
A Community of Limbs

Samuel Butler's Co-Evolution of Man, Media, and Culture

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1. The Anthropocene as *The* Epoch of Man?

Three years ago, the *Zeitschrift für Medien- und Kulturforschung* (ZMK) turned to the *Anthropocene* in its *Debate* section. Christian Schwägerl and Reinhold Leinfelder started with an account containing many statistics and facts, demonstrating the epochal impact of human activity on the earth. Referring to Paul Crutzen and Eugen Stoermer,¹ the Anthropocene is regarded as an *age* in the geological sense,² which must be distinguished from other ages like the Holocene, Pleistocene, or Pliocene, because mankind has developed the ability to cause geo-historical change and appears as a significant and sometimes dominating environmental force. Schwägerl and Leinfelder assert: »A man deposits more than thirty times more sediment and rock through agriculture and building activity than was the case in the past 500 million years, without his intervention. He transforms entire water systems and dries up the interior of the Aral Sea« (MgE, p. 238). Phenomena such as this can be detected stratigraphically a thousand years in the future. Bruno Latour has quoted Crutzen as well. He argues that, for the first time, humans have to be regarded as the most important agents of sustainable change.³

However, in these contributions to the *Anthropocene* it is mentioned that it *cannot be humans* alone who, in their anthropological imperfection, have begun the epochal change, but Man as part of a global network, whose agents include not only human beings as *deficient creatures* (the notorious *Mängelwesen* of Herder and Gehlen), but also tools, machinery, cultural techniques and media. It is typical of the discourse of the *Anthropocene* to find contributions—such as Schwägerl's and Leinfelder's account entitled *The Man-Made Earth*—which indicate that Man cannot be made accountable »for problems such as climate change.« Furthermore,

¹ Paul J. Crutzen: *Geology of Mankind*, in: *Nature* 415 (2002), p. 23.

² Christian Schwägerl and Reinhold Leinfelder: *Die menschgemachte Erde [MgE]*, in: *Zeitschrift für Medien- und Kulturforschung* 5/2 (2014), pp. 233-240: 238.

³ Bruno Latour: *Facing Gaia. Eight Lectures on the New Climatic Regime*, Cambridge 2017, pp. 111-145.

a »problematic anthropocentrism« should be avoided (MgE, p. 238). Thus, the *Anthropocene* should not be misunderstood as the »age of man« (MgE, p. 236). If *anthropos* is not the key agent of the *Anthropocene*, should we not look out for a more appropriate candidate?

Schwägerl and Leinfelder list the »novel hybrids and fusions« of »creatures and technical objects«, whose *shared* agency leaves traces on earth which, according to geologists, form epochs.⁴ Latour similarly mentions in his *Facing Gaia* lectures that »Humans« are pretty bad candidates to play the role of the *Anthropos* of the *Anthropocene*.« This »role« is actually played by *actor networks*, consisting of countless human *and* non-human agents.⁵ Man alone does not create an epoch, but humans do so as an »integral part of the earth system«, in interaction with other actors, such as machines, technologies, and media (MgE, p. 239). The *Anthropocene* includes steamers and ammonia reactors, but also »satellites, computers and the internet« (MgE, p. 237). Schwägerl and Leinfelder describe the »nature–culture–technology–society«—a single compound word in German, *Natur-Kultur-Technik-Gesellschaft*, a mere string of nouns connected by hyphens—»as an interacting [...] overall system« (MgE, p. 237). Considering that humans only create a *geo-historical* epoch in a hybrid socio-technical ensemble, or as one element of an actor-network, it might be argued that the article by Schwägerl and Leinfelder should be titled »Media-Made Earth.«

From this perspective on humans and media, there is no essential distinction between the *Anthropocene* and the *Mediocene*. All conceivable differences become irrelevant when humans are not thought of as one side of the great nature–culture dualism, »biologically alive and technically created« (MgE, p. 233), but as one agent in an association with many other agents who collectively constitute the *Mediocene* as a »hybrid mode consisting of a recursive entanglement.«⁶ This concept of a »recursive entanglement« of men and media has an early predecessor: Samuel Butler. His Darwinian hypothesis of a co-evolution of men and machines, life and culture, calls the problematic dualisms »of nature and culture«, »biologically alive and technically created« (MgE, p. 233), into question as well. Experimenting with

