For a Technodiversity in the Anthropocene

Hui, Yuk

Published in:
Technē Logos and the (Neg)anthropocene

Published: 01/01/2022

Document Version:
Final Published version, also known as Publisher’s PDF, Publisher’s Final version or Version of Record

License:
CC BY-NC-ND

Publication record in CityU Scholars:
Go to record

Published version (DOI):
10.21427/2rn3-pw70

Publication details:

Citing this paper
Please note that where the full-text provided on CityU Scholars is the Post-print version (also known as Accepted Author Manuscript, Peer-reviewed or Author Final version), it may differ from the Final Published version. When citing, ensure that you check and use the publisher’s definitive version for pagination and other details.

General rights
Copyright for the publications made accessible via the CityU Scholars portal is retained by the author(s) and/or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights. Users may not further distribute the material or use it for any profit-making activity or commercial gain.

Publisher permission
Permission for previously published items are in accordance with publisher’s copyright policies sourced from the SHERPA RoMEO database. Links to full text versions (either Published or Post-print) are only available if corresponding publishers allow open access.

Take down policy
Contact lbscholars@cityu.edu.hk if you believe that this document breaches copyright and provide us with details. We will remove access to the work immediately and investigate your claim.

Download date: 06/06/2024
Technē Logos and the (Neg)anthropocene
The first annual conference of the European Culture and Technology Laboratory.
Noel Fitzpatrick
Conor McGarrigle

EUt + Academic Press
Technē Logos and the (Neg)anthropocene
The first annual conference of the European Culture and Technology Laboratory.
Noel Fitzpatrick
Conor McGarrigle
Contents

Introduction
Noel Fitzpatrick and
Conor McGarrigle

Part 1: Keynotes
16 Chapter 1
For a Technodiversity in the Anthropocene
Yuk Hui

28 Chapter 2
Challenges for Science Policy in the Anthropocene
Carl Mitcham

Part 2: Papers
38 Chapter 3
Entropies, Ecologies, Economies in the ‘Entropocene’ Era: Towards an ‘Anti-entropic Growth’
Anne Alombert

49 Chapter 4
Bifurcating Gender: Knowledge and Neganthropy in Queer and Trans Futures
Genevieve Melville

63 Chapter 5
Challenging AI’s Simulacra of Ethical Deliberation: Some Problems of Ethicopolitics of Algorithms
Silviya Serafimova

79 Chapter 6
Pattern Recognition and the Grammatization of Vision
Hugh McCabe

98 Chapter 7
Ctenocene: A Network Topology
Jenny Pickett
Julien Ottavi

121 Chapter 8
Environmental Education and the Technosphere
Glenn Loughran
John O’Connor

144 Chapter 9
Climate Change for a Change in Architectural Education: Evaluating the Curricula
Dragoș Șerban Țigănaș
Dana Opincariu
Andreea Pop
Alina Voinea

Part 3: Art Work
162 Chapter 10
Emergent: A Critical Approach to Performance and Biometric Data
EL Putnam
Chapter 1

For a Technodiversity in the Anthropocene

Yuk Hui

Professor Philosophy of Technology and Media, SCM, City University of Hong Kong

On the Concept of Technics

What is technics? Jacques Ellul begins La technique ou l’enjeu du siècle (1954) with a critique of the conventional understanding of technics, which for him is far away from being able to understand the complexity and the dynamic of technics; namely, technics has been considered as equivalent to machines.

What is called the history of technique usually amounts to no more than a history of the machine; this very formulation is an example of the habit of intellectuals of regarding forms of the present as identical with those of the past. Ellul showed how this equivalence has been implicitly and explicitly maintained among his contemporaries, including by the respectful historian of technology Lewis Mumford. The misidentification of technics and machine led to a very narrow notion of technics. However, if technics is irreducible to machines, then what does it include, and how do we describe it? Ellul claims at some points that the primitive society was free of technics. It is difficult if not impossible to think of a society free of technics, and here we may also confuse the relation between magic and technics, namely, that there is only magic but not technics in the primitive society:

In so-called primitive societies, the whole of life was indeed enclosed in a network of magical techniques. It is their multiplicity that lends them the qualities of rigidity and mechanization. Magic, as we have seen, may even be the origin of technics; but the primary characteristic of these societies was not a technical but a religious preoccupation.2

