# Chapter 12 On the Concept of "Energy" from a Transcultural Perspective



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Abstract This chapter gives an overview of the concept of energy from a transcultural perspective. Often, energy is only approached by means of the stipulative definition as used in science. This usage disregards the specific philosophical origins of the concept. In the comparative philosophy of Ulrich Libbrecht, the concept of energy is used as a comparative category, which has related concepts in each of the various ideal types of worldviews—the Greek, the Indian, and the Chinese—his comparative model describes. By informing ourselves of particularly Buddhist and Chinese perspectives on energy and ethics, we can transform and expand our understanding of energy, in order to increase its explanatory power, with regard to contemporary questions of energy justice. This includes a posthuman approach towards it.

### 12.1 Introduction

This volume is aimed at an active engagement with energy ethics from a cross-cultural perspective. This chapter engages with the concept of energy on the most fundamental level. When we engage with the concept of energy from a cross-cultural perspective, this might lead to a deconstruction of some of our assumptions about it. This chapter will try to give an overview of the fundaments of the concepts of energy from different cultural starting points, while being inspired by the comparative approach of Ulrich Libbrecht to understand energy as a cross-cultural comparative philosophical category to understand philosophical difference.

When we engage with the ethics of energy, our enquiries are grounded in our imagination of the concept of energy. Energy can be approached in two ways, either

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as a physical and defined given, based on the laws of thermodynamics<sup>1</sup>, or as a philosophical and open question. The way, however, how we imagine the meaning and reference of the concept of energy, already has ethical implications. How we understand the world and our ethical commitments can never be detached from each other. Regarding energy ethics, I propose we won't focus too much on the physically defined approach to energy and instead survey what is at stake when we survey energy as a philosophical open question. The definitional approach to energy is used for functional applications. But to understand energy from an ethical perspective, we need to see how it is embedded in broader frames and worldviews.

Energy is predominantly an ethical problem if it is understood as limited or if access to it is restricted. As a scientific and economic given, energy is indeed seen as both limited and its access restricted. This "applied" concept of energy is very different from its philosophical roots, which appears to understand it much more as an unlimited force. Ulrich Libbrecht's method has been precisely to use the concept of energy as a cross-culturally relevant philosophical principle. When we look at the environmental crisis of today as it is related to the energy crisis, it is ironic to see that though we believe that energy it is actually abundant. The real energy crisis is not a material dependence on fossil fuels as a source for energy, but a crisis of imagining a source of energy which taps into the philosophical understanding of energy. In a sense, even our imaginations of "sustainable" energy sources, such as wind, solar, hydro-, and biomass, still rely on a limited perspective on energy, in which energy is "measured" and "calculated" and in which the industries necessary to extract this energy still rely on scarce resources. The stipulative understanding of energy, which presents it as an unquestionable scientific given, might not be sufficient if we want to engage with deeper and ethical question in light of the ecological predicament and energy justice. It is therefore important that we imagine energy beyond the quantifiable concept as how it is often presented to us. Libbrecht's comparative philosophy starts from the philosophical open concept of energy. In this chapter, I will briefly survey his cross-cultural understanding of energy and relate it to energy ethics, to show how it helps understanding energy in a way which offers a more integrated and holistic approach to energy justice. Since energy justice is a global issue, it is important to take into account wider diversity worldviews.

# 12.2 Libbrecht and Worldviews

Ulrich Libbrecht (1928–2017) was a Belgian philosopher, who can be placed in the universalist school of comparative philosophy. This school assumes the possibility of designing a philosophical model to encompass all different philosophies of the world.

<sup>&</sup>lt;sup>1</sup>All definitions appear to include a reference to the "ability to perform work" and the property of "transference," in line with the first and second laws of thermodynamics. Wikipedia's current lemma starts with "energy is the property that must be transferred to an object in order to perform work on, or to heat, the object." For discussion, we refer to Lehrman (1973).

