THE QUESTION CONCERNING ENERGY: ECOLOGICAL CRISIS AND MACHINIC ONTOLOGY IN *THE MATRIX* TRILOGY

There is a longstanding tradition in science fiction cinema of human bodies being consumed in order to generate some form of energy; films like Richard Fleischer's *Soylent Green* (1973) and Michael Anderson's *Logan's Run* (1976) depict the consumption of humans as food (i.e. energy in the form of calorie intake). Other examples with similar tropes include David Lynch's *Dune* (1984), Kevin Reynold's *Waterworld* (1995), John Bruno's *Virus* (1999), David Cronenberg's *eXistenZ* (1999), Steven Spielberg's *War of the Worlds* (2005), Frank Vestiel's *Eden Log* (2007), The Spierig Brothers' *Daybreakers* (2009) and George Miller's *Max Max: Fury Road* (2015). In all these films, the consumption of bodies relates to the idea of humans as a source of 'power': be it as nutrients or as a more technical energy resource. Their most obvious example of the latter to date is the Wachowski's *The Matrix* (1999) in which humans are bred and harvested in huge fields to serve as living batteries (and where the dead are liquified and turned into nutrition for the new baby-batteries to grow); a 'Human Resources' trope, which also echoes in some of their more recent works like *Cloud Atlas* (2012) and *Jupiter Ascending* (2015).

Energy humanities scholar Allen MacDuffie (1) addresses the problematic use of the term 'human energy' when discussing an advert from an energy company, where it is opposed to more customary sources of energy (like coal or petroleum): human energy, he writes, "suggests something like creativity, initiative, intelligence, and cooperation". Human energy functions as a metaphor, signalling the ability to think our way out of energy concerns facing our world today. However, the dialectics of literal and metaphoric energy in *The Matrix* are more complicated than MacDuffie indicates: his is a kind of ideology critique, and not a materialist account of energy and the human. It is in the field of the energy humanities that

we find the resources to confront that complexity; this relatively young subfield, mainly coined by Dominic Boyer and Imre Szeman, is an area of humanities research that (amongst other things) tries "to find our way toward a sustainable energy future" (40). The field focuses on the impact that energy has on our culture and society, and how this manifests itself in cultural objects like literature, art, and film. Boyer, as one of the key figures in the field, points out how "conditions of life today are increasingly and unstably intertwined with particular infrastructures, magnitudes, and habits of using electricity" ("Energopower" 323). The impact of the oil industry on popular cinema, for example, is undeniable: the long tradition of high octane action cinema with its fast-paced aesthetics and narratives, mainly based around car chases, international travel, explosions, and militarisation—think of the *Mad Max* or the *Fast and the Furious* franchises, any of the *James Bond* or *Mission Impossible* films, or the countless other less memorable (Cold War) themed action films—not to mention the massive energy impact of most of these film productions or the fact that big oil companies like Shell and BP actively create(d) 'petrofictions' in order to entangle the American dream with fossil fuels (cf. Jacobson). Or consider the exponential rise of (scholarship on) petro-fiction, oil fiction and solarpunk; genres of speculative fiction that heavily draw on our culture's reliance on energy, examine its impact and sometimes envision new energy futures in response (cf. Bellamy; Edwards; Riddle; Welling).

The energy humanities form an excellent framework to rethink ecocinema scholarship, as it aims to explicitly uncover the complexities and embeddedness between energy and our lives. In this article, I argue that such relations are made visible through the central thematic of the resourcing and exploitation of human energy throughout *The Matrix* trilogy; they show the unstable intertwining of not just life and electricity, but also how human life *is* energy, and how this challenges traditional human-nonhuman boundaries. Further, I also argue that the anthropocentrism of the films' protagonist(s) forces the Matrix-universe into an impossible

energy position. This problematic position is one that encompasses both literal human energy and metaphorical/metaphysical human energy, without differentiating between the two, and forces the Matrix-universe into an ecological crisis. The films adopt the perspective of 1% (Zion) and cannot make visible the reality of the other 99% (the Machines and those inside of the Matrix); as such, it is not just an ecological crisis but a social one as well.

As the films show, the Matrix is a virtual reality that only functions to keep humans alive whilst the Machines can harvest their energy. This harvesting of human energy is traditionally read as an allegory of capitalist exploitation of the (human) body. However, I read and take this energy challenge literally—that is, take it seriously, as it hints at a fundamental ecological crisis at the root of the films, deeply buried and implicated within the storyworld the diegesis envisions; this crisis is a narrative effect of the story's conceptual mediations of energy as both source and regime. Surely, breeding humans as batteries must be a measure of last resort, as there are plenty of other, less infrastructurally complicated methods of producing energy. There is also a significant downside to using humans as an energy source: they *need* energy, in one way or another, to be kept alive[1], unlike nuclear energy or wind energy, which can produce energy without needing initial human input first. And then there is also the issue of those humans living outside of the Matrix: they too depend on energy for their basic survival outside of the system, yet where does these Matrix-refugees' energy come from? It would seem that an energy unconscious organises the film's conceptual and narrative structure; energy seems to be the driving element behind the trilogy's most basic plot development[2].

[1] Actually, they need *a lot more energy* than they can produce kinetically. Rabinbach's classic historical study on labour and energy showed how depending on the situation, something from 35 up to 75 percent of caloric input gets lost as waste, heat, and general other functions of the body, making the human a 'weak efficiency machine'.

[2] It may be important to note that this reading of *The Matrix* trilogy does not intend to be exhaustive; that is, it does not want to dismiss previous academic and popular interpretations of the films. If

The Matrix has received a vast academic reception, especially within the intersection of film studies, cultural studies and philosophy, ever since the first film hit the cinemas in 1999[3]. However, the broad reception of the film has not considered the question of energy in any detail. This can be easily illustrated through Slavoj Žižek, who is one of the very few critics seemingly interested in the question of (human) energy in *The Matrix*:

> Why does the Matrix need human energy? The purely energetic solution is, of course, meaningless: the Matrix could easily have found another, more reliable source of energy which would not have demanded the extremely complex arrangement of Virtual Reality co-ordinated for millions of human units. (Žižek *Desert of the Real* 96)

Žižek's answer to this question is that the Matrix feeds on human *jouissance*—an answer which is not disputed here—but he remains uninterested in the ecological question that arise from his take on the film: it would indeed make more sense to use any other power source, so why did the Machines choose humans? Žižek does not go on to answer this, as his interest is not in the ecological but in the psychoanalytical. This question nevertheless resonates throughout the course of the four films—that is, including *The Animatrix* (2003)—that make

anything, the following reading aims to be a meaningful contribution to these previous discussions and wants to shed light on the previously underexplored themes and ideas of ecology and energy, specifically geared towards explicating and gaining insight in our own entanglements with energy.

