Rethinking Nature in Contemporary Japan
From Tradition to Modernity
edited by Bonaventura Ruperti, Silvia Vesco and Carolina Negri

Without Nature
Thinking about the Environment in Tokugawa Japan

Federico Marcon
(Princeton University, USA)

Abstract The modern Japanese *shizen* 自然 was systematically used for the first time to translate the German *Natur* in 1889, on the occasion of a debate between Mori Ōgai and the critic Iwamoto Yoshiharu. Before the 1880s, *shizen* was mostly employed as an adjective or adverb meaning 'in itself' or 'spontaneously', and no other single term had a semantic capacity equivalent to 'nature'. This does not mean that no conceptualisation of the material environment existed in pre-Meiji Japan. On the contrary, a constellation of different terms – such as *tenchi*, 'heaven and earth'; *sansui*, 'mountains and waters'; *shinrabansho*, 'all things in the universe'; *banbutsu*, 'ten thousand things'; *honzō*, 'the fundamental herbs'; *yakusō*, 'medicinal herbs'; *sanbutsu*, 'resources' etc. – expressed different aspects of the natural environment, material reality, natural objects, and the laws that regulated it. This paper sketches a map of these concepts, their different functions and spheres of influence. Then, it argues that the absence of a term analogous to 'nature' should not be perceived as a *lack* of premodern East Asian cultures, but it rather emphasises that it is the Western 'nature', in its various vernacular declinations, that nurtures troubling semantic and ideological excesses. It finally claims that the adoption and success of the modern *shizen* functioned as an important ideological support to Japanese modernisation.

Keywords Nature. Shizen. Honzogaku. Tokugawa Japan.

> What is familiarly known is not properly known, just for the reason that it is familiar. When engaged in the process of knowing, it is the commonest form of self-deception, and a deception of other people as well, to assume something to be familiar, and give assent to it on that very account.
>
> G.W.F. Hegel, *Phenomenology of Spirit*

In 1889 Mori Ōgai 森鴎外 (1862-1922), physician, author and public intellectual, engaged in a controversy over the nature of literature with the critic and pedagogue Iwamoto Yoshiharu 巌本善治 (1863-1942) in the pages of the literary journals *Kokumin no tomo* 国民の友 and *Jogaku zasshi* 女学雑誌. The dispute, one of the many that punctuated the Meiji period, opposed Iwamoto's view according to which "the best literature is what describes nature the way it is" to Mori's belief that "Art is that which is created from

Ca' Foscari Japanese Studies 7
DOI 10.14277/6969-171-3/CFJS-7-6 | SSubmission 2017-02-08 | Acceptance 2017-04-06
ISBN [ebook] 978-88-6969-171-3 | ISBN [print] 978-88-6969-172-0

the ideal" and "not that which copies the natural and the real" (Yanabu 1977, 9). Art was, for Mori, "something that can produce beauty by burning out the dust attached to nature in the fire of the idea" (11). The debate had a large resonance in the intellectual world of modernising Japan and contributed to the invention and institutionalisation of a modern – and most importantly, national – Japanese literature (Ueda 2007; Usui 1975). At the same time, the debate consolidated the word *shizen* 自然 as the modern Japan equivalent to the German *Natur* once and for all. Mori put it quite clearly in the piece he published on issue no. 50 (May 1889) of *Kokumin no tomo*: "By *shizen* I mean *Natur*" (Yoshida, Asai 1971, 69-75).

From then on, *shizen* as 'nature' became one of the most important concepts in Japanese philosophical texts and one of the fundamental ideas behind many political, ideological, aesthetic and philosophical stances, as Julia Thomas has persuasively demonstrated (Thomas 2001). Today, *shizen* is commonly used in Japanese as an equivalent of the English 'nature' and functions as key heuristic term in the historiography of Japanese premodern conceptualisation of the material environment.[1] But before the 1880s there was no single term that expressed the meanings of 'nature'. This does not mean that in premodern Japan there was no conceptualisation of material reality and of the metabolic relation that human societies had with it. Quite the contrary, in fact: in the Tokugawa period, Japanese scholars had developed not only quite sophisticated metaphysical views, but also protocols of observation, description, understanding, and systematisation of natural knowledge (Marcon 2015).

My claim – not so surprisingly, after all – is that the greatest challenge for us is not to understand the ways in which the material environment was conceptualised in the Tokugawa period, but rather avoid reducing them to a universally shared notion of 'nature'.[2] 'Nature' is indeed a capacious word and its semantic and, as I will claim, ideological power is directly proportional to the complexity and contradictoriness of its meanings. Raymond Williams famously defined 'nature' as "perhaps the most complex word in the language" (Williams 1984, 219).[3] Arthur O. Lovejoy

1 See, for example, the recent collection of essays on "nature and artifice" (Karube 2013), which for the most part reduces the complex conceptual constellations of premodern Japan to the single modern *shizen*.

2 This essay shares therefore the relativization of Western notions of 'nature' of anthropologists and theorists like Philippe Descola, Eduardo Kohn and de Castro, among others. In their work, they also relativize the universalist claims of Western anthropologists and philosophers and propose a "perspectival multinaturalism" that aims to retrieve the various conceptualisations of human metabolic relations with the environment in different sociohistorical contexts. See Descola 2013, Kohn 2013, and De Castro 2004.