Ellul's seemingly odd view resonated with Gilbert Simondon, who became a key figure in Ellul's The Technological Society and in which Ellul takes Simondon further, from the latter's analysis of technical objects in terms of technical element, technical individual, and technical ensemble, to an autonomous technological system. This distinction between magic and technics may not come directly from Simondon, but they were writing in the same epoch. In On the Mode of Existence of Technical Objects (1958) Simondon proposes a speculative history of technology, which he calls the genesis of technicity. At the beginning is the magic phase, in which there is no distinction between subject and object, while ground and figure (terms taken from Gestalt psychology) are already separated. The convergence between ground and figure is maintained by key points, namely, the sacred geographical points and special dates such as festivals. For Simondon, the term genesis is what he calls individuation, which he elaborated in L'individuation à la lumière des notions de forme et d'information. According to this theory, individuation is triggered when a system is oversaturated, when the tensions or incompatibility within the system have reached a threshold, and consequently a restructuration takes place. When the magic phase is saturated, its restructuring is presented as a bifurcation into technics (practice) and religion (theory), and each part in the second stage further bifurcates into a theoretical part and a practical part. For example, religion bifurcates into ethics (theory) and dogma (practice). This does not mean that Ellul agreed completely with Simondon's theory of the genesis of technicity, as he contested the nature of the key points in Théologie et Technique. His description of magic as pre-technics seems to have implicitly reserved the term technics for a post-magic rationality, or techno-logos.

The post-magical rationality, which is technics, according to Ellul, seems to have started in the East and traveled from the Near East to Greece and then continued into the Roman era. For Ellul, in Greece and Rome technics remained Oriental; it was not until the decline of the Christian West in the fourteenth century that the anti-technological tendency was reversed, and then modern science and technology emerged. After the eighteenth century, technology ceased to be the application of scientific discoveries; instead, technology gained an autonomy that was far beyond machines and beyond the sheer application of sciences. Ellul reminds his readers that Western scholars have mistaken the East as inclining

---

3 Ibid., 79.
4 ‘Society was free of technique. And even on the level of the individual, technique occupied a place much more circumscribed than we generally believe.’ Ibid., 65.
5 Ibid., 64. Italics are mine.
7 See Gilbert Simondon, L'individuation à la lumière des notions de forme et d'information (Grenoble: Éditions Jérôme Millon, 2005).
8 See Jacques Ellul, Théologie et Technique (Geneva: Labor et Fides, 2014), 183–185. Ellul claimed that these sacred points are posteriori, namely, sacredness is given by the human.
towards mysticism and regression (one can find this, for example, in Pierre Teilhard de Chardin). Instead, Ellul shows that ‘technics is essentially Oriental’:

This predominance of technique in the East points up an error which is found throughout Western thought: that the Oriental mind is turned toward the mystical and has no interest in concrete action, whereas the Western mind is oriented toward ‘know-how’ and action, and hence toward technique.9

Interestingly, this account of technics is similar to Hegel’s theorization of the Weltgeist. That is to say, like the Weltgeist, technics travelled from the East to the West, and it is realized as an autonomous and self-conscious form in the State. However, since technics’ departure to the West from the East, what happened in the East became insignificant. It will be significant again only after it is modernized and synchronized by the West. Retrospectively, perhaps the Weltgeist is like salmon,10 which go back to the stream where they were born, to spawn and die there. So technics, like the Weltgeist, travelled back to the East and flourished there after colonization and modernization; and now in Western medias, China is no longer blamed only for being a world factory but is reproached also for its rapid development of artificial intelligence that is putting Western democracy and values in danger.

But what does it mean exactly that technics exceeds machines? We may refer to what Simondon says in the third part of On the Mode of Existence of Technical Objects, where he argues that the genesis of technicity should not be reduced to the evolution of technical objects. Instead, it should be understood as a genetic process in which technical thinking interacts dynamically with aesthetic, religious, and philosophical thinking. That is to say, technological thinking is not an independent thinking but rather one that is motivated and at the same time conditioned by other thinking. What Simondon does in On the Mode of Existence of Technical Objects is very significant, even though one can reproach him by saying that he leaves the impression that the primitive society is pre-technics – something that might be inspired by Sir James Fraser’s The Golden Bough.11 But this does not mean that the magic phase is devoid of technics – it means only that in the magic phase the ground and figure are not separated. That is to say, technics still has a dominant function in the mediation between the internality of the subject and the externality of the environment. Thus it was preoccupied with religious meaning, rather than with rationality. This might be how we can understand those seemingly odd passages in The Technological Society mentioned above. Simondon’s thesis on the genesis of technicity is fundamental for us to understand the diversity of technology, since he states that a technological thought is dependent on its relation to other thoughts, namely, on its locality. The notion of locality is important but also delicate, since in our time locality, negatively defined in opposition to globality, can also mean conservativism, traditionalism, and even proto-fascism, such as found in the discourse of the National Front in France and the AfD in Germany. Without approaching the question of locality, however, perhaps we will not be able to fully understand the question of technology. Locality does not mean a logical operator – that which is opposed to the non-local – but rather cosmology. I suggest that technics is cosmologically situated in locality, and precisely because of this we can account for the different trajectories of technological development.