This possibility was later questioned by representatives of the hermeneutical school of comparative philosophy, who assume that any comparative philosopher is always reflecting on different philosophies from a particular hermeneutical perspective and would need to take this perspective into account (van der Braak 2014). One of the reasons that Ulrich Libbrecht was attracted to a universalistic approach to comparative philosophy was that he was trained as a mathematician (before finishing a PhD in Sinology in Leiden) and was strongly influenced by the Belgian philosopher Leo Apostel.<sup>2</sup> The project of Apostel can be seen as a rational-universal approach to philosophy, which attempted to unite metaphysics, logic, and ethics in an overarching collection of what he called worldviews (Apostel and Veken 1992). Any worldview is the idea a human being or human beings have about the world in which they live. It includes a set of assumptions about how the world in which we live is constituted. These assumptions are both descriptive and normative. Worldviews provide human beings meaning in life. Worldviews can change, and everybody has them. According to Apostel and Veken (1992), the plurality of worldviews and the encounter between them would ultimately lead to a merging of worldviews, which would result in a more correct understanding of nature and reality, and of the meaning, value, and ethics worth striving for. Ulrich Libbrecht entered this project from the approach of a sinologist, who was well acquainted with the non-Western worldview of Chinese culture. This added a comparative dimension to the worldviews project.

Libbrecht's model of comparative philosophy starts from two fundament concepts: energy and information. According to him, these can serve as "comparative foundations", since every philosophy has concepts which are similar to these concepts (Libbrecht 2007). Each philosophy expresses a worldview, a view of the world. The particular form of this worldview, this tradition, or this religion is what Libbrecht (1995) calls the "surface structure" or the worldview. How it is expressed, in which forms it is expressed, etc. This surface structure is culture dependent and variable. This is opposed to "the world" or the "real Reality" that is beneath these phenomenal worldviews. This is the "depth structure" of all worldviews. Libbrecht often uses the metaphor of the "ocean". The "surface structure" is the "waves" of the ocean; the "depth structure" is the water beneath the waves. These surface structures of different philosophical or religious cultures is what Libbrecht calls the world of *information*. However, the depth structure, or the water beneath the surface of the ocean, which is the "real Reality" is shared by all philosophies. This depth structure of philosophy is what Libbrecht calls energy. Energy is therefore the cause of everything. It is everything and nothing at the same time. However, according to Libbrecht, energy cannot only be understood as a substance, it can also be studied in its effects, and in how it functions. Different philosophies have different expressions of this depth structure or energy. These expressions are the different observations of how energy functions. This functionality, in turn, is expressed with the concept information.

<sup>&</sup>lt;sup>2</sup>Leo Apostel was one of the strongest representatives of post-war philosophy at the University of Ghent in Belgium. This school of philosophy not only represented both a secular and scientific approach to philosophy, but also emphasized the necessity for values and normative frameworks (Batens and Christiaens 1999).

Information, as Libbrecht explains us, is derived from in-formation, or "being in form". Energy, on the other hand, is derived from the Greek ἐνέργεια, "in the works". He explains that energy is only observable "in its works", i.e. in its function. Libbrecht develops a comparative model to compare different philosophical worldviews. Methodologically, he believes that there has to be enough similarity as a ground to compare (the energy), whereas we can also observe that on the surface, various philosophies can be very different (the information). Libbrecht's models consist of three philosophical worldviews. These worldviews are "ideal types". This means that the worldviews are not discretely distinct from each other, but that each particular philosophy can tend towards with either of these ideal types. They do not exist in reality, but are limit situations. The geographical positioning of the three worldviews (Greek, Indian, and Chinese) is not a means of limiting these worldviews to these regions, as if Western philosophers only think a certain way, and Chinese philosophers another way. The three ideal types each emphasize a different relation to the world and the place of humans in it. In their contribution to this volume, Janssens et al. (2020) give a detailed outline of the comparative model and the three ideal typical worldviews, so I will only summarize it briefly relevant to the philosophical question of energy. The first worldview emphasizes "Being" and can be broadly related to the Greek-monotheistic-scientific philosophies. The second worldview emphasizes "Non-Being" and can be broadly related to the Indian-Buddhist philosophies. The third worldview emphasizes "Becoming" and can be broadly related to the Chinese-Daoist philosophies. We have denoted that *energy* refers to the "real Reality" beyond the phenomenal and the particular worldviews and that energy is defined functionally, "in its workings". This means that energy as a comparative concept in Libbrecht could also say to equal God, or nature, or Emptiness, or the ground of Being, dependent on which metaphysical model you prefer (Libbrecht 2007). Energy, for Libbrecht, is without properties, it is the foundation of reality, and it enables us to compare in the first place.