3 Every time 'nature' is written between quote marks is to be taken to mean the conception, idea, or trope of nature, the focus being in the word as signifier itself rather than in its signified, i.e. what it refers to.

equated the development of its meanings to the entire history of Western thought (Lovejoy 1997, 447-56). Its semantic capacity is staggering: I can call 'nature' the environment that surrounds me, the incontrollable impulses inside me, the laws that sustain physical reality, all that exists in a metaphysical sense, the inner essence of things, Being, God, and all the above at the same time.

No term with a semantic value equivalent to 'nature' developed in pre-nineteenth century China, Korea and Japan. Before the modern age, no single term had the capacity to signify, like the Italian *natura* and its European cognates, the physical universe as an ordered, self-sustaining totality of things, phenomena and laws. Instead, a constellation of terms, which were not mutually exchangeable, denoted various aspects of the material world. Unlike 'nature', the semantic sphere of terms denoting the essence or the inner characteristics of things had no connections with terms referring to the material environment. Also, the cluster of words referring to notions similar to the English 'human nature' had no semantic relation of causality or affinity with those referring to material reality or totality. Finally, the modern *ziran*/*shizen* 自然 was used in pre-nineteenth century East Asia mainly as an adverb or adjective meaning 'in itself', 'autonomously', 'spontaneously', 'on one's own accord' etc., with only two exceptions.[4]

The issues at stake are clear enough. Is it possible for us to fully understand the world-views of a culture that lacked a term like 'nature', expressing, that is, one of the most fundamental conceptions of reality not only in the European cultural tradition, but in modern East Asia as well – since the modern Chinese *ziran* and the modern Japanese *shizen* developed in the late nineteenth century as translations of the modern European 'nature' in its various senses and has been so used thus far? My answer is yes, but on condition that we get rid of the notion of 'nature' altogether. Does the

4 The first is the *Haruma wage* 厳本善治, a Dutch-Japanese dictionary compiled in 1796 by Inamura Sanpaku (1759-1811) with the collaboration of Udagawa Genzui 厳本善治 (1756-98) and Okada Hosetsu 厳本善治 and on the basis of the second edition of the Dutch-French dictionary by François Halma (1653-1722), *Nieuw Woordenboek der Nederduitsche en Freansche Taalen. Dictionnaire Nouveau Flamand & François*, printed in Amsterdam in 1722. The three translators were all disciples of the *rangaku* scholar and physician Ōtsuki Gentaku 厳本善治 (1757-1827), who was an active participant in *honzōgaku* intellectual circles. The *Haruma wage* is worth mentioning because, contrary to all other dictionaries compiled during the Tokugawa period, it was the only one that translated the Dutch *Natuur* as *shizen*. However, when in 1858 Katsurakawa Hoshū 厳本善治's (1751-1809) new edition of *Haruma wage* was finally printed with the title of *Waran jii* 和蘭字彙, the entry *Natuur* disappeared. The second exception is the works of rural thinker Andō Shōeki 和蘭字彙, whose manuscript *Shizen shin'eidō* 和蘭字彙 treated *shizen* as a fundamental concept. Unfortunately, he remained largely unknown until 1899, when his manuscripts were discovered by Kanō Kōkichi 和蘭字彙 (1865-1942). Shōeki's contribution in the philosophical debate of the Tokugawa period was virtually irrelevant. See Yoshinaka 1992 and Ishiwata 2007.

term 'nature' convey such a universal idea as to justify the assumption that the sum of the Tokugawa expressions pointed to nothing other than the same human experience of reality – justifying therefore their unqualified translation with 'nature'? I do not think so. As I will argue, there is nothing *natural* in our conceptions of 'nature'. Or, as Graham Harman put it, "nature is not natural and can never be naturalized. […] *Nature is unnatural*, if the world 'nature' is supposed to describe the status of extant slabs of inert matter" (Harman 2005, 251; see also Harman 2011). Besides, if we subsume under the semantic umbrella of the modern English 'nature' or the modern *ziren*/*shizen* the historically specific understanding of the relationship between human beings and the environment that the constellation of pre-modern Japanese terms expressed, do we not risk imposing to large chunks of the ideas and practices that defined that society meanings that are alien to it?[5]

1 The Fuzziness of 'Nature'

'What is nature?' is a question that seems impossible to answer. The challenge to fathom, even in the most general and preliminary sense, to what exactly the *what* of the question refers to – a thing? A process? A logic? A field? A concept? A meta-concept? A trope? A condition? Being itself? – is daunting. 'Nature' is one of the most important concepts in the intellectual history of the Western world. And yet, if we were to look at its semantic palimpsest in one glimpse, we would discover it cramming with contradictions. When we talk about 'nature' we conjure up something that is at the same time concrete and abstract, material and conceptual, physical and metaphysical. To the modern person, 'nature' can evoke breathtaking landscapes, the thick of a rainforest, or awe-inspiring natural phenomena.[6] And yet, it stands for those landscapes, particular, material, and tangible, also as a whole, as a totality abstracted from their concrete appearance. 'Nature' encompasses the objects that populate those landscapes as well as the invisible forces that move them. 'Nature' designates the essence of things, the immutable *quid* that makes things what they are, and contains connotations of eternity, changelessness and a-historicity. And, yet, it

5 My focus here is on early modern Japan, but I think the argument stands as well for all those cultural spheres that did not develop as complex a concept as 'nature' – if it is a concept at all. See, for example, how Pierre Hadot (2008) builds an argument with allegedly universalistic claims out of a limited number of European texts and myths. De Castro, Kohn, Descola, and Bruno Latour also criticise similar universalizations of 'nature' and propose instead a more complex and diverse understanding of natural 'ontologies' (cfr. Latour 2013).

