Article

Nature, Culture: Trajecting Beyond Modern Dualism

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Abstract

Modern dualism, opposing the subject to the object, and therefore culture to nature, has made possible modern science and technology, and consequently modern civilization, but it has eventually produced an unsustainable world, which progressively destroys its own basement: the Earth. In order to survive, we have to overcome dualism, but is that rationally possible? Making use of the concepts of trajection *and* trajective chains*, this paper shows that not only concrete reality is* trajective *(neither purely objective nor purely subjective), but that modern physics itself has come to this evidence. Accordingly, beyond the abstraction of dualism, we have to conceive of reality anew, including in the field of the natural sciences.*

Keywords: modernity, dualism, milieu, trajective chains

要旨

現代の二重性、つまり自然に対立する文明の存在は、高度な科学技術を人類にもたらしたが、現代文明は自らの基盤である地球を破壊し続け、もはや維持できなくなりつつある。人類の生存のためには現代の二重性の克服が不可欠となるが、それは合理的に可能なのであろうか。本稿では、軌跡とその連鎖の概念を用いることにより、純粋な客観的立場や主観的な立場はあり得ず、具体的な事実のみが軌跡となり、現代物理学自体がその証拠となることを明らかにする。したがって、我々は現代の二重性という抽象概念を超えて、自然科学の分野を包括する新たな現実認識を獲得しなければならない。

キーワード：現代の二重性、文明、自然、足跡

1. Can we cross the frontier between the natural sciences and the humanities?

A modern event like the Kyoto Prize (*Kyôto shô* 京都賞) has typically been awarded, since 1985, in the following three domains: advanced technologies, basic sciences, and arts and philosophy. Though no clear-cut frontier can be drawn between these three domains, it is common knowledge that while technology and basic sciences belong to the field of objectiveness, arts and philosophy imply the existence of a human subject whose creativeness is precisely that of a subject, not of an object. On the other hand, technology produces objects, and that which the basic sciences intend to know is the exact nature of objects of various sizes, ranging from particles to the Universe. Subjects and their subjecthood are not supposed to interfere with these objects.

Needless to say, such a way of seeing is nothing else than that of the Modern Western Classical Paradigm (hereafter MWCP), with its dualistic ontology, which made possible the scientific revolution of the XVIIth century and therefore modern technology. Yet what is generally overlooked in this respect is that this particular type of ontology did not only give rise to the modern object, supposed to exist in itself and, for that reason, to be accessible in its own nature through the use of scientific methods (that is, essentially, through measure and experiment); dualism as such correlatively gave rise to the modern individual subject and consequently to individualism, which appeared in Europe in the XVIIIth century. The modern subject and the modern object as well are supposed to be substantial entities existing in themselves, independently from each other, and belonging therefore to essentially different domains of knowledge. This is the fundamental reason why the natural sciences and the humanities since then have diverged more and more, giving rise in the XIXth century to the main disciplines which, roughly, still reign in the academic field and, accordingly, in the conception of prizes like the Nobel or the Kyoto Prizes.

Yet, at the same time, older conceptions of truth, reality and existence are still alive, interfering more or less with these modern categories. The main one is religion, whose essence is definitely alien to that of science, and which still competes with science on some crucial questions like that of evolution. Religion establishes an

essential difference between the sacred and the profane, a distinction which does not exist for science. Another one is the ontological hierarchy between matter, life and mind. In the main trend of modern science, mind supposes life, which supposes matter, while the reverse is not true. Now, matter is deemed to be objective, while mind is subjective. This has entailed another main trend, that of reductionism, which tends to explain mind through biological factors, and life through physical factors. In other words, which tends to explain the subject as a measurable object; that is, eventually, to suppress the subject as such and make the world an absolute object. True, there have been philosophers like Schopenhauer who, the other way round, have considered the world as a representation (*Vorstellung*) of the subject; but, in the reigning order of things in the MWCP, such views are precisely not considered as scientific. They belong to the humanities, and humanities are deemed to be alien to the scientific method.