[3] Much of the critical attention went to exploring *The Matrix* in terms of Jean Baudrillard's work, yet, William Irving's edited volume *The Matrix and Philosophy: Welcome to the Desert of the Real* (2002) set the tone for extended philosophical criticism of the trilogy, which was primarily concerned with questions of epistemology, scepticism, phenomenology, metaphysics, ethics and religion. Further critical work followed—chiefly addressing the same issues—with volumes like Christopher Grau's *Philosophers Explore the Matrix* (2005), which collects philosophical essays that were originally commissioned for the official Matrix website, Myriam Diocaretz and Stefan Herbrechter's *The Matrix in Theory* (2006) and Catherine Constable's *Adapting Philosophy: Jean Baudrillard and The Matrix Trilogy* (2009). Stacy Gillis' *The Matrix Trilogy: Cyberpunk Reloaded* (2005) is slightly defiant of this strictly philosophical trend, in the sense that the volume focuses more on questions of style and aesthetic, and considers the contexts of postcolonialism, posthumanism, science fiction theory, virtual reality and cyberspace in its broader discussion. Nevertheless, it too grounds itself in the taken-for-granted philosophical concepts of the trilogy, and thus implicitly affirms the philosophical debates that surrounded the films from the late 90s until the late 00s.

up the Matrix-universe, as there is not one mention of alternative power sources besides the human battery fields. Since the surface of the earth and the entire atmosphere were destroyed and what is left is now inhabited by the Machines, natural resources are rendered moot: fossil fuels, wind, solar and hydro-kinetic energy have been made impossible. Nuclear fission is not an option either, nor is heat combustion, as the Zionists live underground and have no infrastructure, place or equipment for such endeavours: they use humans because these are *literally* the only resources left ("It's the ecology, stupid!"). Nonetheless, they have enough power to run a quite large city with an estimated population of 250,000, including a fully functioning bay of airships and other military vehicles.

As such, my interest here is in the ecological state that is portrayed in *The Matrix*, and more specifically in the dynamics of human energy[4] at play between the Machines and the humans: is the use of human energy metaphorical and/or literal (or both) and how did the turn towards humans as energy resource trigger an ecological crisis within this cinematic universe? Hereon, I draw out the film's conceptual work on the sometimes latent tendency in the techno-machinic mediation of human and non-human energy, and I will do so by relying on Levi R. Bryant's seminal *Onto-Cartography: An Ontology of Machines and Media* (2014). In his work, Bryant proposes a machinic ontology that allows me to partially sidestep the anthropocentric focus held by the protagonists in the Matrix narrative, and helps me to

[4] There is a long tradition of the term/idea of human energy in Marxist thought and theory (as well as in science fiction, as noted earlier): Karl Marx's 1858 famous 'Fragment on Machines' being perhaps the earliest and most notable example. In a 2014 essay McKenzie Wark describes how Marx in this fragment tries to deal with the idea of energy in the form of human labour being replaced with fossil-fuel energy, with the latter becoming the basis on which capitalism unfolds ("#Accelerate"). In a follow-up essay, Wark points out that Marx was the first to consider that science and technology could point toward a new kind of species being and tried to develop a meta-science to "try to understand how the 'science' of political economy, for example, used concepts grounded in material and social and technical realities it did not perceive" ("Meatphysics"). This gives relevance to the idea of human energy here in *The Matrix*, as society 'returns' towards a new reliance on human energy in the post-apocalyptic and post-capitalist landscape of the films' universe; as such it describes a directly opposite move to the one Marx observed.

propose a new, enriched understanding of the films, in the context of an ecological/energy crisis and from a mindset that embraces energopolitics—a biopolitics where power over energy replaces Foucault's political power—as the foundation for societal organisation. In addition to Bryant, I will also rely on the philosophical work of Gilles Deleuze and Felix Guattari, Martin Heidegger and Bernard Stiegler; their thinking on machines and technology forms the theoretical groundwork on which much energy humanities scholarship is based (even if that debt is not always made explicit).

However, as Christopher Jones has noted, the energy humanities tend to have a prevalent focus on the representation of petroculture, which Jones has dubbed 'petromyopia', despite the field's own claims; in this sense, another objective of this analysis is to address the under-researched issue of the cultural representation of alternative energy sources. By attempting to provide an insight in the energy dynamics of the films, then, this article proposes to consider *The Matrix* trilogy as part of what is called ecocinema, a field that often shies away from Hollywood cinema[5]. Part of a trend of environmental criticism in the larger field of literary and cultural studies, which had been around since the 90s, the term ecocinema was coined within film studies by Scott MacDonald in 2004, in his article 'Toward an Ecocinema' (published in this very journal). MacDonald (20) provides a working definition in a more recent work on what ecocinema should be:

> As I see it, the fundamental job of an ecocinema is not to produce pro-environmental narratives shot in a conventional Hollywood manner (that is, in a manner that implicitly promotes consumption) or even in a conventional documentary manner (although, of course, documentaries can alert us to environmental issues). The job of

[5] While I use the term 'trilogy' here, I will be referring to the tetralogy/quadrilogy that I consider to be making up the Matrix-universe: *The Matrix* (1999), *The Matrix Reloaded* (2003a), and *The Matrix Revolutions* (2003b), and the straight-to-DVD film *The Animatrix* (2003). However, for the sake of ease and continuity with traditional debates, I will be referring to the series as a trilogy.

> an ecocinema is to provide new kinds of film experience that demonstrate an alternative to conventional media-spectatorship and help to nurture a more environmentally progressive mindset.

Although it is safe to say that by now *The Matrix* is considered a piece of 'classic' Hollywood action, it was not a box office success when it opened in the late 90s, and it slowly gathered its cult following mainly through VHS and DVD sales after the release. The first part of MacDonald's definition is nevertheless fulfilled: *The Matrix* does not produce a pro-environmental narrative shot in a conventional Hollywood or documentary manner. At least, the film's aesthetic was not conventional when it first hit cinemas; its main innovative elements being the integration of film techniques from Hong Kong action cinema and visual aspects from Japanese anime[6]. However, at first glance and by most existing critical readings, the film seems to fail the second part of MacDonald's definition. My argument is that *The Matrix* trilogy, when read in dialogue with the energy humanities, can help 'nurture a more environmentally progressive mindset' in its viewers. While the trilogy obviously portrays an apocalyptic world, this very setting will prove to be the foundation for critically re-evaluating its ecological awareness.