6 See, e.g., the photographs in the Wikipedia entry for 'nature' URL `http://en.wikipedia.org/wiki/Nature` (2016-10-18).

changes: nature evolves, unremittingly producing and extinguishing populations, species, and ecosystems. It is alien and familiar at the same time, a perfect example of that which Sigmund Freud called *das Unheimliche*, "the uncanny" (Freud 2003, 121). 'Nature' loves to hide its secrets – as in Heraclitus' famous aphorism[7] – but it is also a perfectly intelligible "book", "written in mathematical language, and the letters are triangles, circles and other geometrical figures, without which means it is humanly impossible to comprehend a single word".[8] Nature is the mysterious Goddess Isis, Spinoza's God, and benign Mother, but it is also "red in tooth and claw".[9] It is a harmonious, homopoietic and self-healing organism,[10] *and* a field of conflicting and destructive forces. It is both within and without us. It is particular: it defines what kind of human beings we are as individuals, with our peculiar attitudes, vices and virtues; but it is also universal, defining what it means to be a human being, endowed with inalienable rights. Human beings, for some philosophical traditions, are an integral part of nature,[11] while other thinkers – from Aristotle to Heidegger via, needless to say, René Descartes – have struggled to demonstrate our substantial distinction and separateness from it. The state of nature is for human beings at the same time a nightmarish condition of continuous warfare (Hobbes) and a blissful brotherhood of human beings with the surrounding environment (Rousseau). The list of the oxymora of 'nature' can be even longer. They are the symptom of the complex history of this term, passing through successive translations – from the Greek φύσις to the Latin *natura*,[12] and then to the Indo-European vernacular variations – and successive reconfigurations in different philosophical schools, cultural practices, religious traditions and socioeconomic processes. Meanings and connotations added up rather than erasing each other, thus contributing to the semantic stratification of 'nature' into a palimpsest that is difficult to break apart. Such is the vertiginous semantic fuzziness of 'nature'.

7 Φύσις κρύπτεσθαι φιλεῖ – *Phýsis krýptesthai philei* – is Fragmentum B 123 in *Fragmente der Vorsokratiker*, ed. H. Diels, Berlin 1903.

8 Galileo Galilei, *Il Saggiatore*, quoted in Drake 1960, 183-4.

9 Alfred Tennyson, *In Memoriam A.H.H.*, Canto 56 (1850): "Who trusted God was love indeed/And love Creation's final law/Tho' Nature, red in tooth and claw/With ravine, shriek'd against his creed".

10 As in James Lovelock's Gaia hypothesis, first mentioned in Lovelock, Giffin 1969.

11 As in Baruch Spinoza's *deus sive natura*. See Sharp 2011.

12 See French 1994, Lloyd 1992; Scott 2002, 3-81; and Bondí, La Vergata 2014, 13-58.

2 The Conceptual Constellations of Tokugawa 'Nature'

In Tokugawa Japan a rich constellation of terms was used to express different aspect of the material environment. Some of them cut through different disciplines, others were field-specific. A large degree of heterogeneity can be detected in the terminology that referred to the material environment, even though the specific uses of each term differed in the various schools of thought. They may be grouped in four main categories: terms that referred to the material reality as a field or container; terms that referred to small-scale, circumscribed ecosystems or territories; terms that referred to the objects that this space contained; and locutions that referred to a principle of order, logic, or coherence inside this space.[13]

Tiandi/*tenchi* 天地 – sometimes read also as *ametsuchi* – was probably the most conventional term. Usually translated as 'heaven and earth', *tenchi* referred to what contained everything existing in the universe. Itō Jinsai defined it in *Gomō jigi* 和蘭字彙 as a "box made of six panel", which "as soon as it is closed the generative principle [*ki* 気] fills it up and eventually produced mold"(Itō 1971, 116). The *Yi jing* 易經 (end of the second millennium BCE) introduced another term that was almost a synonym of *tiandi*/*tenchi*: *gankun*/*kenkon* 乾坤. Its use was in both China and Japan limited to texts specialised in hemerology and divination. In Daoist texts like the *Zhuangzi* 莊子, but also in the Confucian *Xunzi* 荀子 (3rd century BCE) and the syncretic *Huainanzi* 淮南子 (2nd century BCE), there appeared a further term, *yuzhou*/*uchū* 宇宙, which indicated infinity or vastness in space and time. From a Buddhist context came *shijie*/*sekai* 世界. Today *sekai* is used to translate the English 'world' in both physical and social senses, but in Buddhist texts it rendered the Sanskrit *loka-dhātu*, which denoted the world conceived of as the emanation of a Buddha.