The first worldview, according to Libbrecht, is the scientific worldview which emphasizes reality as "Being". This means that reality can only be observed as it appears as information. Everything is "Being" is *energy*, but this energy can only be observed in its function. *Energy* in this worldview, according to Libbrecht, is still an "unknown", which becomes gradually known by means of scientific inquiry. The physical definition of *energy* is most applicable to the interpretation of the concept of energy in this worldview: "energy is the property that must be transferred to an object in order to perform work on, or to heat, the object". It is this understanding of energy that is commonly used in philosophical or ethical debates regarding energy. Let me put that more firmly: Greek-monotheistic-scientific is the dominant view on energy and therefore obfuscates other interpretations of energy. The scien-

<sup>&</sup>lt;sup>3</sup>For the secular-minded reader, the hyphenation of "monotheistic" and "scientific" might lead to some confusion. According to Libbrecht, science and Christianity are much less oppositional as usually assumed. Scientific culture emerged in Christian Europe. To a large extent, both rest on a similar metaphysical imagination. The connection between energy, cosmology, and God has, for example, been explored in a theological edited volume by Bowman and Clayton (2012).

tific worldview aims to understanding the world through linear causality and through the functioning of energy. The advantage of this view is that it is able to acquire very precise measurements. How much energy is available? How is this energy distributed? How much energy is available for humanity and how is this energy distributed? It is a worldview that enables a calculative approach to energy and to energy ethics and justice. The disadvantage is that this view is too narrow. It fails to acknowledge that *energy* is not limited but limitless. It also fails to acknowledge that what we might do to achieve energy justice is not a more just calculus of distribution, but instead a broader imagination of *energy*.

This brings us to the other worldviews. Let me first note something relevant here. Comparative philosophy is sometimes used as a form of "escape" from a Western perspective. In a form of reversed Orientalism, the philosophies of the East are admired for being more wholesome, more sensitive, and more natural than the artificial, economical, and rational scientific worldviews of the West. In a recent publication of David Palmer on Daoism, he has pointed at the fact that Chinese and American expressions of Daoism are now already inextricably interwoven (Palmer and Siegler 2018). The difference between "West" and "East" becomes thus rendered meaningless; instead we have to acknowledge there is an accelerated circulation of cultural codes globally. One of the strengths of the comparative model of Libbrecht is that it does not oppose "the West" versus "the East", but that it instead proposes three worldviews: "Being", "Non-Being", and "Becoming", and that wholesomeness is ultimately to be found in a balance between these worldviews, rather than rejecting one in favour of the other (Libbrecht 2005). When we move to the second and third worldviews, we are not looking to contradict the Greekmonotheistic-scientific worldviews, but to broaden the scope of its horizon. A second note I should make here is that the specific biases in Greek-monotheistic-scientific worldviews are not limited only to the concept of energy—though it is the focus of this text—but also to the concepts of justice and ethics. To broaden our imagination from the Greek-monotheistic-scientific worldviews to an extended worldview means destabilizing all these concepts at the same time. We cannot simply hope to find solace in changing one concept by an extension with Eastern insights but stick to a calculus of justice and ethics that is informed by a Western worldview. When you change your metaphysics, you change your ethics as well. Part of this work is being done, for example, in Sovacool et al. (2017) and Janssens et al. (2020).

