In Brown W & Fleming D (2020) *The Squid Cinema from Hell: Kinoteuthis Infernalis and the Emergence of Chthulhumedia*. Edinburgh: Edinburgh University Press.
https://edinburghuniversitypress.com/book-the-squid-cinema-from-hell.html

1. Introducing the End

Blast your toplights! Plutarch reports that Diogenes of Sinope—the notorious cynic who not only wanted to learn from animals, but also to base human existence on animality—died on account of eating a 'raw octopus,' a wild gesture in keeping with his life-long remonstration against the effects of perverting civilizing forces, especially the 'inconvenience of preparing cooked food' (see Onfray 2015: 21). With respect to cookery, Diogenese professedly railed against the treatment of raw flesh or vegetables by fire—that perverse Promethean *technē* purloined from the gods and thereafter setting men apart from, and against, 'nature.' We shall see humans consume raw octopus later (as well as rare octopus-like creatures consuming the odd human), before also considering the Promethean control by humans of fire and, by extension, light. However, at present we wish simply to highlight how Diogenes felt that humans had strayed on to a path of civilized perversion, since we shall look here at the most recent technological 'perversions' affecting human civilization—networked computers, software programs and digital screens—arguing that they mark a strange spiralling return, or reversion, to the world of animals and animality, and in particular the world of cephalopods, which, as Jacob von Uexküll might put it, have their own *umwelt*, or non-human world with non-human perceptions (see von Uexküll 2010).

Our intention is not just to look at the role that cephalopods—primarily octopuses and squids—play in contemporary media (with an especial emphasis on film). It is also our intention to look at the contemporary media-drenched world from the perspective of/as if it were a cephalopodic universe, since this may help us to understand media not just from a human perspective, but from the perspective of

(primarily but not exclusively) digital media themselves. Our aim being to offer up ideas regarding how media themselves think (and act, and invite us to interact, and therefore think). As we shall see, this is necessarily a weird and speculative endeavor, not least because it involves the suggestion that media are alive, an alien presence heralding a new world in which the fate of humans is not necessarily certain as we grow increasingly to recognize the intelligence—and thus the life—of media. Forasmuch weird, though, we believe that the idea of chthulumedia/*Kinoteuthis Infernalis* is one that has legs—perhaps eight of them, to be paradoxically imprecise (eight is a precise figure while 'perhaps' signifies ambiguity; we shall also revert shortly to this tension between precision and ambiguity, and paradox, as part of our methodology). For the time being, though, we should say that we do not just want our readers to leave this book with a better understanding of films featuring cephalopods and other tentacled creatures. Such a book would be for the cephalopod/tentacle fetishist at best (although when we consider the popularity of tentacle porn, or that which in Japan is characterized by *shokushu* ['tentacles'] as a form of *hentai* [erotic animation, or literally 'perversion'], then that would not be too small a readership). No—our intended readership is much wider than that, and like an octopus clinging to a human with its suckers, we want slowly and softly to lure you into cephalopod thought, putting into place a perverse and weird seduction that hopefully is not without erotic components, as we get you to think like a cephalopod and to find cephalopod thought not just in a ring-fenced selection of movies and other media products that we have carefully selected for cookèd consumption, but raw and everywhere.

In this way, *Kinoteuthis Infernalis, or The Squid-Cinema from Hell: Chthulumedia Emerge* is a bit like the change that a human undergoes during puberty,

when as a result of hormonal shifts, the adolescent has a novel tendency to find sexual innuendo everywhere (as the adolescent begins to appreciate the erotics of everyday life). Like the adolescent gurgling away in their barely controlled state of sexual overwhelm, we want you to find cephalopods (and their own erotics) everywhere. We want to seduce you as you see-think-feel from the perspective of other minds and bodies. We want to change you as you have flashes of other worlds. And like Diogenes dying from his raw octopus, we cannot say that we do not want to kill you as you taste cephalopod thinking raw rather than cooked. One bite and you may be hooked. But where some fear mind-alteration as dangerous and perhaps even evil, we want to show you that there is nothing to fear. Like puberty, we want you simply to emerge on the other side of our hormonal and cerebral shift as a different being. The old you will be dead (and in this way *Kinoteuthis Infernalis* will have killed you). And yet, we confidently can say that you will still be here, and that one of the things that you will have learned is that death is simply another part of becoming. For, we present here a shimmering ecstasy of a thousand small deaths (or orgasmic *petites morts*) that correspond to each of our thousand tiny glittering sexes (see Deleuze and Guattari 2004: 235). And in the light of which, you will be coming and becoming *with* the world.

