientific term for 'shushakai', instead of 'specia', Augustin Berque (2021) proposes the term 'speciety', which seems to catch the nuance of 'society' better than 'specia'.

Although the growth of the individuals and the evolution of the species are matters which happen on different time scales, both are regarded as 'courses [koosu]' on the timeline; they should be regarded as the trace of auto-movement of subjecthood [shutai no arawashita jiko undou no kiseki]. (Imanishi 1980: 206)

Imanishi explains that living beings change because they must change (Imanishi 1980: 202). He himself admits that it sounds like a typical Zen claim. When you see the pathway of your life, there must be only one way, and it brought you here because it had to bring you here. The Japanese term 'koosu' (course) has the connotation of the pathway and way. It may remind us of Taoism. Imanishi himself admits that this thought is similar to that of Laozi and Zhuangzi (Imanishi 1990[1987]: 51). ¹⁶

Moreover, Imanishi thinks that the problem of change is the problem of agency. He thinks that Nature is the subjecthood of agency, because Nature changes by itself. He denies the selection or control by God or any other agent than Nature. He argues that living beings have the ability to change by themselves and calls it 'shutaisei', which is translated into English as 'subjecthood' (Imanishi 1990[1987]: 211–217). Imanishi questions the notion of struggle in Darwinism by asking whether Nature is harsh for living beings (Imanishi 1984: 45). According to him, the principle of Nature must be the concepts of 'daiji daihi' ['maitri' and 'karuna' in Sanskrit (Buswell, Lopez 2014: 424, 518) and 'great empathy' and 'great compassion' in English] of Buddhist philosophy (Imanishi 1984: 36).

To sum up, (1) Imanishi's theory is based on his view that all things in the universe came from the original oneness. (2) From this perspective, he identifies the order of societies, which consists of multiple species, and calls it 'habitat segregation'. (3) As he admits the agency of species, he thinks that evolution occurs as a natural consequence of Nature's course. (4) Unlike Darwinism, his thought about the oneness leads him to believe that Nature is a place of empathy and compassion rather than struggle, competition, and selection.

5. Parallels between umwelt and fūdo theories

As already indicated, there are parallels between Watsuji's and Imanishi's $f\bar{u}do$ theory and Uexküll's umwelt theory. This section investigates their parallels regarding five topics and positions them in philosophical and historical contexts.

¹⁶ It is interesting that although Imanishi did not mention the name of Charles Sanders Peirce, his concept of 'course' (*koosu*) seems to be the same as the notion of 'tendency' in Peirce (CP 6.14; 1935[1891]) discussed by Jesper Hoffmeyer (1996, Ch. 3) from the viewpoint of biosemiotics.

5.1. Relation between the subject and environment

Watsuji and Imanishi thought that there is no clear boundary between the subject and environment. Uexküll also thinks that the subject and environment are connected in a way that cannot be divided clearly. He argues this, using his model of a functional circle (*Funktionskreis*).

Ueküll's functional circle model consists of the perceptual world (*Merkwelt*), actional world (*Wirkungswelt/Wirkwelt*¹⁷), inner world (*Innenwelt*) of the subject, and the object. The former two relate to the outer world (*Außenwelt*) and, as Uexküll (1928: 100) says, "both the actional word and the perceptual world configure one coherent totality, which I call umwelt". In the illustration of the model, the perceptual world, actional world, and inner world of the subject are connected via an arrow, which represents the flow of stimuli (*die Reize*). In the illustration, the arrow seems to be connected to the object, but if you look closely, it is not (Uexküll 1928: 105, 2013[1921]: 63; Uexküll, Kriszat 1970[1934]:11). There are gaps between the ends of the arrow and the object, which are represented as blanks in the illustration. As there are gaps, the circle is not perfect but broken. It means that the object and the subject are disconnected. The fact that Uexküll calls it a 'circle', although it is broken, means that he thinks that, although the subject and the object are physically disconnected, they are still somehow connected.

From the perspective of the organism, there is no distinction between the perceptual world and the actional world; they are not two worlds, but one world. The distinction is an interpretation by the observer. Uexküll (2014[1921]: 63) states, "What the observer of the umwelt, who is standing outside, can see is only the fact that there are things whose meanings only belong to those particular animals." For the animals themselves, there is no boundary between the perceptual and actional worlds.