This amounts to say that, in the MWCP, the frontier between the subjective and the objective cannot be crossed, at least from the former to the latter. Dualism, then, appears to be the most fundamental beacon of this paradigm. Yet the fact is that dualism has been ceaselessly contested on all sorts of grounds not only from the outside of the MWCP, but including from the heart of the natural sciences; that is, physics itself. One of the most prestigious physicists of the XXth century, Werner Heisenberg, could write the following:

> If one is allowed to speak of the image of nature according to the exact sciences of our time, one must understand here, rather than the image of nature, the image of our relationship with nature. (…) It is above all the network of the relations between Man and nature which is the scope of this science. (…) Science, ceasing to be the spectator of nature, acknowledges itself as part of the reciprocal actions between nature and Man. The scientific method, which chooses, explains, orders, admits the limits which are imposed to itself by the fact that employing the method transforms its object, and that, consequently, the method cannot anymore be separated from its object.
>
> (Heisenberg 1962 : 33-34. My translation)

This goes clearly beyond the modern subject's 'point of view of nowhere', which had brought forth dualism. It implies that nature cannot anymore be considered as

a pure object, since it is linked with the subject – here the scientist, or rather science as a collective subject – through a network of relationships and reciprocal actions. The subject's point of view is part of these relationships. It cannot anymore consider itself, as Descartes wrote, as "a substance whose whole essence or nature is only to think, and who, in order to be, does not need any place, nor depends on any material thing" (Descartes [1637] 2008: 38-39). This purely abstract transcendence of the modern classic subject, with his 'point of view of nowhere', is giving way to a concrete immanence of both the subject and the object within a certain relationship, one conditioning the other, both reacting on one another. This implies that, contrary to Descartes' *cogito*, the subject henceforth, in order to be, needs concretely a certain place, and depends on certain material things. Correlatively, the subject cannot have anymore a 'point of view of nowhere' since it is concretely situated within a certain spatial and temporal network of relations with the object.

Does this overcoming of the MWCP and its dualism amount to the overcoming of modernity (*kindai no chôkoku* 近代の超克) formerly chanted by the Kyoto School? And especially, considering that the reigning way of thinking of the MWCP was founded on Aristotelian logic, was Kitarô Nishida right when he substituted a 'logic of the predicate' (*jutsugo no ronri* 述語の論理), or 'logic of place' (*basho no ronri* 場所の論理) to Aristotle's 'logic of the subject' (*shugo no ronri* 主語の論理)?

I shall try here to argue that the question cannot be reduced to such an alternative, and that, in order to really overcome modernity, what we need is rather a synthesis or sursumption (*Aufhebung*) of these two logics.

2. Should we absolutize the subject (S), or the predicate (P)?

Let us first clarify a disturbing ambiguity, which ensues from the polysemy of the word 'subject' in the main European languages, all derived in this respect from the Latin *subjectum*, itself a translation of the Greek *hupokeimenon,* the literal meaning of which is 'that which lies (*keimai*) under (*hupo*)'; in other words, a basement. Basement of what? Basement, first, of what the logical discourse is about, and which, therefore, makes that discourse possible. For logic, indeed, the subject (S) is what the discourse is about, and what is said

about the subject is the predicate (P).

This is not all. In the tradition of European thought, the same image has also governed ontology, in which the distinction between substance and accident is analogous to that of subject and predicate in logic. Substance is etymologically that which stands (*stare*) below (*sub*). It translated the Greek *hupostasis*, standing (*stasis*) below (*hupo*). Accordingly, in this tradition, Being has been assimilated with substance and with the logical subject, while the predicate has been considered to be unsubstantial and therefore not to exist really. That was the fundamental point on which Aristotle diverged from Plato, because he considered Plato's Forms or Ideas to be predicates of real beings. This entailed in the Middle Ages the so-called quarrel of universals, between, on the one hand, Aristotelian 'nominalists', for whom only individuals had a substantial essence while universal ideas were mere representations, and on the other hand Platonist 'realists', for whom substantial reality was that of universal ideas, while individuals were only unsubstantial accidents of that reality.