[6] The film revolutionised the genre of science fiction cinema, and perhaps even action cinema, as it integrated 'new' film techniques, such as "pyrotechnic steadicam and process shots, including a hallmark lightning zoom (derived from the Hong Kong action cinema) on the God-shot (from the ceiling or sky into the floor or roof)" and took inspiration from "Alice in Wonderland, Jean Baudrillard, or the cityscapes of Sydney, the signature wirework of Yuen Wo Ping and the comic book art of Geoff Durrow" (Cubitt 239, 346). The film also has its roots in the literary genre of 'cyberpunk', with the publication of William Gibson's short story "Burning Chrome" (1982)—which he supposedly wrote after seeing Ridley Scott's *Blade Runner* (1982)—and his seminal work that defined the genre, *Neuromancer* (1984); Gibson, however, commented the following on his blog after first seeing the film: "*The Matrix* is arguably the ultimate 'cyberpunk' artifact (sic). Or will be, if the sequels don't blow". Striking similarities can also be seen between *The Matrix* and Mamoru Oshii's *Ghost in the Shell* (1995), both in its visual aesthetic qualities and tone (its depiction of cities, violence, and futuristic war machinery) as well as its deeper narrative similarities of hackers roaming in a virtual space, with near-limitless possibilities, and integration of the human body with a digital sentience. Nevertheless, the franchise revitalised the cyberpunk genre and its themes, stylistics and postmodern aesthetics influenced many other science fiction films, like *Equilibrium* (2002), *Inception* (2011), *Oblivion* (2013), *Sucker Punch* (2011), and *Wanted* (2009),

In one of the early scenes of *The Matrix*, Neo (Keanu Reeves), the protagonist, is confronted with the reality of earth: Morpheus (Laurence Fishburne) shows him a desolate, ruined, apocalyptical landscape which used to be Chicago but now is a scorched desert. Morpheus aptly says to Neo: "You have been living inside Baudrillard's vision, inside the map, not the territory. This is Chicago, as it exists today. The desert of the real"[7] (Wachowski Brothers "The Matrix" 39). He goes on to, very briefly, explain why the Matrix is built, and acknowledges that humanity scorched the sky to win the war against the Machines, who actually relied on solar power. His facial expressions reveal a sadness, pining for the world as they knew it, as it is now lost. Morpheus' sentiment is not unlike what Stephanie LeMenager describes 'petromelancholia'; a term used to illustrate how where energy is available in abundance, it is taken for granted and thus becomes invisible, yet when it is gone, it triggers a certain 'melancholia' for that resource and its contingencies and possibilities in its subjects. However, paradoxically, at no point does Morpheus seem to display a sense of guilt or regret for his predecessors' decision to black out the sun permanently, causing the destruction of all natural resources on earth within this universe, and therefore leaving the Machines with no other choice but choosing humans as a source of power[8]. The problem of energy and where it comes from thus runs much deeper than Žižek seems to indicate in his account; energy has turned into something beyond normal understanding, now gradually starting to resemble what Timothy Morton has influentially called a 'hyperobject'.

[7] The dialogue in the actual release of the film is different from the citation above; the article relies on the original text from the film script, which The Wachowskis wrote between 1996-1998.

[8] *The Matrix* is by no means the only post-apocalyptic or science fiction film that relies on the use of alternative energy resources, albeit that their use of humans is one of the more 'intense' choices. *The Avengers* (2012), for example, has a mystical energy source called 'The Tesseract', *Iron Man* (2008) imagines a working fusion reactor which provides clean and unlimited energy, *Moon* (2009) uses moon rock as an energy source, *High Life* (2018) envisions black holes as being able to function as an energy resource, and most space opera's like the *Doctor Who*, *Star Trek* and *Star Wars* franchises rely on often non-descript or mythical, seemingly unlimited energy resources, like crystals, force fields, hyperdrives, etc.

HUMAN ENERGY IN ZION: AN ILLUSION OF CHOICE

Zion, the last human city outside of the virtual reality prison of the Matrix, has access to electricity, but it is never mentioned how and where they get the energy or resources from to run their machines, homes, lights, ships, etc. Zion is conceived to be a safe haven, shielding those that were fortunate enough to escape the Matrix and the tyranny of the Machines. Zion is under constant threat by the Machines and, besides an underground cave, it cannot be said to have any sort of ecology, flora or fauna, or natural resources to produce food, clothes and other daily commodities. It is rather obscure, narratively speaking, how Zion is sustainable as a site of refuge, as it lacks an account of basic necessities for ensuring human survival. It would almost seem that Zion is as much a prison as the actual Matrix—perhaps even worse.

Despite there being no natural ecology, energy seems abundantly available. In *The Matrix Reloaded* (2003a), Neo and Councillor Hamann go down to the engineering level of Zion on a sleepless night. Upon arrival the Councillor remarks, as they overlook the machines that sustain the city, "I have absolutely no idea how it works" (Wachowski Brothers *The Matrix Reloaded*). Like the Councillor, the inhabitants of Zion are ignorant when it comes to power. As there is no narratological or diegetic evidence that their energy is derived from natural resources, the most consistent conclusion that fits within the films' storyworld is that Zion is tapping off energy from the same power source that sustains the Machines, ergo, humans.

The problem of human energy thus presents itself as being fully invisible to the humans living outside the Matrix, as exemplified by Neo. He argues that the Zionists have control over the life-sustaining machines in Zion—they can choose to shut them down whenever they want—which makes those machines different to the Machines they are fighting, or so he argues. However, Neo's idea of choice is flawed: the only control the Zionists have is to keep their machines intact and running, otherwise they will not survive. The Councillor points at

the root of the problem: “Nobody cares how it works, as long as it works”. At this point, however, it is perhaps more interesting to push this argument in the general direction of what Dominic Boyer has called ‘energopower’ and ‘energopolitics’. Obviously drawing on Foucault’s notions of biopower and biopolitics, Boyer describes energopower as “a genealogy of modern power that rethinks political power through the twin analytics of electricity and fuel” ("Energopower" 325). As such, energopolitics closely resembles biopolitics, but it acknowledges that “power over energy has been the companion and collaborator of modern power over life and population from the beginning” ("Energopolitics" 5).

In this sense, the actual biopower that we encounter in *The Matrix* is a tangible and visual representation of energopower, as it becomes “an indispensable element of capitalism”, which would not be a possibility “without the controlled insertion of bodies into the machinery of production” (Foucault 140-41); in *The Matrix*, physical, human-battery power has become the main commodity of the Machines, where bodies are now literally inserted into ‘the machinery of production’. While energopolitics’ main argument revolves around how political and social power is used to harness and control energy (and hence life), within the Matrix this harnessing of energy shifts onto another phenomenological level, where it becomes a metastatic drainage of *human* energy, harnessed by artificial intelligence, outside of human social and political structures, thus complicating traditional (and anthropocentric) critical modes of thinking about human energy extraction (often in the form of physical labour). To put this differently, the alteration is from a human energopolitics to a technological ‘thanatopolitics’; one that, in the words of Timothy Campbell, has to do with “an often unexplored relation between *technē* and thanatos”; between technology and death (viii).