Uexküll thinks that the subject and umwelt form the One, namely they "construct a whole (ein Ganzes)" (Uexküll 1980[1935]: 140).

The whole functional circle, which encompasses the inner world and the umwelt (which in turn is split into the perceptual world and the actional world), forms a plan-suitably constructed whole (ein planmäßig gebautes Ganzes), in which each part belongs to the other and nothing is left contingently. (Uexküll 1928: 100)

Uexküll thinks that the functional circle is an indivisible whole. In the circle, every element is interdependent and inseparable. In this sense, although there are parts

¹⁷ The term 'Wirkungswelt' appears in Uexküll 2014[1921]: 63 ff., whereas the term 'Wirkwelt' can be seen in Uexküll 1928: 105 and Uexküll, Kriszat 1970[1934]: 11.

in the functional circle, it is the One (eine Ganze). He uses the terms 'planmäßig' and 'Planmäßigkeit'. 'Mäßig' means 'suitable' or 'fitting'; hence, this paper translates the terms as 'plan-suitable' and 'plan-suitability', respectively. Using the word 'plan-suitable', he presupposes that parts should follow the order of the whole, as the whole and its parts are already interdependent. In this vein, what happens in the part must follow the order of the whole.

Uexküll's functional circle indicates no clear distinction between the subject and the environment. Although their focal points are different, $f\bar{u}do$ theory and umwelt theory share the same standpoint concerning the revision of the relationship between the subject and the object.

5.2. Plurality of umwelts

Watsuji and Imanishi consider $f\bar{u}do$ as plural phenomena. Specifically, as the subject and $f\bar{u}do$ is 'two but one', every $f\bar{u}do$ belongs to every subject. From this standpoint, Watsuji pursued the typology of $f\bar{u}do$. In his book, he proposes three types, namely, the $f\bar{u}do$ of the monsoon, of the desert, and of the pasture, hypothetically. Imanishi proposes sumiwake, habitat segregation. He thinks that every species has its own society (specia) according to its environment. A similar thought is seen in Uexküll's writings:

If you further imagine that a subject is bound to the same object or to different objects by several functional circles, you get an insight into the first fundamental principle of umwelt theory: all animal subjects, the simplest as well as the most complex, are fitted into their umwelts with the same perfection (*Vollkommenheit*). The simple animal corresponds to a simple umwelt, the multifaceted one to an equally richly structured umwelt. (Uexküll, Kriszat 1970[1934]: 11)

Uexküll argues that an animal has its own umwelt according to its complexity. Although there are degrees of complexity, the ways through which they are fitted into their umwelts are the same.

In this vein, Watsuji, Imanishi, and Uexküll agree that it is not the case that there is only a single objective world. Uexküll (1928: 74) claims, "You must then, of course, renounce the beloved belief in an absolute material world with its eternal laws of nature. And you have to admit that it is the laws of our mind that build and sustain our human world."

According to Watsuji, Imanishi, and Uexküll, the single objective world does not exist, and every subject has its own umwelt. The number of umwelts is the same as the number of subjects. The world is the sum of such types of multiple umwelts.

5.3. Notion of harmony

Through fūdo theory, Watsuji and Imanishi quested for a harmonious order of the world of humans and living beings. In Fūdo, Watsuji did not discuss harmony to any considerable degree, but later, in his three-volume book *Rinrigaku* (Ethics; Watsuji 1962[1937], 1962[1942], 1962[1949]), he developed his ideas further based on what he wrote in $F\bar{u}do$. There, he proposes a way for a harmonious world order to be realized. Watsuji (1962[1949]: 347) claims that multiple communities, including familial, regional, economic, and cultural communities, have a natural tendency to realize the 'necessary order' (chitsujo ga arubekiyouni). For him, the history of civilization is a process in which the pursuit of the 'universal ethical pathway' (huhentekina jinrinno michi) had been practised by peoples (Watsuji 1962[1949]: 349). He thinks that a situation should be realized in which every nation's culture develops in its own way and, at the same time, these different cultures 'symphonize' (kokyosuru) (Watsuji 1962[1949]: 407). To do so, understanding $f\bar{u}do$ should play the key role, Watsuji (1962[1949]: 408) thought. As the metaphorical use of the term 'to symphonize' reveals, for Watsuji, the world should not be a place of conflict, fighting, or competition but a place of harmony. Similar to Watsuji, as we have seen above, Imanishi thought that the principle of the world of living beings is not antagonistic but co-existential and compassionate.