#### 12.3 The Indian-Buddhist Worldview

Now then, the second worldview is expressed in Indian and Buddhist philosophical cultures and is characterized by an emphasis on "Non-Being". While in the Greekmonotheistic-scientific worldviews, *energy* is unknown, but will become known as a result of scientific inquiry, in the Indian-Buddhist worldviews, the unknowability of energy is absolute. It is rationally unintelligible. In Indian religion and philosophy, the world is considered  $M\bar{a}y\bar{a}$  or illusion. The concept of energy is expressed in Sanskrit

word prāṇa. Prāṇa can mean breathe and can also be compared to the concept "atman" which also means breath or soul. It is linguistically related to "atmen" in German (to breathe) or "adem" in Dutch (breath). The "real Reality" is beyond the world of phenomena, or information. Where in the Greek-monotheistic-scientific worldviews, the informational world acts as our only access to the real Reality, in the Indian worldview, only the rejection of the informational world can serve this purpose. Buddhists even go as far as to reject the concept of "atman" as something substantive. According to them, there is no human soul or "breath" as a form of energy beyond the phenomenal world. They state the idea of an-atman, no soul, no breathe, or no energy. The "real Reality" is, in the Buddhist tradition, called nirvana or Emptiness. Much has been written on how to interpret this. Libbrecht explains us that the Emptiness of nirvana should be understood as an informational Emptiness (Libbrecht 2007), but that this *Emptiness* is actually full of (pure) *energy*. This is not energy in its scientific definition, since it precisely lacks any capacity to perform any work. It has no informational properties. Later Buddhist writers would emphasize that both the informational world and the nirvana are the same thing. They say: "Emptiness is form, and form is Emptiness". 4 This emphasizes that the Indian-Buddhist worldview rejects to describe the world or the energy as "something", as a "Being", but as a "non-Being". What are the ethical implications of this position? For Buddhism, attachment to the belief that reality is something is the cause of all suffering. Our desires bind us to the phenomenal, informational, reality, which is not real. While in Western ethical frameworks, the concept of justice is based on an equal distribution of the fulfilment of desires (in the physically determined interpretation of energy), in a Buddhist worldview, it would actually be most just to relieve people from their desires and distribute Nothing. Climate crisis, in a Buddhist perspective, is precisely the result of our desires. The result should not be an equal distribution of energy in the form of work (energeia), but an equal diminishment of energy, until it is being reduced to its core—Nothingness. The lesser your responsibilities and attachments to life, the more developed you have become. In some Buddhist monasteries, the highest management functions are performed by the novices, while the cleaning of the lavatories is reserved to the most enlightened of monks. Energy justice in such a worldview would be the result of less energy for everybody, instead of an equal distribution of what we have. It would mean a re-evaluation of the lack of functional energy.

#### 12.4 The Chinese-Daoist Worldview

There is a certain nihilism present in the Buddhist worldview, which has been pointed out by several philosophers, for example, by Friedrich Nietzsche (Mistry 1981). Buddhism, according to Nietzsche, is understood as a rejection of life, since the first Noble Truth identifies life as suffering. In this interpretation, Buddhism

<sup>&</sup>lt;sup>4</sup>This is a famous quote from the Heart Sutra.

does not really provide an ethics, but more of an anti-ethics—a path of liberation from suffering. Maybe it is impossible both to "equally distribute" functional energy and to diminish it to its "pure" quality of Nothingness as in the case of Indian-Buddhist worldview. Therefore, we have to look at the third worldview.