Another group of terms referred to the material world, but rather than in an abstract sense of 'container' like *tenchi*, *kenkon* and *uchū*, they were restricted and limited in scope and range. So, *fengtu*/*fūdo* 風土 appeared quite often in Chinese and Japanese texts, especially in gazetteers and records of local histories, rituals, myths and events. It was used since the earliest time to describe a land or a territory, including its geographic features, its climate, its flora and fauna, the customs of the people inhabiting those regions, etc.[14] *Shuishang*/*suijō* 水上, 'waters and lands', enjoyed large popularity in the Tokugawa period and was often used to refer to the geography of a specific territory. Authors as diverse as the eclectic

13 On the semantic of "nature" in premodern Japan, see Yanabu 1977 and Terao 2002.

14 Modern Japanese thinker Watsuji Tetsurō 和辻哲郎 reconceptualised *fūdo* in terms of geographic or climatological determinism, with often quite nationalistic and conservative nuances, whereby the cultural essence of a nation derived from its embedment in a particular climate and soil. Cfr. Watsuji 1961; Harootunian 2001, 202-92.

Confucian thinker Kumazawa Banzan 熊沢蕃山 (1619-1691), the physician Matsushita Kenrin 松下見林 (1637-1703), the geographer Nishikawa Joken 西川如見 (1648-1724), the Confucian scholars Matsumiya Kanzan 松宮観山 (1686-1780), and the agriculturalist and Buddhist monk Shaku Jōin 釋乘因 (1730-1804) used the terms to refer to the material features of a territory. In poetic compositions as well as in pictorial arts, terms like *shanhe*/*sanka* 山河 and *shanshui*/*sansui* 山水 were often employed to refer to the natural landscape of a territory. Around 756, Du Fu 杜甫 (712-770) famously sang, while prisoner in Changan: "the country is destroyed, but mountains and rivers are still here; in the city in springtime, grasses and trees grow vigorously". In this as in many other poems, *sanka* referred to the landscape of a particular territory and the plants and animals that inhabited it: unlike *tenchi*, it included natural objects, but like *suijō* and *fudō* it tended to be locally circumscribed. Even when used in expressionistic and evocative senses, it lacked the more abstract reach of *uchū* and *tenchi*. The case of *sansui* is quite similar and it is often rendered with the English 'landscape', as it was usually adopted in contexts relating to painting (as in *sansuiga* 山水画) or gardening (as in *karesansui* 枯山水). *Sanka*, *sansui* and the variant *shanchuan*/*sansen* 山川 often appeared in association with *caomu*/*sōmoku* 草木 to reinforce the meaning of a particular landscape.

Of the above terms, however, none had a semantic universe as wide and all-encompassing as the English 'nature', nor was any of them used as consistently. Also, they tended not to include the myriads of things and phenomena – natural, supernatural, and artificial – that populated the universe. A whole set of terms had that function: *banbutsu* 万物, *banji* 万事, *ban'yū* 万有, *banshō* 万象, *shobutsu* 諸物, and others were all terms that, with only slight variations, represented the "myriads of things" that *tenchi* contained. The respective usages differed: *banbutsu*, *banshō* and *ban'yū* were widely used to refer to any kind of object existing, while *banji* and *banshō*, although like the previous ones they appeared in texts of different genres, tended to include also natural events and phenomena.

Interestingly, in the Tokugawa period scholars specialising in the study of plants and animals (*honzōgaku* 本草学) – for itself or for various practical applications (pharmacology, lexicography, agronomy, economics, aesthetics, etc.) – often conceptualised their objects of research in terms of their social function. *Honzōgaku* scholars, without a term encompassing both 'nature' and the various objects it contained, generically conceptualised the minerals, plants and animals that constituted the objects of their research in terms of the social function that their intellectual and manual labour performed. In other words, the generic names of rocks, plants and animals depended on their instrumental utility. Plants and animals for physicians, apothecaries and orthodox *honzōgaku* scholars were therefore *honzō* or *yakusō* 薬草, 'medicinal herbs'. For encyclopedists and lexicographers they were *meibutsu* 名物, 'names of things'. For agronomists and naturalists

engaged in survey projects they were *sanbutsu* 産物, 'products'. Often, *honzōgaku* scholars used the clumsy *sōmokukinjūchūgyokingyokudoseki* 草木禽獣蟲魚金玉石, 'herbs-trees-birds-beasts-insects-fish-metals-jewels-grounds-stones'. And when plants and animals became the focus of popular entertainments and spectacles, they could be referred to as *misemono* 見せ物, 'stuff for exhibitions and sideshows', or *sukimono* 好き物, 'curiosities'.

From this long list of words, we observe that, on the one hand, *tenchi*, *uchū*, *kenkon* and *sekai* were *metaphorical* terms that denoted the field or, more precisely, the spatio-temporal domain that contained, without comprising, particular entities and families of entities such as rocks, minerals, mountains, rivers, oceans, lakes, herbs, plants, trees, insects, birds, beasts, human beings and their artefacts. On the other, *banbutsu*, *banshō*, *chōjūsōmoku* 鳥獣草木, *meibutsu*, *yakusō*, *honzō*, *sanbutsu*, etc. were essentially 'list terms', which *metonymically* stood for the whole set of objects that their names grouped in collections: some consists of general, all-encompassing sets, such as *banbutsu* and *banshō*, which grouped all natural (and often man-made) objects and phenomena; others were smaller, more limited sets, such as *yakusō*, *honzō*, *sanbutsu*, etc., which varied in range and scope in accordance with the epistemological or practical needs of the utterer. In between the two, *suijō*, *fūdo*, *fūsui* 風水, *sansui*, etc. *synecdochically* zoomed in and focused on a specific and circumscribed territory, which was real or imaginary, actual (as in *shinkeizu* 真景図 and topographically specific 'views' like in *meishozue* 名所図絵 albums or *ukiyoe* 浮世絵 prints of famous spots) or mythico-religious (e.g. Lushan 廬山 or Tiantaishan 天台山 as *topoi* of many landscape paintings).