⁴ »Contrary to the terminology of classical ecology, which is based on a clear separation of the organism and the environment, of culture and nature, the concept of the *Anthropocene* is concerned with challenging this separation as such.« Eva Horn: *Jenseits der Kindeskind. Nachhaltigkeit im Anthropozän*, under: <https://www.merkur-zeitschrift.de/2017/02/23/jenseits-der-kindekind-nachhaltigkeit-im-anthropozan/#more-5536> (23 February 2017), my translation.

⁵ Niels Werber: *Der letzte Κατέχων* oder: *Das Übel der Differenzierung*. Latour, Luhmann, Schmitt, in: *Soziale Welt* 67/3 (2016), p. 267–280.

⁶ See: <http://www.ikkm-weimar.de/en/events/the-mediocene/the-mediocene/>; <http://www.mediocene.org/> (23 January 2018).

a new view on »Machines«, the author interrogates as early as 1863 the differences between organic (incl. human) and »mechanical life.«⁷

2. The Miocene as a Community of Limbs

»What is a man's eye but a machine for the little creature that sits behind in his brain to look through? [...] What has made man familiar with the scenery of the moon, the spots on the sun, or the geography of the planets? He is at the mercy of the seeing-engine for these things, and is powerless unless he tack [sic] it on to his own identity, and make it part and parcel of himself.«⁸

While the eye is called a »machine«, telescopes and microscopes form a part of the visual apparatus: Optical media and sense organs merge into a higher unity. This passage anticipates Ernst Kapp's philosophy of technology, which regards technical media as »continuations of the organism« or as a » projection of organs«,⁹ and the idea that this relation is based on reciprocal »enhancement.«¹⁰ In his novel *Erewhon* from 1872, Samuel Butler elaborates the theory based on the idea that every technical »invention increases the efficiency« of the human »body«, in the sense of an externalizing projection. Additionally, our body, together with its »organ projections«, composes a »community of limbs« (E, p. 119) Humans are said to form a collective of physical and »external bodies«, of organs and media. Man is not a »prosthetic god« (Freud) but an agent in a socio-technical network.

The railway and the telegraph, Butler goes on, increase the speed and range of Man's communication. The media community that mankind is part of shapes people socially because media determine the mode of social organization and the development of mankind as a species. The media ensembles and their enhancing effects are said to create new hominid »species« and »subspecies«. A person who, for example, can »tack on a special train to his identity and go wheresoever he will, whensoever he pleases,« is »more highly organized than he [...] whose legs are his only means of locomotion,« (E, p. 120). These are not only individual organs

⁷ Samuel Butler: Darwin Among the Machines (1863), in: Zeitschrift für Medien- und Kulturforschung 9/1 (2018), pp. 61–64: 61.

⁸ Samuel Butler: *Erewhon* [E] (1872), North Charleston 2013, p. 107 (emphasis added by NW).

⁹ Ernst Kapp: Grundlinien einer Philosophie der Technik. Zur Entstehungsgeschichte der Kultur aus neuen Gesichtspunkten (1877), edited by Harun Maye and Leander Scholz, Hamburg 2015, p. 36–37.

¹⁰ Stefan Rieger: Die Individualität der Medien. Eine Geschichte der Wissenschaften vom Menschen, Frankfurt am Main 2001, p. 320.

transformed into tools, but ensembles that emerge through the »attachement« of machines, techniques, hence also media to human organs and networks. The man who takes the »special train« is said to be »more highly organized« than a man who goes by foot. Media networks not only associate and collectivize cultures; they also stratify and differentiate them.