As I have stated before, it has been highly innovative of Ulrich Libbrecht to recognize that "the East" is not a single worldview opposed to "the West". Even more so, we could even say that the third worldview Libbrecht proposes is even more different than the Greek-monotheistic-scientific and the Indian-Buddhist worldview are from each other. The Chinese culture, according to Libbrecht, developed a philosophical perspective completely different from both the West and India. He summarizes this by emphasizing that the Chinese-Daoist worldviews emphasize Becoming, the transformative qualities of reality. These qualities are inherent to reality: they are immanent (which is expressed by the Chinese term zìrán 自然). The subject of the study of philosophy is not some abstract form of logical Being, but instead, the entire natural cosmos. Where energy is understood to be only observed in its functionality in the Greek-monotheistic-scientific worldviews, and ultimately *Emptiness* in the Buddhist worldview, the Chinese-Daoist worldviews simply state that energy is inside everything; energy is understood as a force of life which they call *aì* 気.<sup>5</sup> This is not the same as a personal "soul". It is a life force which permeates everything. The body, which is the vessel of qi, takes a much more prominent place in the Chinese-Daoist worldviews. All forms of physical practices are propagated to increase the flow of qi. Qi is not external, but innate. It permeates everything. The limits of  $q\hat{i}$  are only its limits to flow. The  $q\hat{i}$  is not caused by anything—there is no moment of creation as is common in the Christian worldview or is, for example, stated in the scientific imagination of the big bang.<sup>6</sup> Instead, nature - or *energy*, the cosmos - is seen as its own cause, *zìrán* 自然 ("thus by itself"). It is "spontaneously at ease", and the flow is natural. It is artificial human culture which limits the flow of qì. Chinese medicine is therefore aimed at diagnosing the blockage in the flow of ai, in order to let it flow naturally again inside one's body. The same principle is applicable to Chinese ethics. Both in Confucianism and Daoism, the ethical principle is to develop oneself towards the

 $<sup>{}^5</sup>$ The pinyin transliteration is qi and indicates a fourth tone (descending). In simplified Chinese, it is written 气 and it is a fairly common character, referring to gas, air, and breathe.  $Ti\bar{a}nqi$  天气 means "weather" (literally "heaven air") and  $xi\bar{a}ngqi$  香气 is a fragrance. It can also be used in expressions related to anger, such as qi  $k\bar{u}$  le 气哭了, be annoyed to tears ("ku" is to cry). In classical Chinese, it is written 气. Many earlier Western texts would use Wade-Giles transliteration and would write ch"i. This should not be confused with T'ai Chi, which should be written in pinyin as tài jí, which means great pole. Qi is, however, used in the name of the related practice Qi Gong.

<sup>&</sup>lt;sup>6</sup>The big bang theory was proposed by a catholic scientist, Georges Lemaître.

<sup>&</sup>lt;sup>7</sup>There are significant differences between Confucian and Daoist ethics. Although both philosophies agree that one should develop oneself, they disagree on how the final goal looks like. Confucianism emphasizes cultivation, while Daoist emphasizes de-cultivation. However, we should note that a strong difference between Daoists and Confucians is of later date and part of polarizing tendencies and power struggles in later Chinese history. At the times of the classical Daoist and Confucian philosophers, they did not recognize each other necessarily as different schools of thought. For the sake of argument here, it is not necessary to make a strong distinction either.

best possible natural flow.<sup>8</sup> In the Chinese-Daoist worldviews, everybody is understood to have an innate talent to develop this (Yao and Zhao 2010). This "mandate of heaven" is your ethical instruction, your assignment in order to let the natural  $q\hat{i}$ flow as naturally as possible through your body.9 In the Chinese-Daoist worldviews, according to Libbrecht, technological developments are looked at with much more suspicion. In Daoist philosophy, technology only brings humans away from the natural flow of life. Yuk Hui has made a convincing case to show that technology in China has a completely different meaning from the common Greek understanding (Hui 2018). The Western concept understands energy often as a cause which sets things in motion. In Chinese thought, energy or qì is transformative: it does not start a movement, but it changes the form through which it flows, literally. While the Greek-monotheistic-scientific worldviews understand *energy* to be the "cause" of an "effect" which can be measured, in Chinese thought, energy is a field which permeates everything. If the field "moves", everything in the field is moved. Libbrecht calls this a "reticular causality" instead of a "billiard ball causality". In terms of responsibility and therefore justice, this both increases and decreases individual responsibility. It increases the personal responsibility in the sense that your cultivation, 10 which enables (your) qì to flow more freely, has a direct effect on other beings around you. On the other hand, it also decreases personal responsibility, since you are only a very small part of a much larger framework. If all bodies move into one direction, your movement in another direction won't have much effect. The popular understanding of Chinese culture is that it is "less individualistic and more collective".