Uexküll had a similar view of Nature. Similar to Watsuji, Uexküll even uses the metaphor of music; the term 'harmony' (*Harmonie*) can be seen in his text:

We have called this force of Nature plan-suitability (*Planmäßigkeit*). We can only trace that force by way of our apperception (*unserer Apperzeption*), when the force combines, by rules (*Regeln*), the multifaceted individuals with the One. Higher rules, which also connect temporally separated individuals, are generally referred to as plans (*Pläne*), regardless of whether they are based on human intentions or not.

Instead of using the term plan-suitability, we can as well call it function-suitability (*Funktionsmäßigkeit*), harmony (*Harmonie*) or wisdom. But how to describe it is not important at all; what is important is to recognize the existence of the force of Nature, which binds according to rules. Without the recognition of this force of Nature, biology remains an empty delusion. (Uexküll 1928: 144)

There are two layers of regulation of rules in Nature. The first one, or the basic one, is the plan-suitability, and the second, or the higher one, is the plan itself. The force Uexküll mentions might be a power with which Nature makes things as they are. In other words, it might be the aspect of Nature's ability to make things emerge – in philosophy, it is called 'natura naturans' (Mittelstraß 2004[1995]: 966–967). Because of this power, things in Nature can exist as they are. As they

are the product of Nature and they exist in Nature, they are in the framework of Nature. Uexküll calls this structure 'the plan'. If something exists in the world, it is already included in a whole-and-part relationship, and further, the relationship produces a meta-relationship. This meta-relationship is the plan, and things in the world should follow the plan if they exist in the world.

Uexküll calls the plan and plan-suitability 'rules' (*Regeln*, sg. *Regel*). Yet it might be questioned whether they can be called so. To this question, Uexküll responds:

It is not surprising that physics pursues to explain all the relationships in the world through causality, and to deny other standpoints than this. But it is completely incorrect; causality is not the only one rule (*die einzige Regel*), which is given to us in order to organise the world. (Uexküll 1928: 81)

If the single rule which regulates the world is causality, the existence of the plan cannot be regarded as a rule. However, causality is merely one of the explanatory principles of the world. Physics is not the only science which can explain the rules of the world. As will be seen below, Uexküll problematized the extant order of disciplinarity.

Using the term 'harmony', Uexküll denies the view that the principle of the world is conflict and struggle. He clearly states, "If there had been progress, it never was the survival of the fittest nor the selection of the better through the planless fight to exist" (Uexküll 1970[1940]: 165). For him, instead of struggle and selection, there is 'the melody' (*Melodie*) composed by the entanglement of life and death (Uexküll 1970[1940]: 165). This is the same logic as Imanishi's denial of Darwinism that we saw above.

What is interesting is that Uexküll uses the metaphor of music. In music, there is no competition or fight. There is only harmony. In the melody, individual sound supports the entire melody, whereas the existence of the entire melody enables the individual sound's existence as a part of the melody. This is the part—whole relationship and basis of harmony. Uexküll refers to it as "all for everyone, and everyone for all" ("Alles für jedes, und jedes für alles") (Uexküll 1928: 62). By presupposing the oneness, Uexküll, Watsuji, and Imanishi share the same harmonious view on the world.

5.4. Nature and naturalism

Both Watsuji and Imanishi problematize the concept of Nature. Watsuji argues that $f\bar{u}do$ and nature are different. He wants to differentiate Nature from 'nature', which natural science presupposes as the sum of the objective things in the natural world. As $f\bar{u}do$ is the denial of nature in the natural scientific sense, Nature can

be called *fūdo*. By saying that natural sciences cannot access the essence of Nature, Imanishi wanted to establish a science for Nature in the last period of his academic career in the 1980s. He called it 'shizengaku' (Imanishi 1984, 1990[1987]). 'Shizen' means 'nature', but Imanishi emphasizes that his 'shizen' differs from 'nature' in the natural scientific sense. This paper translates 'shizengaku' as 'naturalogy' using the Latin term 'natura' to indicate the nuance of 'natura naturans'.

Uexküll also had a longstanding interest in the concept of Nature. In the last chapter of *Streifzüge durch die Umwelten von Tieren und Menschen*, Uexküll describes how Nature is analysed by various sciences and, despite the attempts by natural scientists, accessing the essence of Nature is not an easy task.