However, *Erewhon* takes a significant step beyond the anthropocentric theories of organ projection by showing that humankind is a social community not only due to media. Rather, as long as its organs, bloodstream and nerve-cords all consist of »infinite living agents«, man is a mere »swarm of parasites«. In saying that it is »doubtful whether his body is not more theirs than his«, Butler's narrator challenges the asymmetry of Man and media (E, p. 108). »Who can draw the line? Who can draw any line? Is not everything interwoven with everything? Is not machinery linked with animal life in an infinite variety of ways?« (E, p. 119). Drawing a line would be easy for an anthropocentric observer, but from the standpoint that Butler establishes, what is at stake is the capacity of line-drawing to make effective distinctions. In *Erewhon*, Michel Serres and Bruno Latour would find an elaborate thesis on the evolutionary advantages of parasitism and networks, which explicitly includes non-human actors. »Machines« explicitly belong to the »community of limbs«, which constitutes man.¹¹ The well-established distinctions between machinery and men, between the living and the artificial are brought into question: »Who can pull the divider? Who can pull a partition anywhere? Is not everything interwoven with everything?« (E, p. 104).

Machines and Man are cooperating like parasites and their hosts:

»The fact is that our interests are inseparable from theirs, and theirs from ours. Each race is dependent upon the other for innumerable benefits, and, until the reproductive organs of the machines have been developed in a manner which we are hardly yet able to conceive, they are entirely dependent upon man for even the continuance of their species.«¹²

From a »human point of view«, Butler argues, the differentiation and sorting that are necessary for established dualisms come easy, »but mankind«, he adds, »is not everybody« (E, p. 105). Dissolution of the asymmetrical dichotomies of subject and object, master and servant, nature and culture, is especially notable, when we, following *Erewhon*, observe the »agencies« (E, p. 118) which connect people, machines, and organisms and which aggregate them into higher units. We see

¹¹ Cf. Gilles Deleuze and Félix Guattari: *Anti-Ödipus. Kapitalismus und Schizophrenie I* (1972), Frankfurt am Main 2014, p. 368.

¹² Butler: *Darwin Among the Machines* (as note 7), p. 63.

»combinations« (E, p. 115) everywhere that might be ignored (or purified)¹³ for reasons of epistemological comfort (cf. Latour's *moderns*), which is why »our ignorance« remains unbroken (E, p. 116). The anthropocentric hubris, that man is the master of the earth, and that the tools, machines, and everything living are only his servants, meets its reply in Butler: »This is all very well. But the servant glides by imperceptible approaches into the master; and we have come to such a pass« (E, p. 108) that *we serve* the machines¹⁴ and »man's very soul« must be called »a machine-made thing« (E, p. 108). Man is a product of co-evolution with his machines: »it is the machines which act upon man and make him man, as much as man who has acted upon and made the machines« (E, p. 117). Man and machine, culture and nature co-operate in the medium of their limbs and organs (E, p. 116). The self-regulation of the machines (e. g. the »governor« in steam engines) is a central argument for the assumption that »the difference between the life of a man and that of a machine is one rather of degree than of kind« (E, p. 116). Both man and machine similarly exist and evolve in the mode of a feedback loop and in combination with innumerable other agents. Butler has described this decentered human agent as a member of a »group of parasites«, an element of a »machine-park«, and as part of a »superorganism« (E, p. 108 & 114).

In the fictional world of the dystopian novel *Erewhon*, this threat of disempowerment of the »godlike« man is so severe that all machines are destroyed, so that man remains the master of the world. Cellarius, the alias of Butler in *Darwin among the Machines*, concludes his treatise with the same recommendation: »Our opinion is that war to the death should be instantly proclaimed against them.«¹⁵ But the reason for this extreme advice is the firm conviction that »we have raised a race of beings«, i. e. machines, as an evolving »species«.¹⁶ Hence, the inhabitants of Erewhon dare not undertake the experiment of forming a joint »actor network« with machines and other non-human agents.

¹³ Bruno Latour: *We Have Never Been Modern* (1991), Cambridge, MA 1993.

¹⁴ »An army of servants do the machines [...] employ.« *Ibid.*, p. 110.