This way of understanding technics appears unfamiliar, however, because we have been told that science and technology are universal. In the current technological and philosophical education, there is not even space to have such a doubt. According to the conventional understanding, one admits that other civilizations also developed their technologies; however, these technologies differ only in terms of functional aesthetics (for example, the particular length and decoration of spoon handles) and levels of technicality, and despite these differences, they could be understood in principle as the same kind of technology. Non-European thoughts, therefore, have been considered solely as ethics or religions that regulate the use of these technologies. Therefore today we find everywhere discussions on Daoist ethics of technology, Confucian ethics of technology, Indigenous ethics of technology, etc. To what extent is technology universal? If we could find different technologies in different cultures, then shouldn’t it imply that there have been multiple technological thoughts? Here, when we follow up our previous discussion with Ellul, we want to ask, what happened to the East after technology travelled to the West?

On the Antinomy of the Universality of Technology

It seems that one has more courage to challenge the universality of the concept of nature than the concept of technics. For example, in the so called ‘ontological turn’ in anthropology, associated with anthropologists like Philippe Descola and Eduardo Viveiros de Castro, the anthropologists questioned whether the concept of nature that we are using now is mainly a product of European modernity. There are different natures, as one can find

---

10 See Moritz Rudolph, Der Weltgeist als Lachs (Berlin: Matthes & Seitz, 2021), in which the author made a witty claim that if Hegel was right that the Weltgeist travelled from the despotic Orient to Greece, then to Rome, and lastly to Germany, now it travels back to the East like a salmon.
in ethnographies. Nature as it is understood today in the globalized world refers to the non-manmade environment surrounding us. It is a modern construction based on the opposition between nature and culture, which Descola calls ‘naturalism.’

Nature is here considered to be the opposite of culture and at the same time an object to be mastered by culture or the ‘spirit.’ However, this naturalism is not a default but rather a fault.

If the anthropologists are able to argue for multiple natures, or multiple ontologies as response to the anthropocentrism of the Anthropocene, is it possible, and isn’t it even more effective, to argue for multiple technologies, namely, to relativize the concept of technics from the conventional understanding as a universal techno-logos? The Question Concerning Technology in China: An Essay in Cosmotechnics (2016) consists in this effort. The answer is deemed to be a difficult one, but even raising such a question is not easy at all. Perhaps we can try to articulate the difficulties by looking into how a discourse on the universality of technology is already uncritically assumed in some schools of thought, for example, philosophy, anthropology, and history of technology.

Let us start with philosophy of technology. Readers of Heidegger know that in his 1949 Bremen lecture titled Gestell, later published in 1953 as Die Frage nach der Technik, Heidegger makes a distinction between what the Greeks called technē, and moderne Technik. If technē, understood as poiesis, bringing forth [Hervorbringen], bears a mode of unconcealment of Being [Sein], then one no longer finds in modern technology poiesis. Rather, it has its essence as Gestell, namely an enfaming of all beings as standing reserve [Besstand], resources to be exploited. Modern technology, for Heidegger, arrived after modern science, taking on its significance after the Industrial Revolution. Heidegger’s analysis is well recognized in Continental philosophy, and the distinction he made between the Greek technē and modern technology also resonates with the Romantics, whose thought persisted among conservative thinkers in Germany. Heidegger’s analysis travelled far beyond Germany; it is also well endorsed in the East. The experience based on the opposition between technē and modern technology is identified as the conflict between tradition and the modern, and resonates in cultures that are experiencing great transformation due to modernization. If we follow Heidegger’s analysis, however, we might want to ask, how can we situate technics in the East? It is definitely not modern technology, but is it Greek technē?