The role that Nature plays as objects in the various umwelts analysed by natural scientists is highly contradictory. If you want to sum up the objective characters of those umwelts, the descriptions would be chaos. But surprisingly, those different umwelts are brought up and cared for by the One, from which all those umwelts are shut out eternally. Namely, behind her worlds which was made by herself (seinen von ihm erzeugten Welten), the subject is hidden and eternally unknowable (ewig unerkennbar) – that is Nature. (Uexküll, Kriszat 1970[1934]: 103)

Scientists' wish to describe Nature objectively ends with a seemingly chaotic bundle of descriptions, but the true thing that dominates it is hidden behind the existence of multiple umwelts. He terms it 'eternally unknowable'. The utterance of the unknowable might be rhetorical, and his intention is not to mystify it; rather, he believes that through the study of umwelt, it is possible to know Nature.

For Uexküll, the functional circle is its key as the principal factor that forms the 'tapestry of the world (*das Weltgewebe*)' (Uexküll 1928: 221). That tapestry may seem to be chaotic at first glance, but as all the functional circles follow the same principle, it has an order. Uexküll (1928: 221) states, "They are Nature's active plans, and they are the elemental factor of the universe." (Uexküll 1928: 221) The entire universe (*das gesamte Universum*), which consists of multiple umwelts, is summed up by the functional circles and, according to the total plan, tied up as the One. Uexküll (1928: 221) puts it so, "We call such entity Nature."

We have already encountered the terms 'plan-suitable' and 'plan-suitability'. The plan mentioned in them is the total plan of Nature, which is constructed as the sum of the functional circles. As long as the part is a part of the whole, it presupposes the totality of the whole. Uexküll calls this relation of part and whole the plan. Through the notions of the functional circle and plan-suitability, Uexküll wanted to approach Nature. In the same vein, by pursuing the standpoint of $f\bar{u}do$, Watsuji and Imanishi also wanted to attempt the same.

5.5. Problem of disciplinarity

What Uexküll, Watsuji, and Imanishi wanted to do was to establish new disciplines in their own ways. For Watsuji, it was *fūdogaku* and for Imanishi naturalogy. They knew that they were tackling problematics that could not be fully answered by the then-existent disciplinary framework. Uexküll confronted this difficulty as well. He himself called his standpoint '*Umweltlehre*' (Uexküll, Kriszat 1970[1934]: 14), but at the same time, wanted to position it on a broader disciplinary grand map.

The extraordinary difficulties, which biology has to overcome in order to enforce the recognition of plan-suitability (*Planmäßigkeit*) as a force of Nature, stem from the other common view of Nature, namely body–soul. By using this notion, many people think that all the possibilities of living Nature can be explained. But, in thinking so, you forget the fact that both soul and body are already plan-suitably connected with each other (*planmäßig miteinander zusammenhängen*). There is, therefore, the third, which can be derived neither from the soul nor from the body. If the doctrine of the soul is called psychology, and the doctrine of the body physiology, then the doctrine of the third, which includes both body and soul, is still missing. The missing third doctrine is, namely, the doctrine of the plansuitability of all living things – that is biology. (Uexküll 1928: 198)

Here, Uexküll criticizes the view of the mind-body divide, as does Watsuji. According to the quote, many people think that the body and soul belong to different domains; hence, disciplines dealing with them differ. Psychology is for the mind, hence the soul, whereas physiology is for the body. However, such a division prevents accessing the reality of Nature; thus, Uexküll proposes that biology may be the third choice. It seems that Uexküll aspired to redefine biology according to this view.

It should be noted that Uexküll uses the term 'plan-suitability' here again. Plan-suitability presupposes the oneness ($die\ Ganze$) and both the body and the soul belong to the oneness. The problem of how living beings are plan-suitable can be answered only from the viewpoint that admits the existence of the whole. As seen above, the whole is the plan, and the plan is Nature. If Uexküll argues that biology should be the third way to overcome the dualism of the body and soul, it can be done by concentrating on the essence of Nature. Accessing nature was the aim of Watsuji and Imanishi, too. Hence, those three authors approached the issue in the same direction, and their umwelt and $f\bar{u}do$ theories (including naturalogy) are parallel attempts to establish a new discipline for Nature.