At this point, I would like to make a small side remark on Buddhism. In the comparative model, Buddhism is part of the "Indian worldview"—Buddhism originated in India and is a direct reaction to the Brahmanic worldview (which since two centuries would be called "Hinduism"). However, China has been strongly influenced and has a strong Buddhist culture itself as well. How does this relate to the Chinese worldview of *qi*? According to Libbrecht and other sinologists (Zürcher 1959; Mollier 2016), Buddhism in China was strongly influenced by the Chinese worldview. The best expression of this is found in Ch'an Buddhism, which is best known under its Japanese name Zen. Many have argued that Ch'an Buddhism is a sort of mix between Daoism and Buddhism. In Indian Buddhism, the ethical direction towards *Emptiness* is an active intentional process of "emptying". In Chinese Buddhism, however, the *Emptiness* is called *Buddha Nature*, and it is understood to be inside everything. This Chinese understanding of Buddhism is much more in parallel with the concept of *qì* in the Chinese-Daoist worldview. The only problem is that we are not aware that we are Buddha Nature; therefore,

<sup>&</sup>lt;sup>8</sup>We can recognize a Heraclitan understanding of nature as well in this form of thinking, *panta rhei*. This is an example of how these worldviews are not strictly geographically demarcated.

<sup>&</sup>lt;sup>9</sup>The concept of "heaven"— $ti\bar{a}n \mathcal{R}$ —in the Chinese worldview is not the same as the transcendent heaven in theistic metaphysics, as the place where God resides. Instead, it should be understood as the entire cosmos, of which our earth is part.

 $<sup>^{10}</sup>$ A Daoist would say that this cultivation is in fact a de-cultivation, because it is precisely the culturedness of human society that prevents the qi from flowing freely.

in Chinese Buddhism, we should acquire merits so that we are graced with an awareness of our Buddha Nature. In these forms of Buddhism, you often see people offer incense to Buddhist statues (*bodhisattvas*)—this is a method to acquire the necessary merit to achieve the blessing. This view competed with the Daoist and Confucian worldviews. In Chinese Buddhism, other than acquiring merits, self-cultivation is of less importance; it has a similar metaphysical outlook, namely, it understands *energy* to be inside everything, and we would only need to enable it to flow freely.

To summarize, the comparative model of Libbrecht proposes three different worldviews, which are ideal types of philosophical systems: the "Western", the "Indian-Buddhist", and the "Chinese" worldview. According to Libbrecht, though they all have a concept of *energy*, this concept is expressed in different ways. He plots these worldviews on an axial model (see Fig. 12.1). The y-axis is the axis of