On the other hand, Heidegger’s interpretation of technē as the unconcealment of Being already points to an understanding of technics beyond its utilitarian and anthropological definition. Did the Chinese and the Japanese, for example, also have such an understanding of their technics, namely, in relation to the unconcealment of Being? Kitaro Nishida, the founder of the Kyoto School, once made a rather straightforward but profound observation that for the West, Being occupies the central question in philosophy, while for the East, it is the question of Nothing. It is doubtful that this distinction could be applied to the East at large; at least we can say that in Chinese thought it is not Being but Dao that is the highest inquiry of philosophy. What then is dao? We are told at the beginning of the Dao de jing that dao cannot be explained by language, while it is also not mysterious since it exists everywhere, in feces and in gold. Dao, like Being, is beyond the objective description of language, and for this reason it is spiritual and irreducible to materiality but also conditions all pursuits of knowledge. If technology, as well as the concept of technology, must be understood historically, not only factually and chronologically but also spiritually – in the sense of what Hans Blumenberg calls a Geistesgeschichte der Technik – then it is immediately evident that there are many histories of technologies in different cultures and civilizations.

In the anthropology of technology, the invention and use of tools (often covered by the terms labor or praxis) has been understood as the determining process behind hominization, notably in the work of Leroi-Gourhan. He interpreted technics as an extension of organs and an externalization of memory. In this interpretation, technology is anthropologically universal. This is not wrong insofar as such externalization and extension are considered as proceeding from what Leroi-Gourhan called a ‘technical tendency.’ But we still have to explain what he called ‘technical

---

12 Lao Tzu, Tao Te Ching, trans. D.C. Lau (Hong Kong: Chinese University of Hong Kong, 2001). The text starts with, ‘The dao that can be said is not the eternal dao.’
14 I have tried to elaborate on the relation between Being and Dao in my latest book; see Yuk Hui, Art and Cosmotechnics (Minneapolis: University of Minnesota Press, 2021).
15 Hans Blumenberg, Geistesgeschichte der Technik (Frankfurt: Suhrkamp, 2009).
facts,” which are different from region to region and from culture to culture. While a technical tendency is necessary, technical facts are accidental: as Leroi-Gourhan writes, they result from the ‘encounter of the tendency and thousands of coincidences of the milieu.’ While the invention of the wheel is a technical tendency, whether wheels will have spokes is a matter of technical fact.

But is a technical fact merely accidental, caused by the material condition? We would like to ask, what is embedded in these technical facts apart from a casual reduction to cultural difference, or even sometimes to contingency? In the history of technology, the biochemist and sinologist Joseph Needham raised a haunting question by asking why modern science and technology were not developed in China and India. At the same time, in his multiple volumes of Science and Civilization in China Needham shows the large amount of rather advanced scientific and technological development in China before the sixteenth century. Echoing Needham’s inquiry, there have been significant inquiries on comparing technological development in different regions of the world in order to show that, for example, one particular region is more advanced in papermaking or metallurgy than another. However, this is a distortion of Needham’s question, which in fact suggests that one cannot compare Chinese science and technology directly with those of the West since they are based on different forms of thinking.18 In this sense, how can one re-articulate these differences? It is through discussions and negotiations with the philosophy of technology, anthropology of technology, and history of technology that I believe we can arrive at an even richer concept of technology, which I call cosmotechnics. The prefix cosmo- suggests that technology is motivated and conditioned by cosmology, and technology mediates between the cosmic and the moral of the human world. I took China as an example of such an investigation. Instead of simply rejecting technology as being universal, I suggest that we understand what is at stake with the following antinomy.

Thesis: Technology is an anthropological universal, understood as an exteriorization of memory and the liberation of organs, as some anthropologists and philosophers of technology have formulated it.

Antithesis: Technology is not anthropologically universal; it is enabled and constrained by particular cosmologies, which go beyond mere functionality or utility. Therefore, there is no one single technology, but rather multiple cosmotechnics.