To sum up these parallels: (1) Uexküll, Watsuji, and Imanishi deny dualism of the subject and object and (2) emphasize the oneness. Also, (3) they criticize the naturalist viewpoint on nature and want to provide an alternative view; the

concepts of the umwelt and $f\bar{u}do$ serve this purpose, and (4) this leads to the necessity of the establishment of new disciplines.

As for the reasons and background why these three authors have such parallels, the philosophical trends in the late 19th and early 20th centuries, such as Neo-Kantianism (Adair-Toteff 2012; Beiser 2015; Ollig 2000) and monism (Banks 2014) may have had a significant impact, but these contexts are beyond the scope of the current paper.

Conclusion

This paper investigated Watsuji's and Imanishi's $f\bar{u}do$ theory and compared it with Uexküll's umwelt theory. The characteristics of Watsuji's theory are (1) the denial of the subject/object division; (2) the differentiation of $f\bar{u}do$ from naturalism; and (3) the framing of $f\bar{u}do$ as a problem of self-understanding. Imanishi's theory is similar to the first and second points but it is unique in its denial of the Darwinian notions of competition and selection and its proposal of empathy and compassion as the basic principles of the world of living beings. This paper also reveals that umwelt and $f\bar{u}do$ theories are similar in (1) the view on a divide between the subject and object; (2) the emphasis on oneness and harmony; and (3) the revision of scientific naturalism. The three authors are not satisfied with the term 'environment' because it is unable to grasp the essence of reality. This paper argues that they chose the terms 'umwelt' and ' $f\bar{u}do$ ' to represent reality because the latter cannot be reduced to the division between the subject and environment.

Seen from the perspective of $f\bar{u}do$ theory, Uexküll's umwelt theory emphasizes the totality, oneness, and harmonious nature. However, it should be noted that such a view has been criticized in recent Uexküll scholarship. One of the points of criticism is that Uexküll's view is static and does not allow for the dynamic, creative development of living beings' world-making: "This perspective, although balanced by other strands of Uexküll's thinking, seems to leave little room for the organism's characteristic autonomy and creativity" (Pagan, Pozzolo 2024: 9), and "If life is symphony, then there is little room in this composition for creativity, other than in the god-like figure of the composer, who stands outside of the authoritarian orchestration." (Klinke 2023: 473) – so, in Uexküll's framework, the creative activity of living beings cannot be properly addressed, and they must maintain a passive existence. Also, the critics think that this will cause difficulties in applying his theory to contemporary sciences. In multispecies anthropology, Uexküll's concept is often referred to in order to "liberate other creatures from being regarded as passive objects of human meaning making", but "determinism in Uexküll's thinking particularly evident in

the notion of an underlying specific plan according to which each organism develops" hinders this. (Schroer 2021: 144)

This paper agrees with these points of criticism, but does this with some modifications. First, as demonstrated above, Uexküll thinks that, from moment to moment, a new functional circle emerges. This means that, at the microscopic level, the functional circle is not a static but a dynamic process, and if there is dynamism at the microscopic level, the sum of the microscopically dynamic functional circles must form a kind of dynamic state of the whole at the macroscopic level. Second, creativity may have degrees, and it can be said that there is no perfect creativity. If living beings are bound to the limit of the functional circle, it might be possible for them to have space for creativity as well. Third, as seen from the perspective of fūdo theory, such limitations can be overcome. Watsuji emphasizes the historicity of fūdo; he thinks that human history-making is embedded in the totality of fūdo. Watsuji (1962[1935]: 15) says, "It is not a static structure, but a system of movement. [...] What is called history is formed in such a process." Imanishi acknowledges the active agency of living beings. As could be seen in Section 4, he discusses evolution in terms of species. He thinks that, in evolution, the totality of species society is maintained through the production of new species, which he calls 'emergence of creativity' (Imanishi 1974[1941]: 131). He thinks that the development of species can be counted as a form of creativity, "creativity in human beings can be regarded as a sort of it" (Imanishi 1974[1941]: 159).18

Seen from the perspective of *fūdo* theory, Watsuji and Imanishi share a view regarding totality and oneness similar to Uexküll's; however, their interpretation is different from that of Uexküll's. Uexküll uses the term 'the whole' (*die Ganze*) in terms of plan-suitability. As was shown in Section 5.4, Uexküll thinks that at the level of the functional circle, there exists a whole which is called 'umwelt', and, overarching that level, there exists another kind of whole which is called 'Nature'. According to Uexküll, umwelts are brought up and cared for by the latter. Nature's force is the function of plan-suitability, which is the most basic rule regulating umwelts. Uexküll thinks that, although multiple umwelts exist as tokens, there exists one type in the world, namely Nature.