Further difficulties arise when we consider the function of the system that is The Matrix, as it was initially designed to be a utopian place—or so the Architect (a computer programme) informs the audience in *The Matrix Reloaded*. However, this utopian ideal was abandoned quickly for a version of the Matrix that accounted for the human's need of choice, even if thus only illusionary within a virtual world governed by computer codes; about 1% of those attached to the Matrix reject the system. These rejections are calculated into the system's workings: Zion functions as a place of diaspora for those who escaped, awaiting the arrival of The One, who will free them from the Machines (a prophecy that is explicitly referred to in the films). However, the Matrix is a programme and accounts of this messiah are part of the coding. When The One meets the Architect in order to destroy the Matrix, he is offered a choice: either The One can let the 1% that got out die and save the billions within the Matrix, or everyone dies. The Architect knows the location of Zion, so there is only one possible or logical outcome; The One agrees to let the 1% die, so that those attached to the Matrix programme can continue to 'live' on[9]. This is the illusion of choice, of free will, and it is one of the big philosophical questions of *The Matrix* that has been thoroughly discussed by critics like Peter Boettke, Catherine Constable, Matt Lawrence, and Michael McKenna.

While Neo believes that destroying the Machines they are fighting will set them free, he could not be more wrong: destroying the capital of Machines, rather unoriginally called Machine City, would destroy the last power source on the planet, putting Zion without electricity, giving up its only chances of survival, and it would destroy the infrastructure which maintains the lives of those within the Matrix. This is not, as Žižek would argue, impossible because there is no ideology outside of Zion, but for a much simpler, more basic reason: the sheer lack of energy, or rather, the visibility thereof. Nevertheless, Neo is not

[9] For the full explanation of how Zion and the Matrix are interrelated, and how the programme works, I refer readers to the following website: http://matrix.wikia.com/wiki/Zion

alone in this incongruous belief: throughout the whole *Matrix* trilogy no one questions how the destruction of the Machines and the Matrix would impact their source of energy (and how this would be a case of genocide). It becomes clear that in the films, as in the scholarship surrounding the trilogy, its energy unconscious becomes a kind of 'energy non-conscience'—a blind spot in the films (and its critical audience's) vision. When Neo is prompted with the question whether he would let the 1% outside die (including his love interest, Trinity) and save everyone within, or would rather have everyone destroyed in favour of saving Trinity, he chooses the latter; clearly, the ethical implications of this choice are shattering and it is also illustrative of how human necessity and dependency of energy is completely overlooked—not unlike in our own society.

MACHINIC ONTOLOGY AND *THE MATRIX*

This ushers us towards the need of a philosophy that considers something outside of the human as fundamental: so far, this argumentation has led to a point where it seems that the human is inept in dealing with energy issues. Therefore, an ontology that focuses on machines, and so surpasses the human perspective, could prove productive; especially, when we consider that cinema *is* (or can act like) a machine.[10] It is relevant here to steer towards the work of film theorist Adrian Ivakhiv (88), who elaborates in his (eco-)theory of cinema how it can be considered as a machine:

> Cinema, I argue, is a machine that produces or discloses worlds. This machine is, at once, *anthropomorphic* in that it produces a cinematic version of or resemblance to the human, thereby generating an apparent social or 'subject-world'; *geomorphic* in

[10] This idea is, besides from drawing on Ivakhiv, also inspired by the thesis of Jonathan Beller's book *The Cinematic Mode of Production*, where he argues that "Cinema and its succeeding (if still simultaneous), formations, […], are deterritorialized factories in which spectators work, that is, in which we perform value-productive labor" (1).

> its production of a spatially organized or territorialized material 'object-world,' an apparent geography distinguished by hereness, thereness, and distances and relations between the 'pieces of world' displayed; and *biomorphic* (or *animamorphic*) in its production of an apparent world of animate, life-like and interperceptive forms, which are shown to see and be seen, hear and be heard, at the same time as we, the viewers, see and hear them and, in effect, learn *how* to see and hear them. Cinema thus discloses a world of subjects, objects, and things in between.

Ivakhiv's consideration reveals the intentions of the next part of this analysis: the premise lives by Ivakhiv's definition of cinema as an 'anthrobiogeomorphic' machine and reproduces it in a larger context of considering the film as a machinic-ontological narrative, and thus part of an ecocinema as defined by MacDonald[11]. While previous commentary of the trilogy has always primarily focused on the human, it has become clear that if we want to deal with the human energy problem, we need to be able to sidestep the general anthropocentrism of the films (and previous critiques). *We need to adopt, at least partially, the perspective of a machine*.

It is at this point that Levi R. Bryant's idea of a machinic ontology comes in useful. Bryant (14) argues that "thinking ecologically requires us to think how we are both embedded in a broader natural world and how non-human things have power and efficacy of their own". This rather basic yet all-important idea of the environment is completely absent within *The Matrix*. To Bryant, as to Deleuze and Guattari before him, everything is, in a sense, a

[11] It needs to be noted that Ivakhiv is committed to a Peircean model of semiotics; i.e. a triadic semiotic (sign, object, interpretant), rather than the 'traditional' dyadic Saussurean semiotic (sign/syntax, signal/semantics). Peircean semiotics takes as a basic assumption that signs are not always merely linguistic or artificial and disavows the idea that a sign can be an independent entity; it is always a being in relation. Therefore, Ivakiv's conception of cinema very much suits for the analysis I am presenting here, and the Percean model of semiotics forms part of the underlying foundation of this argument—although I have not overtly addressed this throughout.

machine: "'Machine' is thus our name for any entity, material or immaterial, corporeal or incorporeal, that exists. 'Entity,' 'object,' 'existent,' 'substance,' 'body,' and 'thing,' are all synonyms of 'machine'" (Bryant 15). This means that the environment becomes a machine, as much as the humans and the Machines are machines[12]. Essentially, we must try and understand the relations between all machines that draw upon the necessity of human energy,; in such terms, this singular machinic-ontology becomes a useful perspective that offers a way to sidestep anthropocentrism. Bryant (20) writes that when talking about 'machines' "[…] environments issue certain problems as imperatives to be solved. […] Our bodies internalize the features of other machines in their own way". However, understanding the imperatives that an environment evokes and acting on them are two different things.