We know that for an antinomy, when the thesis and antithesis are examined separately, each of them stands on its own; but when they are brought together one sees immediately a contradiction. Technics is universal insofar as it is a material support, like what Leroi-Gourhan called externalization; but beyond that there are tremendous differences in different technics that are not merely contingent.19 I gave a preliminary definition of cosmotechnics as unification between the cosmic order and the moral order through technical activities. The meaning of the cosmos and the moral have to be understood according to their locality. This also means that technology should be re-situated in a broader reality, which enables it and also constrains it, like what Simondon said regarding the genesis of technicity. In The Question Concerning Technology in China: An Essay in Cosmotechnics, against easy oppositions between the West and the East, for example, one being mechanical and polemical, the other organic and harmonious, I suggest formulating a technological thought in China according to the historical dynamics and relations between two major philosophical categories, dao and qi (literally, ‘utensils’, to be distinguished from the word of the same pronunciation which is familiar to western readers, meaning breath, vital energy). These two categories, I argue, are fundamental to the reconstruction of a technological thought in China. It is not only because, as stated earlier, it is not the question of Being but of Dao that occupies the central role in Chinese thought, but also because there has been an ongoing discourse about the unification between dao and qi in the history of Chinese thought. The discourses about the relation between the two are dynamic throughout history, meaning that there have been countless reflections and theorizations on their relations, from Confucius and Laozi to the early twentieth century. Finally, we see how the discourse is rendered ineffective during the process of modernization, that is to say, since China’s defeat by Britain in the Opium Wars, which forced China to open to modernization and global capitalism.20 The discourse on dao and qi was replaced by the dialectics of nature, an orthodox Marxist philosophy of science.

Let us take a step back. If Heidegger, the thinker of Being, was able to see the great secret [Geheimnis] in modern technology, namely, the possibility of the unconcealment of Being in the form of challenging [Herausforderung], it is because Being still has its role in the modern world, as a possibility and task of philosophy. However, Being is not dao, and Heidegger’s interpretation of

19 In relation to this, one may even find an affirmation in Derrida’s De la grammatologie (1967), in which Derrida compared Western alphabetic writing and Chinese pictorial writing, claiming that the former is based on the concept of substance and the latter on relation. For a detailed analysis, see Yuk Hui, ‘Writing and Cosmotechnics.’ Derrida Today 13, no. 1 (2020): 17–32.
20 For a detailed analysis, see Hui, The Question Concerning Technology in China, part one.
technology grounded in the history of Western philosophy might not provide the right path for thinking beyond the evening land [Abendland]. This awareness may come to us only as après coup, just as philosophy is always a latecomer. In the second half of the nineteenth century, the Chinese were very eager to take the Western technology as Chinese qi and hoped to integrate it into the qi-dao discourse, but they failed, because the relation of qi-dao at that time became a dualism. The British historian Arnold Toynbee once raised an interesting point in his 1952 Reith Lectures for the BBC: why did the Chinese and Japanese refuse the Europeans in the sixteenth century but allow them to enter the countries in the nineteenth century? His answer was that in the sixteenth century the Europeans wanted to export both religion and technology to Asia, while in the nineteenth century they understood that it is more effective to just export technology without Christianity. The Asian countries easily accepted that technology was something inessential and instrumental; they were the ‘users’ who could decide how to use it. Toynbee continued by saying:

Technology operates on the surface of life, and therefore it seems practicable to adopt a foreign technology without putting oneself in danger of ceasing to be able to call one’s soul one’s own. This notion that, in adopting a foreign technology, one is incurring only a limited liability may, of course, be a miscalculation.21

We can interpret what Toynbee said in two ways. First, that the opposition of Asian thought and Western instrument, and the belief that the former can master the latter, are proved to be mistakes, since it is dualist in nature; second, that technology in itself is nothing neutral, but it carries particular forms of knowledge and practice that its users are obliged to comply with. Without taking into consideration this understanding of technology (which Max Weber might call rationalization), one takes a rather dualist approach, by undermining technology as something merely instrumental. This miscalculation, a fault, has become a necessity in the twentieth century.

**Technodiversity in the Anthropocene**

What could be the value of introducing the concept of cosmotechnics in the time when we have entered into the so-called Anthropocene in which the technical activities dominate the earth? We live in an epoch of cybernetic systems, which become more and more organic, as Ellul rightly described in The Technological System. In Recursivity and Contingency, I attempted to reconstruct a philosophical history of cybernetics by outlining the historical relation between mechanism and organism, from Kant to cybernetics, in order to show that we have entered a new condition of philosophizing after Kant.22 The earth in the time of F.W.J. Schelling and later James Hutton was described as a super organism, and since the late twentieth century it has been regarded as a gigantic cybernetic system capable of homeostasis under the name of Gaia. If we take up the inquiry of the future of technology, we might ask how to think technology beyond cybernetics—which, according to Heidegger, indicates the end of Western philosophy and metaphysics. The concept of cosmotechnics also has the aim of addressing the future of technology. I proposed an agenda on technodiversity (or a multiplicity of cosmotechnics) in Recursivity and Contingency (2019) as a way to think beyond a cybernetic reductionism.