However, in both cases, there was no doubt about the close association of substance and Being, both forming reality and therefore, at the same time, the subject of logic and the object of science. Hence arose the typical ambiguity of the modern Western notion of subject, since, from then on, the logician's subject -that which the predicate is about, S- has amounted to the scientist's object -that which science is about, S-; that is, in both cases, reality in the strong sense, i.e. the basement which makes anything else possible.

That made the root of the MWCP's dualism. *Dualism* fundamentally means that two orders of reality coexist at the same time, and cannot be united into one reality. In the MWCP, that meant that there are two irreducible orders of truth, which nevertheless coexist and can simultaneously be the *subject* of logical discourse: the objective realm of science on the one hand, and on the other hand the subjective realm of representation. Yet both orders of reality tend to a common ideal: the truth of an absolute Subject, in which would coincide science's object in itself (*an sich*) and its representation by the *cogito* for itself (*für sich*).

Needless to say, this ideal rests on the ambiguity of the word 'subject', and it originates in the etymological image of something which lies beneath

(*hupokeimai*) and therefore can found the world. This ambiguity does not exist in Japanese, at least in principle, since the Western notion of subject has been rendered by a series of different words: *shugo* 主語 (the subject in the grammatical and logical sense), *shudai* 主題 (the subject in the logical sense), *shukan* 主観 (the subject in the ontological sense, i.e. the *cogito*), *shutai* 主体 (the subject in the moral sense), etc. In principle, then, the object (*taishô* 対象) of science cannot be confused with the subject of logic (*shudai* 主題, *shugo* 主語), and of course not with the moral and ontological subject (*shutai* 主体, *shukan* 主観).

Nevertheless, this is not only a question of words and of translation. It is a question of worldview. Now, do worldviews depend on language (as poses the so-called Sapir-Whorf hypothesis), or is language only an aspect of a certain worldview? Moreover, does the object of science have any relation with either language or worldviews, since, in the MWCP, it is supposed to exist in itself, outside of and free from any representation?

For the moment, I shall leave aside this question, and recall first that the core of the overcoming of modernity − or let us rather say the overcoming of the MWCP −, according to the Kyoto school, was the substitution of the Aristotelian logic of the subject with a Nishidian logic of the predicate, or logic of place. And just as the MWCP had equated Being and substance with the subject, and absolutized that Subject, conversely, Nishida's philosophy absolutized the Predicate, equated with nothingness (*mu* 無). Indeed, the central concept of the Kyoto school was 'absolute nothingness' (*zettai mu* 絶対無), supposed not only to negate Being, but to generate Being through its own self-negation[1].

Significantly enough, in his last writings, Nishida established a parallel between this logic of the predicate and religion, entitling his last book ([1946] 1965) *Bashoteki ronri to shûkyôteki sekaikan* 場所的論理と宗教的世界観 (*Logic of place and religious worldview*). Let us here leave aside Nishida's own argument, and focus on the difference between science and religion. Indeed, as opposed to science's absolutization of the Subject (S, i.e. the object in itself), what religion does is to absolutize the Predicate (P). Considering that words are intrinsically predicative, since they are what is said (P) about something (S), this can be seen literally in the first words of the Gospel according to St. John, which reads: *In the*

beginning was the Word, and the Word was with God, and the Word was God. In the European tradition, God is absolute Being, and is correlatively absolute Substance and absolute Subject: S. Now, what the English language translates here as "(the Word was) *with God*" is, in the original Greek, *pros ton Theon*, which might as well be understood as "about God", and could mean, very logically, that P (the Word) is about S (God). What, on the other hand, is not logical here, but mystic, is that John further writes "the Word was God"; that is, P is not only *about* S, but P *is* S. It is thus absolute Truth. And this mystic leap from P to S, absolutizing P, is indeed the essence of religion, which absolutizes certain sets of words as sacred Truth, be they the Gospel, the Koran or, in the case of Nishida's philosophy, the Emperor (*Tennô* 天皇) as absolute nothingness = absolute P.