Finally, beside these groups of terms, which stood for the container and the contained, we find locutions and expressions describing the metaphysical relations regulating the myriads of things contained between heaven and earth. For instance, in Zhu Xi's metaphysical speculations, the locution *tiandi ziran zhi li*/*tenchi shizen no ri* 天地自然之理 can be found to express a logic or coherence believed to be immanent in the space included between *ten* 天 and *chi* 地 and that determined the generation, destruction, and behaviour of the 'myriads of things' (*banbutsu* 万物), human beings included. At the same time metaphysical, epistemological, and ethico-political, Zhu Xi 朱熹's system developed as an elaboration of the philosophical speculations of Zhou Dunyi 周敦頤 (1017-73), Cheng Hao 程顥 (1032-85) and his younger brother Yi 程頤 (1033-1107). It conceived of inert matter ('the supreme ultimate', *taiji*/*taikyoku* 対極) as put in motion by two forces or principles it contained – one energetic, *qi*/*ki* 気, the other logical, *li*/*ri* 理 –,which caused matter to separate first into a series of binary relations – *yin* and *yang* – and then into the 'five phases or agents' – *wuxing*/*gogyō* 五行 – which in turn created, by successive permutations, the 'myriads of things'.

3 The Invention of '*Shizen*'

Subtle differences distinguished these terms from one another, together with their usage in Tokugawa texts of various genres – from philosophy and aesthetics, to literary, artistic and pop-cultural commodities, proto-scientific treatises, agronomy manuals, gastronomical guidebooks and political manifestos. On the one hand, all of them could – and indeed often are – translated with the English 'nature': as a matter of fact, that was soon put into practice by Japanese scholars themselves since the late Meiji period. Mori Ōgai understood and encouraged the translation of many of those very terms with *shizen*; Shirai Mitsutarō 白井光太郎, an early twentieth-century biologist and pioneer historian of science, substituted all these terms appearing in *honzōgaku* manuals with *shizen*. Nishitani Keiji 西谷啓治, during a conference in the seventies, argued that many of the early modern terms introduced before – he mentioned *tendō* 天道, *ten'hō* 天法, *tenchi*, *banbutsu*, and others – were to be understood as expressions of a universal *shizen*, as "everything in the universe grows in *shizen*". On the other hand, this operation betrayed and obfuscated the meanings and functions that these terms had and the world-views that they expressed. Modern *shizen*, like 'nature', follows a logic of binary relations that is absent from the constellations of terms used in the Tokugawa period: container-terms like *tenchi*, circumscribing terms like *suijō* or *fudo*, collective terms for natural objects like *banbutsu*, or expressions of forces like *shizen no ri* or *ki* were all-encompassing categories (or, in mathematical terms, sets): they were all-inclusive, creating a series of macro-micro cosmic relations. They did not, in other words, exclude nor did they neatly separate the human sphere, or the realm of ideas, or even the realm of supernatural beings (from monsters and ghosts to *bodhisattvas*) from matter, from the material, from the environment. Rather, they portrayed a universe where everything played by the same rules. Contrary to this inclusiveness, 'nature' (and the modern *shizen*) has operated throughout its long history following a logic of binary relations. 'Nature' often appears in dialectical relations like 'nature' vs 'nurture', 'nature' vs 'culture', 'natural' vs 'artificial', 'nature' vs 'history', 'nature' vs 'convention', and so on. These relations separate a realm (of things, processes, forces, images, concepts, etc.) that are variously thought of as self-sufficient and self-regulating from another that is the province of human beings, and therefore transient, mundane, contractual, subjective, and so on.

It is important to emphasise this element because otherwise we risk missing the transformative social and intellectual impact that a field like *honzōgaku*, for example, had in the early modern period. *Honzōgaku* is the Japanese reading of the Chinese *bencaoxue*, which designated a field of study usually translated as 'materia medica' or 'pharmacology'. It developed in China as a subfield of medical studies devoted to the pharmaco-

logical properties of minerals, herbs, and animals.[15] The term *bencaoxue*/*honzōgaku* probably dates back to the first century BCE, with a literal meaning of the 'study' of the 'fundamental herbs' (*honzō* 本草) that the mythical emperor Shennong 神農 was said to have touched with his tongue, thus imbuing them with pharmacological properties. Chinese *honzōgaku* manuals circulated since earliest times in Japan among court physicians and Buddhist monks, but it was only in the Tokugawa period that such manuals acquired a wider readership, especially after the introduction in the early 1600s of the single most important encyclopedia of *materia medica*, Li Shizhen 李時珍's *Bencao gangmu*, or *Honzō kōmoku* 本草綱目 in Japanese, which may be translated as "Systematic Materia Medica", published in Nanjing in 1596 (Nappi 2009; Métailié 1988; Qian 1984; Lu 1966).