This is especially difficult in the case of human energy, which, as noted earlier, is invisible to humans themselves. This invisibility does not make sense: Neo himself is freed from the infrastructure which harvests human energy, yet he does not acknowledge it as the power source for Zion, as he willingly attempts to destroy it. Like Neo, many of the humans that inhabit Zion originally escaped from the Matrix, and therefore grew up in this virtual reality, which functions as a Platonic cave (an extended metaphor in the films). Before being pulled out of the Matrix, they never had to use literal human (and nonhuman) energy, but they fully relied on their metaphorical energy; in a way, they were being held in a 'schizophrenic delirium'[13], in the terms of Deleuze and Guattari, which would explain the invisibility of

[12] While this interpretation could be regarded as either overly 'mechanistic' or 'structuralist', it should be noted that the machinic ontology of Bryant leaves room for appreciating the nuances of complex interactions between machines. There is no single or correct way of reading the interrelatedness of machinic processes, their inputs and outputs, and the machines itself, as they can be reframed depending on the conception of the environment in which they function.

[13] This rather differs from Freud's initial conceptualisation of schizophrenia, who considered that "it is a loss of reality manifesting itself as the confusion of words for things" (Freud 1991: 206-7 in Buchanan *'Anti-Oedipus' RG* 30). Deleuze and Guattari's conception is much more useful here, as, contrary to Freud and general psychiatry, they do not believe that schizophrenia's symptoms can be interpreted nor that it is abnormal; it is the environment that makes the schizophrenic ill, not the schizophrenic process (Buchanan *'Anti-Oedipus' RG* 35-36). And they are strong believers in drug therapy, which also works

human energy, from an anthropocentric view. Schizophrenia is a psychotic break from reality, which taps into something 'more real' than the real; like stepping into the virtual reality of the Matrix. Buchanan has remarked that Deleuze and Guattari's argument is that "schizophrenic delirium could not take the forms it does if the unconscious was not, as they put it, *machinic*" (*'Anti-Oedipus' RG* 40): they argue that the *unconscious* mind of the schizophrenic is pre-occupied with machinic relations; relations that transcend the human-nature dichotomy. They illustrate this through describing the state of mind of Latvian/Russian writer Jakob Michael Reinhold Lenz who suffered a schizophrenic episode:

> Everything is a machine. Celestial Machines, the stars or rainbows in the sky, alpine machines—all of them connected to those of his body. The continual whirr of machines. […] To be a chlorophyll- or a photosynthesis-machine, or at least slip his body into such machines as one part among the others. […] There is no such thing as either man or nature now, only a process that produces the one within the other and couples the machines together. Producing-machines, desiring-machines everywhere, schizophrenic machines, all of species life: the self and the non-self, outside and inside, no longer have any meaning whatsoever. (*Anti-Oedipus* 20)

This description of Lenz's mental state is remarkably poignant when conceiving of the relationships within and the actual nature of the Matrix programme: it is essentially of a schizophrenic nature, in which the process of the production of desire and desiring-machines takes place: Deleuze and Guattari's schizophrenic state in itself is preoccupied with machines, but this state can only be produced by desiring-machines (i.e. humans). However,

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well in the case of *The Matrix*, with the virtual world that can be considered inducing the schizophrenic humans within in a sort of 'drug'-like state, as well as the trope of the red/blue pill dilemma; consider the passage from *Anti-Oedipus* where Deleuze and Guattari write that schizophrenia is a "harrowing, emotionally overwhelming experience, which brings the schizo[phrenic] as close as possible to matter, to a burning, living centre of matter" (*Anti-Oedipus* 26).

this is invisible to those who are not experiencing the schizophrenia; i.e. those outside of the system. The schizophrenic experiences the world as a process of productions, processes of producing-machines (here: computer codes and programmes). Yet, there cannot be production without desire, a desire that is essential to the functioning of machines. In that sense, this desire (which we can consider to be 'energy' for producing-machines) is only visible in the schizophrenic delirium; as such, it is invisible to the non-schizophrenic, or in this case, if we consider the Matrix system as the schizophrenic delirium, to those outside of the Matrix, i.e. the Zionists.

Desiring (energy)-production "is that aspect of desire that the body without organs as the agent of anti-production is unable to contain, unable to force onto its smooth surface and thereby repress it. […] D&G define the schizophrenic as the limit of the socius, the instance of a pure asociality which terrifies every social organization" (Buchanan *'Anti-Oedipus' RG* 44). The 'schizophrenic' Matrix-universe, which defies a traditional anthropocentric understanding of the world, thus causes a shift between human and machine: both are alienated from each other because they do not share the same ontological horizon, even though they are interrelated systems.

It thus makes sense that the humans inside the Matrix have a closer relationship to the Machines' ecology, as being 'bodies without organs' (BwO). For Deleuze and Guattari, the 'BwO' is the virtual dimension of the body, its full potential before it finds its material disposition within the body: "This body without organs is permeated by unformed, unstable matters, by flows in all directions, by free intensities or nomadic singularities, by mad or transitory particles" (*A Thousand Plateaus* 40). The Matrix is from this perspective not the prison it is depicted to be, but it can be considered the place where the full potential of the human is being realised; the true exploitation of the metaphorical human energy. As

Morpheus shows Neo, the schizophrenic delirium in the Matrix is easily attainable: because there is no Kantian division between the noumenon and phenomenon inside the Matrix, being a BwO allows one to directly interact with one's reality— a relationship that is unattainable to those outside of the Matrix. This desiring-production is made visible and used to do things which would normally not be possible with a body, such as having direct control over time, extreme control over body movements, flying and defying other natural laws. What is forgotten in this process is that the body inserted in the Matrix allows for the lives of those outside of it; this second desiring-production takes place in the real world but is strangely overlooked—a symptom of the outsider, who is no longer part of the intricate machinic-relational system of the Matrix.

Those within the Matrix can be said to have an immanent relationship which transcends the human understanding of reality; or rather, they have a relationship that has nothing at all to do with the real. On this plane of immanence, which differs entirely from the existence outside the Matrix, the humans inside the Matrix hold a different relationship towards the Machines, one that is natural. It is a relation that is almost symbiotic: they are part of the machinic structure of desiring-production to producing-machine, their metaphorical human energy is converted to literal human energy, all within a system which regulates the needs of both. The Machines and the Matrix-humans are interrelated interdependent machines, in the terms of Bryant, which causes implications humanity outside cannot comprehend because they do not share the same plane of immanence, or rather because this challenges a common-sense understanding of reality. This failure to understand the machinic relations of the Matrix system is what leads to the invisibility of human energy for the Zionists, which is why they

will never be able to triumph over the Machines, and how they ended up in their current situation in the first place[14].