3. Trajecting beyond the binarity of S-P

As can easily be seen, just as science and religion are incompatible, Nishida's logic of the predicate capsizes Aristotle's logic of the subject into its contrary: while, in the MWCP, science absolutizes the subject = the physicist's object (S), religion and Nishida's philosophy absolutize the predicate (P). True, there have been and still are many scientists who, at the same time, practice science and believe in God; but the essence of science, at least in the MWCP, is definitely alien to that of religion, since the former absolutizes S, whereas the latter absolutizes P. Acknowledging both amounts to acknowledging two incompatible truths, which is inconsistent, unless one resorts to mystic leaps assimilating P to S, like St John's Gospel, or Nishida's absolute nothingness (P) as the source of Being (S). One might as well say that words and representations (P) produce things and reality (S), which is precisely what modern science denies. For science, at least in the MWCP, it is exactly the other way round.

But then, does the problem really amount to such an alternative? We should not forget that the dyad S-P is inherent to the MWCP itself as an offshoot of the Aristotelian logic of the identity of the subject = the identity of the object, which itself was an offshoot of the Greek language, the basic structure of which is precisely the dyad S-P. Now, there are other languages, which have other types of basic structures. This is the case of Japanese, in which the dyad S-P does not fit satisfactorily, because this language has in fact a triadic structure S-I-P, in which I

represents an interpretation by the speaker's point of view. True, any language is concretely spoken by a speaker; but formally, according to the language, the existence of the speaker can be more or less abstracted from the speech. In Indo-European languages like English, this existence is discretely and precisely embodied into one word: the personal pronoun 'I', in which coincide both the existential subject (the speaker) and the grammatical subject. Correlatively, one can formally abstract 'I' and make apparently objective statements in the third person, e.g. for saying "it rains", where the grammatical subject is an impersonal 'it', clearly distinct from a personal 'I'. This is not the case in Japanese, in which there is no personal pronoun 'I' in the strict sense, but instead a wide range of expressions according concretely to the circumstances, and in which a sentence does not necessarily have a subject, because the subject − both existential and grammatical − is not explicit, but implicit. This is to say that, rather than a discrete and explicit *subject*, then, it is a *traject* (*tsûtai* 通体), pervading diffusely and implicitly the scene itself (*bamen* 場面), the aspect (*men* 面) of which becomes then an expression of that traject's concrete existence. Hence the ternary structure S-I-P, meaning that *S is P for I*, and not, binarily as in classical Aristotelian logic, *S is P*.

Let us give below three examples of this ternarity, and of the correlative latency of the subject:

1) In English, it is possible to say, binarily, "Mary (S) is sad (P)". The equivalent Japanese *Mari wa* (S) *kanashii* (P) is impossible. One will say instead *Mari wa kanashisô da*, which means "Mary looks sad", implying the ternary structure *S (Mary) is P (sad) for I (the speaker) = S-I-P* : Mary (S) is interpreted (by I) as sad (P).

2) The very sentence where Nishida expresses the core of his philosophy, that is the engulfing (*botsunyû* 没入) of the subject (= Being) into the predicate (= nothingness), presents the remarkable particularity that neither one of its two verbs has a subject. In due respect to the English grammar, the following translation will then have to supply them respectively with a bracketed subject:

> [One] may think that, there, what is predicative becomes the basement.
> Since [this basement] engulfs into the plane of the predicate, just as it is,
> the plane of the subject which until then was Being, [it] comes to

contain as well the meaning of will, which subsumes the general into the particular[2] (Nishida [1926] 1965).

Here, interestingly enough, the 'basement' (*kitai* 基体), i.e. that which the Greeks had called *hupokeimenon* = the subject, is not a (hidden) subject, but the sole predicate.

3) The ternary structure S-I-P, in Japanese, brings forth a profusion of aspective forms, implying a continuous interference of *für sich* on the plane of *an sich*; in other words, of the phenomenal in the physical. Among other effects, this disrupts the normal sequence of tenses of European tongues. For example, in Yamauchi (1974) one can read the following two sentences: Being is not only being effectively there and thus, it is maintaining one's own identity as such. *Realität* was nothing else than *Identität*[3].