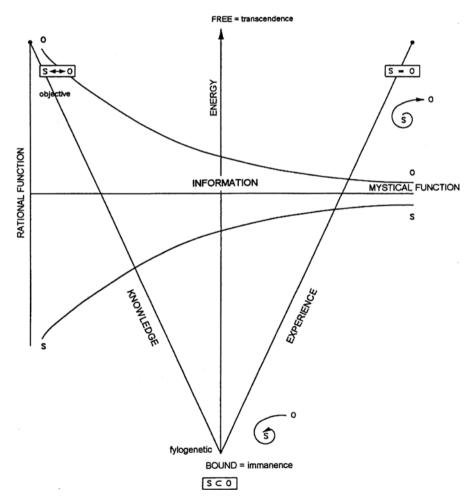


Fig. 12.1 Free and bound energy

energy. On the lower end of the axis, the energy is bound by the laws of nature. This is where Libbrecht situates the Chinese worldview. Energy is most "free" in these worldviews, precisely when it is not free to move beyond its natural flow. Energy is immanent to the world. The primary ethical principle of Daoism is wúwéi 舞為, the practice of non-action. By acting (freely), you disturb the free flow of energy; instead, by not acting, by just spontaneously following what nature orders you to do—which is, by doing nothing, energy is most free, but also most bound. On the upper end of the axis of energy, Libbrecht situates the other two worldviews. In both other worldviews, humans do not flow with how energy commands them to flow, but they use free energy to transcend the natural world. In this Western-scientific worldview, this means taking control over nature by means of developing an artificial world to create as much wealth as possible from it. This is achieved by measuring, understanding, and controlling nature in order to make it fit our needs. The challenges of climate change and the desire to "fight climate change" and "save the planet" are still part of this same worldview of taking control over nature. In the Indian-Buddhist worldviews, the flow of energy is considered a chain. Energy forces us to want one thing, and then something else, which results in a state in which our lives are in permanent illusion. Instead, the Indian-Buddhist worldviews propose to empty oneself of the flow of the phenomenal world, to experience the *Emptiness* that is behind all existence. For this, we need to direct our free energy towards our emotional experience and our ability to be touched by the mystery of nature. Though in both cases, the energy is free—which means unbound by the natural flow or things—the informational quality of it is different; in the Westernscientific worldview, we relate to it rationally, while in the Indian-Buddhist worldview, we relate to it emotionally.

# 12.5 Comparative Reflections

Our engagement with these concepts is very challenging to our commonly held beliefs. To be able to integrate them with the common Greek-monotheistic-scientific worldviews would be nothing short of a paradigm shift. They do not serve in any way to discredit these worldviews. In fact, it is quite the opposite: Greek-monotheistic-scientific-worldviews might even be reinforced. But it does set clear boundaries to the epistemological limits of scientific statements. The concept of *energy* cuts through the heart of the matter. I believe it is not enough to "only receive inspiration from other philosophies" in order to enhance our concepts of energy, ethics, and justice. We should have the courage to completely turn our concepts around. Only in this way, we can see how our bias expresses certain worldviews, which are common to the liberal democratic political world order and which are beyond scientific reach.

I will try to give an example of what I mean. The notion of "energy justice" appears to presuppose an equal or more equal distribution, for example, by means of access, to energy sources, which should also be environmentally sustainable. Concepts such as equality, sustainability, and distribution, however, let alone that we can have an impact on those things as humans, are absent in the non-Western worldviews which are described. Energy is in fact the most equally distributed resource of anything. In the Indian-Buddhist worldview, having more of it is even a disadvantage. While in the Chinese worldview, it is not about receiving or being permitted access to energy, but it is about finding your own way towards the source of energy inside yourself. In part, Eastern thought is so radical, because justice is not something to achieve (as is common to the transcendental ethical framework which is common in Greek-monotheistic-scientific worldviews), but the world is always already in and of itself.

The question of energy justice starts from our understanding of the community or communities who stakeholders in energy ethics are and therefore in the conceptualization of energy. It is obvious that there is a difference between an energy ethics which only benefits a certain group of people and an energy ethics which benefits the whole of humanity. But there is also a difference between an energy ethics which benefits humans and an energy ethics which also benefits animals, for example. However, this reasoning might need to be extended to even larger communities; the communities of all living beings (including plants, archaea, mushrooms, and bacteria), but maybe even to the community of artificial beings (robots, computers, smartphones; what is at stake for the non-human non-biological intelligent bodies on our planet?). While the concept of ethics appears to be straightforward, it is strongly dependent on the kind of community we want to imagine for the ethics to apply to. Often, there is an implicit universal humanism present in the understanding of ethics, which needs both to be acknowledged and put into question. The main reason for this is not only a philosophical critique of the primacy of the human as the sole or primary central point of meaning; it is mainly informed by an increasingly wide understanding that humanity is only a minor player in a much larger ecological environment and furthermore that the nature of this ecology has come under major transformations in the past century. In this light, ethics as the exclusive domain of human actions and behaviour should be put into question.