Honzōgaku scholars tended to examine plants and animals as intellectual commodities in isolation from their ecosystems, to be catalogued as concrete samples of abstract species in encyclopedias, atlases, monographs and collections. These scholars collected, observed, bred, exchanged, analysed, compared, depicted, described, fantasised on and classified the most varied assortments of insects and fish, herbs and mushrooms, trees and flowers, following either theoretical or practical protocols in both solitary and collegial enterprises and for differing purposes. From the beginning of the eighteenth century, a growing number of naturalists started to invade pristine and uncharted forests, mountains and ravines to make complete inventories of the vegetal and animal species they contained. To them, the natural environment ceased to be an element of complex metaphysical apparatuses and was increasingly conceived of as a reservoir of a multitude of objects – 'myriads of things' (*banbutsu* 万物) – to be studied, catalogued and manipulated for economic, aesthetic or entertainment purposes. As a result, these social practices – intellectual, artistic, political, economic, but more often a mixture of them all – secularised nature into a multiplicity of 'objects' that could be grasped, manipulated, owned and exchanged through protocols of observational, descriptive, representational and reproductive techniques. Moreover, this process of reification of nature – the tendency of conceptual knowledge to objectify what it seeks to describe – was coeval with and connected to deep structural transformations in the mode of production that occurred during the early modern period of Japanese history: the commodification of agriculture, the monetization of society and the development of market-oriented mechanisms of commodity exchange. The role of scholars in this process of reification and disenchantment of the natural sphere was central. A revealing example is the work of Satō Nobuhiro 佐藤信淵, an eclectic scholar who played a central role in developing the economic reforms

15 The literature on Chinese *bencao* tradition is vast. For a survey, see Marcon 2015. See also Needham, Lu 1986; Unshuld 1986, 2010; Elman 2005, 2006; Barnes 2005; Hsu 2001; Ishida 1992; Okanishi 1977; Yamada 1989.

that transformed the Satsuma domain in one of the wealthiest and strongest in the early decades of the nineteenth century (Marcon 2014). Nobuhiro conceptualised and developed a system whereby political élites, economic agents, agronomists and *honzōgaku* scholars were all engaged in a political economy that aimed at squeezing the natural environment for more and more resources (sugarcanes, in particular) to be produced and commercialised. In a language similar to eighteenth- and nineteenth-century Physiocrats and Cornucopianists, Nobuhiro conceived of nature as endlessly bountiful, and yet requiring human intervention to ensure its fecundity: Nobuhiro, in short, celebrated the natural world's submission to human domination, establishing the paradigm of a political economy that became the model for all of Japan after the Restoration of 1868, so that nature and the scientists who studied it served the purpose of capital accumulation.

4 The Ideological Nature of 'Nature'

It would be an ideological mistake to follow modern Japanese scholars like Mori Ōgai or Nishi Amane 西周 and point out a deficiency of Tokugawa thinkers for not having developed a concept like 'nature'. As a matter of fact, what I want to emphasise is not the *lack* of a term equivalent to 'nature' in traditional East Asia, but rather its semantic and ideological *excesses*. 'Nature', while referring to the material, *physical* environment, also stands, often without us acknowledging it, for the *metaphysical* assumptions that have been associated to it in the course of its history and are now an organic part of its semantic palimpsest. When we say that something is 'natural', in other words, we conceive of it as existing independently from human will; or as standing for what is normal, what cannot be otherwise than what it appears to be; saying that something (an event, an object) is natural is attributing a sense of originality and authenticity to it. In early modern Japan, the terms expressing these connotations of 'nature' did not have any semantic affinity with those that referred to the material environment and its laws. The signifier 'nature' is overloaded with meanings that surreptitiously summon each other up: physical, metaphysical, aesthetic, religious, cognitive, economic, ethical and political. These meanings are not eternal or universal, but historically situated and socially conditioned. Very often, appeals to 'nature' have ideological overtones. It suffices to think, for example, of the idea of nature as an organic, self-regulating and homopoietic totality so common in popular culture and political discourse, from 'deep ecology' environmentalists to New Age pundits.[16]

16 See, for example, the "deep ecology" manifesto, in Devall, Sessions 1985. A harsh critique that is however completely enmeshed with it is Bookchin 1990.

The ideological function of 'nature' in modern discourses are better understood if we conceived of the word 'nature' and the complex conceptual multiplicity that stands behind it as if they worked as a sort of metaphor. Clearly, 'nature' cannot literally be a metaphor; unless we consider it in association with what 'nature' is taken to signify: physical reality, its order, its objects, the essential properties of things, and so on. In that case, when we talk about 'nature' we can refer to different things in different contexts: for instance, the landscape in front of my eyes *and*, by calling it nature, the property I attribute to it of being an instance of physical reality in general, or the essential character of reality itself, in contrast to, for example, a cityscape or a metropolitan area; my collection of shellfish *and* my understanding of their being part of a totality of objects that I call 'natural' insofar as they are not manufactured by other human beings; the hypothesis that the regularities I observe in the results of an experiment I have been performing are part of the inner structure of nature *qua* physical reality; this urge I have to rush to the bathroom *and* the realisation that this bodily feeling, i.e. nature's call (and *this* is properly a metaphor), is part of my biological being; or the feelings of rebellion I nourish because I am unjustly coerced into the will of more powerful human beings in contrast to inalienable rights I believe to be essential *natural* property of me as human being; or, vice versa, the ideological legitimation of a certain social order or of a certain system of economic production and exchange through the ideological belief that it is 'natural' – in the sense of instinctual, genetically embedded – in human beings as social animals. In all these examples, 'nature' stands for a landscape, shellfish (*qua* natural objects), a law of physics, the feeling of a need to go to the toilet, human rights, capitalism, at the same time that it is distinct from them but to them associated as a 'vehicle' that attributes to them properties and qualities that emphasise their autonomy from human volition, construction, or craftsmanship, their constancy and a-historicity, their externality from our mind, and so on. 'Nature' projects those meanings and connotations in a very general way.