The first sentence, exposing objectively the main idea of Parmenides' philosophy, is written in the timeless present tense – here *de aru* – of general statements, while the second sentence uses the past form *naranakatta*, because it refers concretely to that same idea as it appeared to Parmenides himself, at a particular time in the past. Though Parmenides is not explicitly mentioned, his existence is implied in the underlying structure of this second sentence, which accordingly is not, binarily, S-P (*S is P*, reality is identity) but ternarily S-I-P (*S is P for I,* S [reality]) was P [identity]) for I [Parmenides]). In this sentence, Parmenides is not explicitly present as a *subject*, but he is implied as a *traject* pervading the whole statement, and thus determining its past tense, or more exactly said, its aspective or phenomenal form.

As seen from the MWCP, this aspectivity of the Japanese language seems unfit to objective statements, since it makes the third term (I) interfere in the binary relation of P to S – i.e. what is said (P) about the object (S). On the other hand, as seen from contemporary physics, it may well be fit to what Heisenberg calls, in the above quotation, "our relationship with nature". Indeed, whereas, in the MWCP, science posed itself as a mere spectator of nature, thus abstracting itself as the point of view of nowhere of a pure *cogito* onto a pure object, in "the exact sciences of our time", as says Heisenberg, "the method cannot anymore be

separated from its object". This means that observation (I) interferes in the judgement (P) which is made about the object (S). We have here a concrete and ternary structure S-I-P, not an abstract and binary structure S-P.

In other words, in the natural sciences of our time, nature cannot anymore be considered as a pure object (Descartes' *res extensa*) opposed to a pure subject (Descartes' *res cogitans*). Physics itself has overcome this classical dualism. What we call nature, now, is neither merely *objective* (*kyakkanteki* 客観的) – a pure object (S) existing in itself – , nor merely *subjective* (*shukanteki* 主観的) – a pure representation (P) existing only for us; combining both, it is in fact *trajective* (*tsûtaiteki* 通態的).

4. Nature's trajective chains and the poetics of the Earth

I initially coined the concepts of *trajection* (*tsûtai* 通態) and *trajectivity* (*tsûtaisei* 通態性) thirty years ago, in order to grasp what is the reality of the environment (*kankyô* 環境) for the Japanese in their own milieu (*fûdo* 風土) (Berque 1986). Concretely, trajection corresponds to the reversible passage (*kayoi* 通い) between environment and milieu (*fûdo* or more generally *kansekai* 環世界 : ambient world). I had learnt that distinction between *shizen kankyô* 自然環境 (the natural environment) and *fûdo* (milieu) when reading Tetsurô Watsuji's classical *Fûdo* (Watsuji 1935). At the time, I still had not read Nishida's *Basho* (Nishida [1926] 1965), and so could not imagine any relation between trajectivity and the logic of the predicate. It is only in later years that I came to combine mesology[4] - the study of milieu, *fûdoron* 風土論 or *fûdogaku* 風土学 - and the logical relation between subject and predicate.

As is well known, in the first lines of *Fûdo*, Watsuji introduces the concept of *fûdosei* 風土性 (*mediance*), which he defines as "the structural moment of human existence" (*ningen sonzai no kôzô keiki* 人間存在の構造契機). He understands here 'moment' (*keiki*) in the traditional sense of *Moment*[5] in German philosophy, i.e. a factor working as a dynamic relationship between two terms, here human subjects on the one hand, the natural environment on the other hand. In this relationship, the reality of the environment is not that of a mere object (*taishô* 対象), as it may be for a modern natural science like ecology; it is necessarily interpreted in a certain way by a certain subject, which here is a

certain culture, and this interpretation elaborates it into this culture's proper milieu. Hence the dynamic relation between Being and milieu, which Watsuji grasps with the concept of mediance.

Watsuji's conception of milieu was probably influenced by Jakob von Uexküll's *Umweltlehre* (mesology) through Heidegger's teachings, because he stayed in Germany and met Heidegger precisely in those years (1927-1928) when Heidegger was particularly keen on Uexküll's ideas. Uexküll, the famous forerunner of ethology and biosemiotics, had already introduced a fundamental distinction between *Umgebung* (the environment as a universal set of objective data) and *Umwelt* (the milieu proper to a certain species, resulting from this species' singular interpretation of the environment). Consequently, *Umweltlehre* (mesology), which studies the respective worlds of different species, must not be confused with *Ökologie* (ecology), which studies the environment.