In the past century, modern technologies covered the surface of the earth, constituting a converging noosphere in Pierre Teilhard de Chardin’s sense.

In fact, Teilhard’s noosphere might provide us a conceptual tool to understand the Anthropocene, especially when we think that it is based on the discussion with Vladimir Vernadsky’s biosphere. Since the nineteenth century on, the formation of the noosphere has been largely accelerated by technological competition, which in turn also defines geopolitics. This ‘technological consciousness’ persisted throughout the twentieth century and was marked by the atomic bomb, space exploration, and now artificial intelligence. The technological achievements of the East seem to have reversed the unilateral movement from the West to the East. This is also the source of the neo-reactionary sentiment that we see today in the West,23 since it continues Spengler’s curse of the ‘Decline of the West,’ now affirmed by ideological slogans such as ‘Decline of the West and Rise of the East.’

Taking a step further, we may want to reposition this discourse of the Anthropocene as a critical moment to reflect on the future of technology and geopolitics. This critical assessment

---

demands the *reopening* of the question of technology. Reopening means, first, enlarging the concept of technology by pluralizing it, and second, by doing so we open new imaginations, new methodologies, and new possibilities for thinking the future. We can suspect that there has been misunderstanding and ignorance of technology in the past centuries, since technology has been regarded as merely instrumental and inessential, but more significantly, as homogenous and universal. This universality of technology prioritizes a particular history of technology, which is fundamentally modern. I attempt to show that the way technology has been perceived in philosophy, anthropology, and the history of technology is debatable, and it is *imperative* now for us to gain a different understanding of technology and to reflect on its other futures.

We could also say that this attempt to reopen the question of technology is fundamentally a project of decolonization; however, it is not a project left only to non-Europeans. Indeed, it is a project that is essential and imperative for Europeans also. Modernization brought forward two temporal dimensions: on the one hand, a simultaneity, characterized by the synchronization and homogenization of knowledge through technological means; on the other hand, consequently, the development of knowledge according to an internal necessity, namely, progress. Modernization *qua* globalization is a process of synchronization that converges different historical times to a single global axis of time and prioritizes specific kinds of knowledge as a major productive force. It is also in this sense that we understand why Heidegger claims in *The End of Philosophy and the Task of Thinking* (1964) that

> the end of philosophy proves to be the triumph of the manipulable arrangement of a scientific-technological world and of the social order proper to this world. The end of philosophy means: the beginning of the world-civilization based upon Western European thinking.  

The end of philosophy is marked by cybernetics. Moreover, it implies that the world civilization and geopolitics are dominated by Western European thinking. If there is a future for philosophy again, it will have to become a 'post-European philosophy.'

This re-opening cannot avoid confronting the concept of technology with the one we have today, much as anthropologists of the 'ontological turn' want to do with the concept of nature.Cosmotechnics implies not only the varieties of technologies in different geographical regions in human history, but also different forms of thinking and a different complex set of relations between the human and the non-human. Departing from these anthropological and philosophical investigations, we have to further interrogate what this technodiversity could mean for us today.  

Apart from simply preserving it as obsolete pre-modern and non-modern knowledge, will we be inspired to reframe the enframing of modern technology? Without a direct confrontation with the concept of technology itself, we can hardly maintain alterities and diversities (which I formulate as biodiversity, noodiversity, and technodiversity). This is perhaps also the condition under which we can think about a post-European philosophy. We will need a technological thinking which is capable of firstly rendering the gigantic technological force contingent and making it necessary again for searching a path beyond the Anthropocene.

---


25 See Hui, Art and Cosmotechnics.


27
The ECT Lab+ brings together researchers who are interested in the impacts of technology on society, these impacts can be both positive and negative; this we can term a pharmacology. Following on from the recent material turn in philosophy of technology, the ECT Lab+ conceives of technology as part and parcel of the process and practices of becoming human in the world. Hence the title of the ECT Lab+ reflects the positioning of technology within a culture, acknowledging that technology is not built in a vacuum but in and for society. The second aspect of the cultural environment of technology stems from the philosophical positioning of technics, technē and technology within their cultural locality or milieu.