To conclude, it seems to me that today's predicament for us living in the warming-up world of the Anthropocene is that the very idea of 'nature' often prevents the development of a deeper understanding of human relationship with the material environment.[17] In order to appropriate the political dimension of the metabolic relation of humans with the environment – to "democratize" nature, in Bruno Latour's jargon (Latour 2004) – we must then emancipate ourselves from the mystifying power of 'nature', as I believe, with Adorno, that "people are themselves dominated

17 Ingold (2000) proposes one of the most complex treatment of the metabolic relations between humans and their environment.

by nature: by that hollow and questionable concept of nature".[18] In that sense, retrieving the complex constellations of concepts and terms of a non-Western tradition like the one of Tokugawa Japan – certainly not with the purpose of proposing a return to a more 'authentic' way of relating with the environment – might have the unintended function of emancipating us from beliefs and practices that have been sustaining and legitimating "an enlightened world that radiates disaster triumphant" (Horkheimer, Adorno 1989, 3). In short, to paraphrase Robespierre, it seems that today 'nature' must die so that the environment can live.[19]

Bibliography

Barnes, Linda L. (2005). *Needles, Herbs, Gods, and Ghosts – China, Healing, and the West to 1848*. Cambridge (MA): Harvard University Press.

Bondí, Roberto; La Vergata, Antonello (2014). *Natura*. Bologna: il Mulino.

Bookchin, Murray (1990). *The Philosophy of Social Ecology – Essays on Dialectical Naturalism*. Montreal; New York: Black Rose Books.

Buck-Morss, Susan (1977). *The Origin of Negative Dialectic – Theodor W. Adorno, Walter Benjamin, and the Frankfurt Institute*. New York: The Free Press.

De Castro, Eduardo Viveiros (2004). "Exchanging Perspectives – The Transformation of Objects into Subjects in Amerindian Ontologies". *Common Knowledge*, 10(3), 463-84.

Descola, Philippe (2013). *Beyond Nature and Culture*. Transl. by Janet Lloyd. Chicago: University of Chicago Press.

Devall, Bill; Sessions, George (1985). *Deep Ecology: Living as if Nature Mattered*. Salt Lake City: Gibbs Smith, Publisher.

Drake, Stillman (ed.) (1960). *The Controversy of the Comet of 1618*. Philadelphia: University of Pennsylvania Press.

Elman, Benjamin (2005). *On Their Own Terms – Science in China, 1550–1900*. Cambridge, MA: Harvard University Press.

Elman, Benjamin (2006). *A Cultural History of Modern Science in China.* Cambridge, MA: Harvard University Press.

French, Roger (1994). *Ancient Natural History*. London; New York: Routledge.

Freud, Sigmund (2003). *The Uncanny*. London: Penguin.

Hadot, Pierre (2008). *The Veil of Isis – An Essay on the History of the Idea of Nature.* Cambridge (MA); London: Harvard University Press.

18 Adorno, Theodor. "Musikpädagogische Musik: Brief an Ernst Krenek". *Adorno und Krenek: Briefwechsel*, 219. English translation in Buck-Morss 1977, 228.

19 Clearly, this is a paraphrase of Maximilien Robespierre's famous passage in the speech of 3 December 1792: "*Louis doit mourir parce qu'il faut que la patrie vive*". See Stolz 2014.