How can these transcultural understandings of energy help us advance our imagination of energy justice? I argue in favour of a strong re-evaluation in favour of *energy*, to prevail over the human world. Most ethical systems—such as utilitarianism, deontology, or virtue ethics—focus on the human actor as beginning and endpoint for meaning in the world. A conventional energy justice is still emphasized on justice for humans. When we take these transcultural considerations into account, the question of energy justice can therefore be restated as "What is justice from the perspective of energy?"

We have been comparing philosophies from long gone male philosophers from ancient times. They inhabited an earth that is absolutely different from ours today. As contemporary philosophers, we have become acquainted with all philosophies from all times. It has therefore become nonsensical to "locate" any philosophy in a certain area. The "Western" worldview we have described is equally, maybe even more, prevalent in China today, and the Buddhist idea that all "form is *Emptiness*" and *Emptiness* is form" is expressed in the culture of the entertainment industry, for example. Philosophies have become planetary currents; their flow is ever increasing. We do not have to look beyond boundaries anymore, because there are no boundaries. Everything has become interconnected; everything influences everything—similar to the qi-field of the Chinese-Daoist worldview. The planet Earth is now so increasingly dominated by human activity that many philosophers and geologists are referring to our era as the Anthropocene. Human activity has become the dominant force in planetary development. And if the human-centred approach to justice, ethics, and technology will continue to dominate our actions, it is very likely that the conditions of flourishing of human and other life on this planet will be gravely undermined.

So, what is justice from the perspective of energy, beyond the human? In a humanistic perspective, humanity is seen as "responsible", for example, for climate change, and as the "caretaker" of nature, and therefore *energy*, and being an active participant in equal distribution. From a post-human perspective, it is *energy* which is responsible for planetary justice. Not human actions are the starting point of ethics, but the stored *energy* in fossil fuels that liberated themselves, enslaved a primate species in its wake, and now cause the planet to warm several degrees—some environmentalists have argued. All life, Jeremy England (2013) has argued, can be understood as an extension of the Second Law of thermodynamics, the dissipation of *energy*: entropy. *Energy*, as we have seen in the Chinese worldview, is transformation; transformation always has a dimension of loss and nostalgia: some forms of life won't be retained in the transformation of something new. The political is no longer a faculty of the human realm; it is a planetary, biological, and energetic field.

Humans are not excluded from the transformative planetary processes, but they are not central to it either. The *Buddha Nature* is in all of us: humans, animals, plants, fungi, stones, rivers, and mountains, but these days increasingly also in robots, smartphones, solar panels, coal plants, biomass, and nuclear plants, plastics, minerals, computer servers, concrete, wind turbines, and innumerous other forms of *energy* transforming bodies. All of us are equal stakeholders in the process of energy justice: this is what Bruno Latour (2014) has called the *Parliament of Things*. This posthuman shift in materialist philosophies has recently gained increased interest, for example, in the work of Karen Barad (2003) and Rosi Braidotti (2013), amongst many others. Energy ethics from a transcultural perspective challenges us to imagine a new collectivity, a new "we" beyond the West and beyond the East. In my own article on East Asian religion, I have emphasized that we should imagine a new form of "rhizomatic belonging" that acknowledges that many people do not exclusively

belong to one religion but navigate themselves in a religious ecology of various religious forms and expressions (Oostveen 2019). This call for "rhizomatic belonging" should also be extended beyond the domain of the human. Humans are not solely responsible for climate change or the ecological predicament. Humans are equal actors in and intra-species rhizomatic assemblage of terrestrial agencies. In the same way, humans are not the sole beneficiaries of the *energy* transition that is necessary. This transition is forced on "us", the posthuman collective assemblage, by climate change. The ethical assignment has not changed from Aristotle, or the Stoics, or the Confucians, or the Daoists: we have to develop our nature in a way that maximally enables our innateness to express itself. Energy justice can only be imagined if it serves *energy* itself. That is the task we are given by a truly transcultural philosophy. This transcultural philosophy is informed by various philosophical expressions of the imagination of the functioning of *energy* and serves values this diversity as the depth structure of reality.

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