BREAKING THE HUMAN-MACHINE DICHOTOMY

Clearly, the politics and visibility of energy production and distribution in the Matrix are obscured to such a scale that it diffuses traditional models of understanding for the humans in the film (like it would possibly for us, too, as viewers). In this sense, human energy is a prime example of what Timothy Morton[15] would call a hyperobject. Simply put, the hyperobject is an object which withdraws from us as soon as we try to understand or look at it or, put in other words, entities of such vast temporal and spatial dimensions that they defeat traditional ideas about what a thing is in the first place. Human energy, in this context, can be considered such an object, which particularly shows during a time of ecological crisis[16].

[14] It is perhaps necessary to note that this approach to schizophrenia differs from Žižek's, who relies on Lacanian psychoanalysis. However, the relevance of getting into more detail about the differences between Žižek and Deleuze (and Guattari) is relative, as I contend with Buchanan, who writes that "Žižek's book on Deleuze does not offer us an especially useful terrain in which to view the differences between their respective theories. Not only is it obviously lop-sided in that it gives us Žižek's view of Deleuze for which there is no counterpoint, it is also Žižek's worst book" ("Žižek and Deleuze" 69-70).

[15] Morton (28) writes: "The more I struggle to understand hyperobjects, the more I discover that I am stuck to them. They are all over me. They are me. I feel like Neo in *The Matrix*, lifting to his face in horrified wonder his hand coated in the mirrorlike substance into which the doorknob has dissolved, as his virtual body begins to disintegrate."

[16] It is an object that can only be understood when we conceive of reality in terms of an object- or machinic-oriented ontology: anthropocentric thought simply cannot conceive of the hyperobject in all its dimensions. That is because the hyperobject and its manifestations has five properties (it is viscous, nonlocal, has a Gaussian temporality, is subject to phasing, and interobjectivity) which complicate its understanding if looked at it from an anthropocentric viewpoint (Morton 1-94). Human energy in *The Matrix*, reflects similar: it sticks to beings that are involved with it, both human and nonhuman (i.e. the Zionists and Machines; its viscous character); it has no fixed location and can manifests itself at several places at the same time (its nonlocality; e.g. in the machinery that drives Zion, as well as in the Machines themselves); as an object it contains time and space within itself and it emerges from the object, rather than the opposite (existence of the human energy facilitates time and space in the Matrix as without it neither Machine nor man would be able to exist; its temporal undulation); it is impossible to witness the whole object as a totality (human energy creates the Matrix, and as such becomes 'phased' and occupies multiple dimensional phase spaces that makes it impossible to observe as a whole; its phasing quality); and the hyperobject is part of 'the mesh' and as such it is interrelated with the aesthetics of all objects surrounding it (it is impossible to directly experience human energy, as it is always mediated through other entities in a shared sensual space; in other words, this is why human energy is invisible to humans).

This can be seen exemplified in 'The Second Renaissance, Part I & II' from *The Animatrix* (Chung et al.), which reveals how humanity saw its downfall against the Machines; this is knowledge that is not available to the viewer in the regular trilogy, except for the very brief excursion of Morpheus on the subject when he first shows Neo the desolate view of Chicago. The downfall was caused by several factors at once, but the ultimate mistake was when the humans tried to win the war against the Machines by cutting of their main source of energy, the sun. Even though a peaceful solution was offered at an earlier stage of that war, the humans declined. Destroying the sky did not only cause their own demise but also forced an environmental imperative upon both the Machines and humans, which was to look for an alternative source of power. This reveals a strong theme that is also identified in a lot of other energy humanities scholarship, namely the difficulty of imagining a post-oil future, or any energy future that differs from our energy present; one needs to re-imagine everything from social, political, economic and cultural structures, to actual infrastructures[17]. Clearly, humanity in the Matrix-universe failed to imagine a proper energy future in the face of war, and as such eradicated their ecology and future energy resources[18]. The sentient Machines, in order for their 'species' to survive, thus had to turn to the only natural source left: humans. In doing so, the Machines eradicated the human-nature dichotomy, which is fictional in the first place, or so argue Deleuze and Guattari:

[17] A good illustration of this point is the *Mad Max* franchise. While Mad Max roams post-apocalyptic deserts looking for revenge, he (and everyone else) continues to heavily rely on oil, both as a source of energy and one of currency. This reveals the difficulty of thinking beyond petroleum; even in scenario's where the earth has been rid of all its seemingly natural resources, oil somehow perseveres. The same is true for other, post-apocalyptic narratives, like *I Am Legend* (2007), *Zombieland* (2009), *Ready Player One* (2018), or like those of the videogames *Borderlands* (2009) and *Rage* (2011), where one experiences a similar desolate, destroyed earth or planet as in *Mad Max*, but never has to fuel their vehicles, seemingly having unlimited fuel on board.

[18] Note that this has to do with the fact that energy has become a hyperobject; because of the hyperobject's properties, it is increasingly difficult to imagine energy as one singular entity, that can be easily described and understood. Because of the very multi-dimensional nature that energy has taken up, imagining a post-oil, post-human-battery, or any alternative energy future is by no means evident.

> There is no such thing as either man or nature now, only a process that produces the one within the other and couples the machines together. Producing-machines, desiring-machines everywhere, schizophrenic machines, all of species life: the self and the non-self, outside and inside, no longer have any meaning whatsoever. (*Anti-Oedipus* 2)

"Nature does not exist", Slavoj Žižek writes. For hundreds of years, nature seemed to have been the one stable aspect of life and yet, with the dawn of ecological crises, even nature seems to be falling apart. Like Deleuze and Guattari, Žižek recognises that the Anthropocene, or rather the 'age of man', has evoked existential crises about the dichotomies between nature and culture, human and nonhuman, and he argues that ecological crises, in this regard, should radically change our views: "What is at stake is our most unquestionable presuppositions, the very horizon of our meaning, our everyday understanding of 'nature' as a regular, rhythmic process" (*Looking Awry* 34). Similarly, we learn from Bryant that since all machines are connected—one being the input for another, the output being another's input and so on—there is no way to think in binary oppositions any longer, as no process is distinguishable from another. Deleuze and Guattari propose that we should break away from anthropocentrism to avoid these issues:

> Not man as the king of creation, but rather as the being who is in intimate contact with the profound life of all forms or all types of beings, who is responsible for even the stars and animal life, and who ceaselessly plugs an organ-machine into an energy-machine, a tree into his body, a breast into his mouth, the sun into his asshole: the eternal custodian of the machines of the universe. (*Anti-Oedipus* 4)

Deleuze and Guattari, slightly ignoring the somewhat crude metaphors, seemingly adopt a perspective which, nonetheless, evokes a sense of harmony, a relationship between human

and machine which functions on equal footing and is based on sharing the same plane of immanence. However, *The Matrix* films are not depicting quite that, and seem to be rather vocal in denoting how mutual understanding between human and nonhuman is at the very least arduous; similarly, Bryant (21), when it comes to understanding the outcome of certain machines, writes that

> While the craftsman's intentions and map play a role in the production of the artefact [the machine], the things themselves, the matter used, the circumstances under which they're produced, all contribute to the final product in ways not anticipated by the craftsman.