Harman, Graham (2005). *Guerrilla Metaphysics*. Peru (IL): Open Court.
Harman, Graham (2011). *The Quadruple Object*. Winchester (UK); Washington: Zero Books.
Harootunian, Harry D. (2001). *Overcome by Modernity – History, Culture, and Community in Interwar Japan*. Princeton: Princeton University Press.
Horkheimer, Max; Theodor Adorno (1989). *Dialectic of Enlightenment*. Trans. of John Cumming. New York: Continuum.
Hsu, Elizabeth (ed.) (2001). *Innovation in Chinese Medicine*. Cambridge: Cambridge University Press.
Ingold, Tim (2000). *The Perception of the Environment – Essays on Livelihood, Dwelling and Skill*. London: Routledge.
Ishida Hidemi (1992). *Chūgoku igaku shisōshi* (Intellectual History of Chinese Medicine). Tōkyō: Tōkyō Daigaku Shuppankai.
Ishiwata Hiroaki (2007). *Andō Shōeki no sekai – Dokusōteki shisō wa ikani umareta ka* (The World of Andō Shōeki – The Origins of His Creative Thought). Tōkyō: Sōshisha.
Itō Jinsai (1971). "Gomō jigi" (The Meanings of Philosophical Terms in the Analects and Mencius). *Nihon shisō taikei*, vol. 33. Tōkyō: Iwanami Shoten.
Karube, Tadashi (ed.) (2013). *Nihon no shisō – Shizen to jin'i* (Japanese Thought – Nature and Artifice), vol. 4. Tōkyō: Iwanami Shoten.
Kohn, Eduardo (2013). *How Forests Think – Toward an Anthropology Beyond the Human*. Berkeley; Los Angeles; London: University of California Press.
Latour, Bruno (2004). *Politics of Nature – How to Bring the Sciences into Democracy*. Cambridge; London: Harvard University Press.
Latour, Bruno (2013). *An Inquiry into Modes of Existence – An Anthropology of the Moderns*. Transl. by Catherine Porter. Cambridge (MA); London: Harvard University Press.
Lloyd, Geoffrey E.R. (1992). "Greek Antiquity: The Invention of Nature". Torrance, John (ed.), *The Concept of Nature*. Oxford: Clarendon Press, 1-24.
Lovejoy, Arthur O. (1997). "Some Meanings of Nature". Lovejoy, Arthur O.; Boss, George, *Primitivism and Related Ideas in Antiquity*. Baltimore: The Johns Hopkins University Press.
Lovelock, James A.; Giffin, C.E. (1969). "Planetary Atmospheres – Compositional and Other Changes associated with the Presence of Life". *Advances in the Astronautical Sciences*, 25, 179–93.
Lu, Gwei- djen (1966). "China's Greatest Naturalist – A Brief Biography of Li Shih-Chen". *Physis*, 8(4), 383-92.
Marcon, Federico (2014). "Satō Nobuhiro and the Political Economy of Natural History in Nineteenth-Century Japan". *Japanese Studies*, 34(3), 265-87.
Marcon, Federico (2015). *The Knowledge of Nature and the Nature of Knowledge in Early Modern Japan*. Chicago: The University of Chicago Press.
Métailié, Georges (1988). "Des mots et des plantes dans le *Bencao gangmu* de Li Shizhen". *Extrême-Orient Extrême-Occident*, 10, 27–43.

Nappi, Carla (2009). *The Monkey and the Inkpot – Natural History and its Transformations in Early Modern China*. Cambridge (MA): Harvard University Press.
Needham, Joseph; Lu, Gwei-djen (1986). "Botany". *Science and Civilization in China*, vol. 6(1). Cambridge: Cambridge University Press.
Okanishi Tameto (1977). *Honzō gaisetsu* (Overview on Pharmacology). Ōsaka: Sōgensha.
Qian, Yuanming (ed.) (1984). *Li Shizhen yanjiu.* Guangzhou: Guangdong Keji Chubanshe.
Scott, Charles E. (2002). *The Lives of Things*. Bloomington; Indianapolis: Indiana University Press.
Sharp, Hasana (2011). *Spinoza and the Politics of Renaturalization*. Chicago; London: The University of Chicago Press.
Stolz, Robert (2014). *Bad Waters – Nature, Pollution, and Politics in Japan, 1870-1950*. Durham: Duke University Press.
Terao Gorō (2002). *"Shizen" gainen no keisei shi – Chūgoku, Nihon, Yōroppa* (The Development of the Concept of "Nature" – China, Japan, Europe). Tōkyō: Nōsangyoson Bunka Kyōkai.
Thomas, Julia Adeney (2001). *Reconfiguring Modernity – Concepts of Nature in Japanese Political Ideology*. Los Angeles; Berkeley; London: The University of California Press.
Ueda, Atsuko (2007). *Concealment of Politics, Politics of Concealment – The Production of "Literature" in Meiji Japan*. Stanford: Stanford University Press.
Unshuld, Peter (1986). *Medicine in China – A History of Pharmaceutics.* Los Angeles; Berkeley; London: The University of California Press.
Unshuld, Peter (2010). *Medicine in China – A History of Ideas.* Los Angeles; Berkeley; London: The University of California Press.
Usui Yoshimi (1975). *Kindai bungaku ronsō* (Debates on Modern Literature). Tōkyō: Chikuma Shobō.
Watsuji, Tetsurō (1961). *Climate and Culture – A Philosophical Study*. Tōkyō: The Hakuseido Press.
Williams, Raymond (1984). *Keywords*. Oxford: Oxford University Press.
Yamada Keiji (1989). *Chūgoku kodai kagaku shiron* (On the History of Science in Ancient China). Kyōto: Kyōto Daigaku Jinbunkagaku Kenkyūjo
Yanabu Akira (1977). *Hon'yaku no shisō: Shizen to neichā* (The Philosophy of Translation – Shizen and Nature). Tōkyō: Heibonsha
Yoshida, Seiichi; Asai, Kiyoshi (eds.) (1971). *Kindai bungaku hyōron taikei* (Anthology of Critical Essays on Modern Literature), vol. 1. Tōkyō: Kadokawa Shoten.
Yoshinaka Toshinobu (1992). *Andō Shōeki – Social and Ecological Philosopher in Eighteenth-Century Japan*. New York; Tōkyō: Weatherhill.