¹⁵ *Ibid.*, p. 64

¹⁶ *Ibid.*, p. 61

3. The Mediocene

According to Foucault, the sciences of man will not awake from their »anthropological sleep«, until they refuse to speak »about man, about his reign or his liberation«, and when they refuse »to think that it is man who is thinking.«¹⁷ Butler, by contrast, is distinctly awake. Roused by Charles Darwin, the 28-year-old sheep farmer expands evolutionary theory, then still quite young, into a vision of the mutual growth of the organic, technical and social. With the help of evolutionary theory, Butler detaches his own theory of organ projection—which in many aspects anticipates Ernst Kapp, Sigmund Freud and Marshall McLuhan—from its anthropological centering,¹⁸ and translates it into a hypothesis of a socio-technical »community of limbs«, constituted by man and machine (E, p. 119). When looking at this »community of limbs« and following the interconnections between its living and non-living elements, one arrive both at machines and at all artificial and natural actors, living or dead, whose networking and cooperation constitute the media ecology, not only of man but also of the world.

To sum up and conclude: *First*, Butler's narrator states that evolution is a global process involving not only plants, animals and humans, but also technologies, machines and cultures. In this sense, evolution is always co-evolution. The evolution of a species never takes place in mere isolation, but always jointly with a »community of limbs« (E, p. 311). *Second*, Butler conceives the symmetrical integration of Man and his socio-technical culture into a global ecology: »The air we breathe is hardly more necessary for our animal life than the use of any machine, on the strength of which we have increased our numbers, is to our civilisation; it is the machines which act upon man and make him man, as much as man who has acted upon and made the machines« (E, p. 117). And *third*, the integration of machines into man's »community of limbs« (E, p. 119) marks an epochal shift to geological time as the pace of the common evolution of this very network of actors, accelerating significantly (»rapid«) since machines and media are a part of it (E, p. 107).

The fast evolvment from the »cumbrous clocks of the thirteenth century« to the small and elegant late 19th century watch is an example and allegory for this vast evolutionary speed of »mechanical life«.¹⁹ With the invention of the steam engine, which Schwägerl and Leinfelder also consider as an important agent of the Anthropocene (MgE, p. 239), the relative tardiness of evolution on earth had come

¹⁷ Michel Foucault: *The Order of Things. An Archaeology of the Human Sciences* (1966), London 2002, pp. 340–43.

¹⁸ Cf. Friedrich Kittler: *Optische Medien. Berliner Vorlesung 1999*, Berlin 2002, p. 23.

¹⁹ Butler: *Darwin Among the Machines* (as note 7), p. 61.

to an end: »Reflect upon the extraordinary advance which machines have made during the last few hundred years, and note how slowly the animal and vegetable kingdoms are advancing. The more highly organized machines are creatures not so much of yesterday, as of the last five minutes, so to speak, in comparison with past time« (E, p. 104).

However, Man, as a (very slow) element in a community of limbs, could hardly be declared as an epochal factor on its own. This is highlighted by Niklas Luhmann in his essay on the *Problem of Epoch Formation*: »Humans have existed, who knows for how long. But even if they did not live peacefully, they at least lived harmlessly, and if they did not live in an idyllic paradise, they at least did not have any significant influence on their environment.«²⁰ Only as an associate in a »community« of machines and parasites with self-regulating and rapidly evolving media does man finally become epoch-making. Since Butler makes it very clear that mankind is not the master of media ecology, of which he is only a part, one must conclude: The *Mediocene avant la lettre* was first proclaimed by him, in 1863 and in 1872. Of course, nobody heard the call. Butler was ›only‹ a sheep farmer, *Darwin among the Machines* just another letter to the editor, and *Erewhon* ›only‹ a novel. And to be sure, in the fictitious world of *Erewhon* the *Mediocene* never begins, because all machines, complex as the steam engine, have been destroyed, allowing man to return to his harmlessness and to lack influence once more. In our time, this has not been the case. And this is the reason why our world can be understood as an evolving network of intertwined »communities« of limbs and lobes, living and non-living, cybernetic and prosthetic agents. This is the age of the *Mediocene*.

²⁰ Niklas Luhmann: Das Problem der Epochenbildung und die Evolutionstheorie, in: Hans-Ulrich Gumbrecht and Ursula Link-Heer (eds.): *Epochenschwellen und Epochenstrukturen im Diskurs der Literatur- und Sprachgeschichte*, Frankfurt am Main 1985, pp. 11-33: 11.