What Bryant hints at is that non-human machines and materials contribute to their own intentions as much as the human who made them. So, then, the blame is not fully to be put on humankind, one might say, because even if one would understand all machinic-relations, there is a sense of unpredictability which cannot be accounted for. Bryant observes that whatever the intention, one cannot completely predict the outcome of the processes which machines facilitate. The best example in this case are the Machines in *The Matrix*: clearly, they were not intended to be harvesting humans as batteries[19], yet human machinic input required this action for the machinic system to continue to operate.

Zion seems to be a beacon of hope, fighting the Machines; however, what for and why? First and foremost, there is nothing to return to; even if every single Machine were to be destroyed, the earth at that point in time in *The Matrix* storyline is ruined beyond repair and all energy that is produced would be lost, and both Machines and humans would all falter. It

[19] Interestingly, the Machines that harvest the human babies to plug into the Matrix after they have grown big enough to serve as a battery look like enlarged versions of a motor block or piston; thus heavily confirming, on an aesthetic level, to petrocultural aesthetics, making one wonder whether the Machines are suffering from LeMenager's 'petromelancholia', and as such sculpted these workers in the form of mechanical parts of an engine.

might be a battle for freedom and free will, but what is the point if there is no possibility of sustaining life outside of the Matrix after destroying the Machines, and all human energy with it? There is no sustainable earth, energy, or ecology left to fight for: it may appear to be a battle for free will and freedom, but that is merely an illusion[20].

THE QUESTION CONCERNING MACHINE AND ENERGY

This discussion of energy in *The Matrix* can be productively brought into dialogue with the work of Bernard Stiegler. In his book, *Technics and Time, 1: The Fault of Epimetheus*, Stiegler holds that technics precedes the human, or rather that technics should be "apprehended as the horizon of all possibility to come and of all possibility of a future" (ix). Reframing this, Stiegler argues that not only does technics precede us, but it will also succeed us, outlive us. This is because, in contrast to technology, human existence is defined by temporality. For Heidegger's *Dasein*—the experience of being—temporality is a question of inheritance, of drawing upon a past one has not lived, casting one into an indeterminate future. Stiegler argues that access to this non-lived, inherited past will always be technical and inscriptive; i.e. choice is illusory as life is already 'inscripted' through this lived past. The relation, however, between technics and time, thus becomes more problematic:

[20] This is even more so when we regard *The Matrix* as being situated at the end of an 'Eremozoic' era—which literarily translates as 'lonely or desolate life', or the age of loneliness, a term coined by biologist E.O. Wilson—after a sixth mass extinction event, caused by the actions of one single species, the Homo sapiens. Whilst contemporary ecological discourse employs a vision without humans as one where nature will self-regulate itself to a normal state again, this is according to Žižek, simply another form of ideology ("Censorship Today" 42-43). He argues that the effects of the Industrial Revolution are beyond the point of reversibility: there is no way back. Whether all human life would disappear from the planet or not, the planet would still suffer the damage of human activity, long after we are gone. *The Matrix* must be seen in this setting, where human impact has left an irrevocable effect on the planet's ecosystem; in this particular case, the destruction of the natural world in its entirety. It also fits into the framework of being unable to envision a non-apocalyptic post-oil future; the Eremozoic sees the eradication of the human species as the only possibly future outcome, a simple solution to imaging a sustainable energy future as an incredibly complex social, economic, political, cultural and historical event.

> The 'understanding that Dasein has of its being' finds itself profoundly - and dangerously - shaken. It is as if a divorce could now be pronounced between, on the one hand, the technosciences and, on the other, the culture that claimed to have produced them, engulfed by technology. (Stiegler 14)

In other words, humans cannot live up to technology, or rather the speed of technology surpasses humanity's, as it precedes and survives them; and so, anthropocentrism is rendered moot, and we see a shift from biopolitics to thanatopolitics[21]. Therefore, it is necessary to rethink technology in terms of 'being'. As far as we know, Stiegler argues, there are two classes of bodies/being: the organic (biologic) and the inorganic (mechanical), however,

> technical beings are nothing but a hybrid […]. Since matter receives accidentally the mark of a vital activity, a series of objects that are manufactured over a period of time does nothing but report an evolution: a technical being belongs essentially to mechanics, doing little more than conveying the vital behaviour of which it is but a thin trace. (1)

Machines thus have a questionable ontological status, which causes the tension and difficulties that arise from human-machine interaction (i.e. anthropocentrism vs. machinic-ontology). This dichotomy is apparent within *The Matrix*: the Machines are 'dead', they are not living in a human sense, however, they cannot be fully pronounced dead since they are able to move, reproduce, work, etc. The Machines breed humans, and with regards to the

[21] It is useful to consider Achille Mbembe's conception of 'necropolitics' (or thanatopolitics) in this context, as he focuses on the colonial or neocolonial state, which exerts direct control over the human lives of its colonised population (Mbembe 11); disregarding deeper colonial issues, *The Matrix* depicts exactly such a society, with the Machines as the coloniser with absolute life-death control—complicated by the fact they have a questionable 'non-human' ontological status. The notion of biopolitics is thus not suited any longer in this context. Additionally, Roberto Esposito has argued that thanatopolitics accounts for the neglected negative undertone in biopolitics' logic of immunity; biopolitics becomes thanatopolitics when it justifies violence against those subjects that are not part of the biopolitical sphere and as such becomes an active death campaign.

events within the Matrix, the Machines precede Neo (and every Zionist for that matter) when he wakes up from their system; he is a result and part of their past. Where humanity was once maker, the creator of the Machines, he is now reduced to the inferior assistant to those same Machines. As was clear from the passage from *The Matrix Reloaded* cited earlier, the inhabitants of Zion are nothing more but the tenders of their life-sustaining Machines. All humans within the Matrix depend on the Machines to 'live', while they serve as mere disposable commodities to them.