Watsuji and Imanishi use the term 'zentai' ('the totality', 'the whole') in terms of the human world order (Watsuji) and order of living beings (Imanishi). Like Uexküll, Watsuji and Imanishi believe that apart from the individual things, there is the one totality:

¹⁸ Based on such a standpoint, from the 1990s, successors of the Kyoto school of primatology developed an anthropological method which covers not only the world of human beings but also that of other living beings (Kawai 2013, 2017, 2019). It is a parallel movement of multispecies anthropology.

What we call 'totality' (zentai) is a movement which actualizes ethical situations by leading the relationship between organizations into particular direction. Structures and forms of the organizations differentiate and complicate in every stage, but there is something which penetrates the whole process: the movement of self-realization of non-duality between the 'self' and the 'other' (*jitafuni*) in the process of the split of the 'self' and 'other'. (Watsuji 1962[1949]: 66)

Nature is the one and whole (*zentai*) Nature. There are various parts which construct Nature, but the Nature as a whole (*zentai to shite no shizen*) is the only One. (Imanishi 1984: 21)

Watsuji argues that, in reality, there are various stages of organization, but something that penetrates them exists, which is the totality (*zentai*), and its principle is the non-duality between the self and the other. The self and the other are thought to be two, but according to Watsuji, they are the One. For Watsuji, totality is the name of such a principle. On the contrary, Imanishi thinks that Nature is the whole and calls it the One. For him, totality is not an abstract principle, but a concrete entity.

All three authors covered in this paper discussed the totality and the whole, but their discussion methods were different. This may reflect the differences in their interests and disciplinary perspectives, but this would deserve further comprehensive investigation.

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風土学から見た環世界学: ユクスキュル、和辻哲郎、今西錦司における自然、 ハーモニー、全体

本稿はユクスキュルの環世界学のアクチュアリティを、風土学との比較から探るものである。主体と客体がどのように関係しているかを再考する点で、 風土という概念はユクスキュルの環世界という概念と類似した概念である。 風土学は、日本の哲学者である和辻哲郎(1889-1960)、生物学者である今西錦司

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(1902-1992)、フランスの地理学者であり哲学者であるオギュスタン ベルク (1942-)によって彫琢されてきた。本稿では第一に、風土学を通じて、和辻が環境の中における自己を、今西が環境の中における種を、どのように論じているかを見る。第二に、風土学と環世界学を、それらが主体と環境、ハーモニー、自然をどのように論じ、ディシプリナリティをどのように問題化しようとしていたのかという点から検討し、類似性を指摘する。第三に、ハーモニーと全体性に注目しながら、その学術ディスコースにおけるアクチュアリティを探る。

Omailmateooria *fūdo* teooria vaatepunktist: Uexküll, Watsuji ja Imanishi loodusest, harmooniast ja totaalsusest

Artiklis vaadeldakse omailmateooria tänapäevast tähendust, kõrvutades seda $f\bar{u}do$ teooriaga. Jaapani termin ' $f\bar{u}do$ ' sarnaneb 'omailmaga', sest tegeleb tähelepanelikult küsimusega, kuidas subject ja object omavahel suhestuvad. $F\bar{u}do$ teooria töötasid välja Jaapani filosoof Tetsuro Watsuji (1889–1960), Jaapani bioloog Kinji Imanishi (1902–1992) ning Prantsuse geograaf ja filosoof Augustin Berque (snd 1942). Esmalt käsitletakse artiklis Watsuji vaateid, mis keskenduvad 'ise' kohale looduses, ning Inanishi omi, mis puudutavad liigi kohta keskkonnas. Teiseks võrreldakse seda, kuidas omailma- ja $f\bar{u}do$ teooriad lähenevad probleemidele, mis on seotud subjekt ja keskkonna, harmoonia, looduse mõiste ning distsiplinaarsusega, osutades kahe teooria vahelisele parallelismile. Kolmandaks uuritakse artiklis omailma ja $f\bar{u}do$ teooriate olulisust ning tõlgendamist kaasaegses akadeemilises diskursuses, keskendudes harmoonia ja totaalsuse mõistetele.