One can easily see that Watsuji's distinction between *shizen kankyô* and *fûdo* is homologous to Uexküll's distinction between *Umgebung* and *Umwelt*, and, accordingly, that the principle of his mesology is the same as that of Uexküll's *Umweltlehre*. Both suppose the subjecthood (*shutaisei* 主体性) of the being who interprets the environment as its own milieu. Yet, as a philosopher, it is Watsuji who created the concept of mediance, and clearly established that mesology was fundamentally an approach of nature in terms of hermeneutic phenomenology; that is, interpreting the way reality appears to a certain subject from that subject's point of view.

Now, considering what precedes, it should be clear that whereas ecology, as a modern science, considers the environment as an object (S), mesology considers a milieu as an interpretation of that S in the terms of a certain predicate (P). The milieu thus is not objective (S); it is trajective, combining S with P. Its reality is not that of a pure object *an sich* (S); yet it is not a purely subjective representation *für sich* (P). It results from the trajection of *an sich* into *für sich*. Its reality (r), then, is S/P. It is *S taken as P*, i.e. *r = S/P*.

Now, mesology postulates that any being necessarily lives in a certain milieu, from which even science, whatever methods it may use, can never be totally abstracted. Reality in general, then, is necessarily trajective. It is S/P, not S. This

is close to what Heisenberg meant when he stated that "the method cannot anymore be separated from its object", since, indeed, the method is that which relates P to S. It is also close to what Husserl meant when he wrote that "the archaeoriginary Earth does not move" (*die Ur-Arche Erde bewegt sich nicht*) (Husserl 1989). Of course, that was not to say that Galileo was wrong and that the Church was right. It was to say that, ontologically, we can never attain a pure S (the Real in itself), because the very fact of attaining it makes it an S/P: a certain reality, implying ternarily our own existence as I (the interpreter of S as P).

If we can easily conceive of what is S, i.e. any kind of object, what then is the predicate P? It is the way a certain subject establishes a relation with that object, by grasping it through its senses, action, mind and – in the particular case of the human – words. P supposes S, but S does not exist for that subject unless trajected as P. The *environment* (S) does not exist unless trajected as a *world* (P) into a *milieu* (S/P). This principle is the same for any being, from the earliest forms of life on our planet to the most elaborate forms of human culture, e.g. contemporary science and technology.

Yet, though reality is always trajective (S/P), this trajectivity never ceases to evolve, since both living beings and their environment evolve, in relation to each other, that is precisely because of the mediance – the structural moment – of that relationship. Though the great naturalist Kinji Imanishi (1941) did not refer to Watsuji, nor to the concept of milieu as differing from the environment, he expressed that same idea in his own words with the formula "subjectivation of the environment, environmentalization of the subject" (*kankyô no shutaika, shutai no kankyôka* 環境の主体化、主体の環境化)[6]. For him, that was the principle of the evolution of species.

In mesological terms, this means that former realities (S/P) are ceaselessly reinterpreted through new predicates (P', P'', P''' etc.) by later generations. This may be rendered with the following formula: (((S/P)/P')/P'')/P'''… etc. In such a sequence, or *trajective chain*, S/P becomes the subject of P', (S/P)/P' becomes the subject of P'', ((S/P)/P')/P'' becomes the subject of P''', etc. Reminding that, traditionally, the subject has been assimilated with substance, this process amounts to a progressive substantialization or hypostasis of the predicate P, which, in Aristotle's as well as in Nishida's philosophy, is deemed to be unsubstantial

(*mu* 無). One must also have in mind that, at each link of the chain, the abstract binary relation S-P is concretely a ternary one: S-I-P, in which the subjectivity of the interpreter (I) trajectively pervades the relation S-P, i.e. the reality of the milieu as S/P. Consequently, the charge of subjectivity in reality grows from S/P to (S/P)/P', from (S/P)/P' to ((S/P)/P')/P'', and so on. This is, in logical terms, nothing else than Imanishi's principle of 'subjectivation of the environment, environmentalization of the subject'.