On this note, we should reflect once again on the barren ecological system that is presented in *The Matrix*. Here, Martin Heidegger's notion of *Gestell* (Enframing), coined in his essay "The Question Concerning Technology," might be useful. Whatever comes into existence in this world, Heidegger notes, needs to be 'framed' first, before it can exist. This framing is essentially technical:

> Enframing means the gathering together of that setting-upon which sets upon man, i.e., challenges him forth, to reveal the real, in the mode of ordering, as standing-reserve. Enframing means that way of revealing which holds sway in the essence of modern technology and which is itself nothing technological. (Heidegger 20)

Gestell is the way through which humanity gives identity to itself. The basic idea, that one can only know about oneself through a knowledge of what is outside of the self (an impossibility in an object-oriented ontology), is thus in a Heideggerian sense always technical. When *tehkne* precedes being human, the only frame of reference is therefore that of technics; the *Gestell* can only be technical but is in itself not technological.

This has as its implication that nature is not controlled by humanity, but by technics, since everything that exists needs to be seen through *Gestell*, thus as something of a technological nature. Heidegger (21) shows how modern science is a prime example of how technics

controls nature, and not humanity: "Modern science's way of representing pursues and entraps nature as a calculable coherence of forces". When looked at the problematic relation between technology and nature in *The Matrix*, this entails an inescapable negative feedback loop for humanity. Not only is it revealed that the current generation of humans within the Matrix has been the sixth generation that has been threatened with extinction by the Machines (and as proven earlier, extinction by and of itself) but also that all generations before them have failed in achieving victory over the Machines. Technology, ergo the Machines, precedes the humans and survives them time and time again. From a Stieglerian/Heideggerian perspective, as *tekhne* precedes the human, it frames him and everything in his life, including nature, and will go on when the human dies; this too is an inescapable circle, because the idea that one can know itself by knowledge of what is outside of them does not work within a setting that requires an object-oriented perspective (cf. Morton's hyperobject). Ecology, in this sense, does not even have a chance; it is not something humans can act upon, as the Machines govern 'nature', and humanity only follows in an attempt to survive.

BECOMING THE MACHINE IN THE FACE OF ECOLOGICAL DISASTER

It would thus seem that the films imply that if the human and machine, and the dichotomy between the two, recognised each other, a form of ecological salvation would be possible in *The Matrix*'s cinematic universe—a clear ecocinematic trait that marks the trilogy. As such, the Matrix, the actual computer system, is a manifestation of interlinking human and machine in order to protect the environment; as such it is not a prison but a sanctuary, where humanity is protected from itself, but where the Machines are also protected from human impact. The trilogy also seems to end on a positive note. In *The Matrix Revolutions* (2003b) a sort of peace treaty is agreed upon; however, this again turns out to be illusory. The Machines ask

Neo to destroy their Agent Smith-programme that is now terrorising the Matrix-system. If he can kill the programme, the Machines promise to free all the humans who reject the Matrix and to let them live in Zion. Neo agrees and succeeds in terminating Agent Smith, and so the trilogy ends—with a digital sunset rising over what is the digital rendering of New York City.

However, none of this is very logical: The Machines created both the Matrix and Agent Smith, so why would they need a human to kill the latter? The Matrix is a computer system, which means that deleting a programme or rebooting is of no consequence to the structure of the system. The Machines can predict anthropocentric actions and are thus able to manipulate Neo into a peace treaty. By attending to his inherent need of choice, they can save their own ecosystem of Machines. Neo dies in destroying Smith, but with that the greatest threat to the destruction of the human energy resource of the Machines is saved from possible destruction. There is no free will at the end of the trilogy, but a status quo: The Machines depend on humans for energy, and the humans continue to depend on the Machines (and humans) for their energy. It is a vicious circle from which there is no escape in the current ecological state of the Matrix-universe. And besides, what keeps the Machines from updating the Matrix, using what they learned from Neo's actions and desperate need for choice, to make a system with even less chance of rejections?

The dynamics at play concerning the literal and metaphorical human energy are intrinsically complex. What has become clear is that humanity, and not the Machines, features as the source of ecological crises. This is the biggest point of ecological criticism within *The Matrix*: being unable to look past the ideology of the 1% and not accept the reality of the other 99%, combined with the misconstrued idea of mastery over technology and nature leads disastrous effects on environment and ecology. The solution might be in the accepting of a machinic-oriented ontology, but even this does not necessarily merit a positive outcome;

there is also the thanatopolitical system that needs to be overthrown somehow, which is improbable as the human in the wake of technics cannot be undetermined and ruled by it; humankind appears to be philosophically and ontologically trapped in a form of ecological blindness, where the hyperobjects that are energy, nature, and climate change obscure the possibilities of meaningful intervention. We must acknowledge that the hyperobject heavily complicates the envisioning of a sustainable energy future, as it obscures the boundaries between the human, nonhuman, and their intrinsic relations—it participates in making energy invisible. And then there is, as pointed out, the schizophrenic delirium that is the Matrix, which even further complicates this issue: those outside of the Matrix, having been part of the delirium but ripped out of it, cannot 'see' or comprehend their initial intrinsic relationship to the Machines, as both literal and metaphoric energy, and fail to see the system in its totality of machinic relations. Therefore, reflections on the nature of their energy resources never seem to surpass the attitude of 'don't care as long as it works', all the while showing a clear form of petromelancholia, which is intensely problematic and paradoxical.

The exploitation of literal and metaphorical energy is nevertheless caused by humanity itself, whilst simultaneously causing the destruction of their own natural environment. In the end, *The Matrix* can thus be considered part of an ecocinema, as described by MacDonald. It may be one of the most innovative and confrontational ecological films of its era, as it makes us realise that our own dealings with energy are not all that different from the Zionists depicted in the trilogy. Besides from being a worthwhile addition to the ecocinematic corpus, this article also shows how analysing alternative energy resources, as 'out there' as the harvesting of literal and metaphorical human energy, can offer profound insights in our cultural state and what implications transitions to other post-oil energy regimes entail; or rather, in this case, how after the world is destroyed by petroculture, through a refusal of giving in to natural demands, the conceding in the continuation of petroculture's archaic systems and modes

proves even more unsustainable and death-threatening than its potential (unimagined) alternatives.

In more pragmatic terms, this article illustrates what could be considered a potential root for the political inability to engage with deep environmental issues. The obscurity and inability of exposing (mainly Western) culture's relationship with energy is due to a deeply rooted reliance on petroculture which until now has mainly gone unexplored and actively ignored, often under the same motto of The Counsellor's proclaiming that no one cares as long as it works. Furthermore, our relationships with fossil fuels have become so intimate, that it has become hardly impossible to consider living without them, resulting in an inability and at times even a resistance towards imagining future alternative energy scenarios. Without a thorough analysis of these mechanics, reconceptualising our current energy culture and acknowledging the need for more sustainable energy resources in the face of peak oil, future planning may as well be impossible and pointless altogether.

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