Concretely said, the unsubstantial *way* a certain being relates to its milieu progressively becomes the substantial *flesh* of later organisms. In biological terms, this is the principle of epigenetics. In the terms of the history of science, a trajective chain amounts to a sequence of paradigms (P, P', P''…), making possible the indefinite progress of science and technology, and consequently the substantial transformation of our environment by means of new techniques.

The concept of trajective chain allows also a synthesis of the two aisles of thought as distinguished by Tokuryû Yamauchi (1974), an Eastern one founded on *lemma*, and a Western one founded on *logos*. Only the abstraction peculiar to logos permits the objectification necessary to the modern natural sciences, whereas only the concreteness peculiar to lemma permits to take into account, in the *syllemma* (taking together, notably so in symbolicity) of both A and non-A (A *soku* 即 non-A, i.e. A *is/is not* non-A, or A *as* non-A), both the existence of the subject and that of the object. The historical progress of trajective chains thus allows us to grasp rationally the apparently irrational reality of S as P, that is, concretely, of the environment as a milieu, i.e. *Umgebung als Umwelt* or *shizen kankyô soku fûdo* 自然環境即風土. In a word, it allows us to take into account not only the trajectivity of concrete reality (S/P), but its logical ternarity (S-I-P) as well.

This synthesis allows us to found anew, beyond modern classic dualism (that of Descartes and Newton), a mesology in tune with contemporary physics, which, as Heisenberg has shown, deals with a *relation with nature* rather than with nature as an object, as well as in tune with the stress which biology has recently put on epigenetic relations rather than on the identity of the sole genom. We should reconsider on these bases the theory of evolution, and particularly the antagonism between neo-Darwinian orthodoxy, which relies basically on the dyad S-P, and Kinji Imanishi's *naturing science* (*shizengaku* 自然学), which relies basically on

the triad S-I-P. There is much to precise in this respect, but it already allows us to view the prospect of a science developing, in the XXIst century, a *biohermeneutics*

which would take into account the meaning of its own milieu for any living being, and the possibility, for the human, to continue indefinitely with the trajective work of nature itself.

To conclude, a trajective chain, as long as it may be, always expresses the same principle of *S taken as P*, i.e. S/P. In its essence, this principle is the same as that of metaphor or that of *mitate* 見立て; that is, to see a certain thing (S) as if it were another thing (P). *Mitate* has a long history in East Asian aesthetics, while, needless to say, metaphor is the fundamental principle of poetry, more generally that of symbolicity, and basically that of the creativity of nature itself, which endlessly brings (*pherei*) reality further (*meta*) than identity. This is the principle of natural history (evolution) as well as that of human history. That is, the *poetics of the Earth*[7].

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[1] More about this in Berque (2000).

[2] In the original text: 是に於いて述語的なるものが基体となると考えることができる。これまで有であった主語面をそのままに述語面に没入するが故に、特殊なるものの中に一般なるものを包摂するといふ意思の意味を含んで来るのである。(Nishida [1926] 1965: 261).

[3] In the original text : 存在とはただ現にそこにそうあることではなく、それがそのものとして自己同一性を保つことである。Realität とは Identität である外ならなかった。(Yamauchi 1974: 5).

[4] The word *mésologie* was coined by a physician, Charles Robin, who presented it at the inaugural session of the Société de biologie in Paris, on June 7th, 1848. Yet Robin, a disciple of Auguste Comte, used it in a positivistic sense akin to that of what was later to become ecology, in which the *milieu* is objective, not trajective.

[5] *Das Moment*, not *der Moment*, which is a short lapse of time.

[6] Imanishi repeatedly used this expression throughout his works, starting from his first book (Imanishi 1941).

[7] The arguments cursorily alluded to in this paper are developed, and provided with more ample references, in my book (Berque 2014a). I clarify the genealogy and the epistemological stance of mesology (*Umweltlehre, fûdoron*) in Berque (2014b).

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