Armed with these new nonontological cephalopodic perspectives, we believe we can be with the world again—a paradoxical new world within the old world, seeing the world not as fixed but as changing and thus fresh with possibility. By giving you death, then, we give you hope—and hope is a corrective of tingling fear. To get to hope, though, perhaps we must face our fears, we must face what lies beneath, and allow ourselves to become suckered in, and look into the eye (and the partially sighted skin-screen) of squids and octopuses. We must confront Cthulhu. We

must stare Roko's basilisk in the eye. (Worry not—the meaning of these strange demonic names and the bestiary that they convey will be revealed in good time—for time as change and becoming is indeed good.)

Why cephalopods? An anecdote

There are three preliminary answers to the question as to why we are considering cephalopods, with the first being anecdotal, the second observational-empirical, and the third historical-theoretical.

First, the anecdote. Four of our limbs were on an aeroplane, travelling long haul, on the type of vessel where, embedded in the back of the headrest of the passenger in front, each traveller is granted their own personal screen (as these days we mostly have outside of aeroplanes, too). The sort of voyage where a constrained film scholar can catch up on all the latest spineless Hollywood pulp—which is made available through the commercial hauler's onboard intranet (and which no doubt trawls our viewing data as it solicits our 'likes'). On this occasion we chanced a seat on an isle, mid-galley, which granted us a broad vista over a bank of others' headrest-screens—and a port-hole aspect onto splinters of the screens in the rows in front, as well as an askew vantage of our starboard neighbor's screen *and* his iPad tablet. Fast forward a few hours into the flight—after cruising altitude has been maintained and the victuals have been razed and tidied. We remember half-minding a wishy-washy franchise film featuring a British beast-hunting wizard in the USA (*Fantastic Beasts and Where to Find Them*, David Yates, USA/UK, 2016). In a distracted state we were also scouring the cabin to see what we might watch next, using the multiple screens within our field of vision as a material YouTube-style applet bar—albeit one streaming full films and television shows rather than just offering thumbnails.

Then, our ears must have been cued by affective headphone sounds, for our attention was racked back to our assigned headrest-screen. Therein, and not for the first time in this film, a dark billowing smoke monster called an Obscurous—somewhat like the smoke monster seen in the television series *Lost* (J. J. Abrams, Jeffrey Lieber and Damon Lindelof, USA, 2004-2010)—was spiraling around the plasma screen. However, this time something more interesting was happening. For in our peripheral vision we noticed that this black sentient cloudiness was spreading across on to our neighbor's iPad too. On closer scrutiny, though, it transpired that he was not watching *Fantastic Beasts…*, but the beginning of the latest modular *Star Trek* series (*Star Trek Beyond*, Justin Lin, USA/Hong Kong/China, 2016), the high concept opening of which finds a black tendril of inky CGI-smoke sculpting itself into various familiar objects, before deforming, and then re-forming, into a starship, a phaser, a Shatner-era communicator, and so on. As we watched, a sort of flick(er)ing triffid-like tentacle briefly appeared on his touch screen too. Remarkably, we then noticed *another* screen in front of us showing the Huallywood blockbuster *Xi you ji: Da nao tian gong/The Monkey King* (Pou-Soi Cheang, China/Hong Kong, 2014), and which also featured a curling demonic Obscurous-effect. So, there we were, contingently witnessing three unrelated monitors, each simultaneously billowing the same sort of inky CGI effects. It was as if some invisible squid had suddenly deposited a spiraling ink trail along the whole cabin's screen-tanks as it withdrew down the tube of the deck—and for the rest of our voyage we kept on noticing evermore of the same sort of zeitgeist effects, often coupled with glimpses of weird monsters, demigods, aliens, antennae and tentacles. This brings us to our observational reasons for why we are writing a book about cephalopods, and which themselves begin to move towards theoretical considerations.

Tentacular art and media

We live in tentacular times. Indeed, it seems that tentacles are everywhere. In the realm of literature, this is not simply a case of well-known historical references to cephalopods in the work of Pliny the Elder, Plutarch, Lord Alfred Tennyson, Charles Darwin, Jules Verne, Victor Hugo, Étienne Geoffroy Saint-Hilaire, and the Comte de Lautréamont (see Montgomery 2015: 4-6; Nakajima et al 2018). For, a trip along the vast banks of the Amazon (website) might well also lead you, if you coast into the right forbidden waters, to titles such as *Tentacle: Chameleon 2012* (Albert 2012), *Good Sense of Humour, Must Have Tentacles* (Cramer 2012), *Wrapped up in Tentacles* (Lake 2014), *Squirm: virgin captive of the billionaire biker tentacle monster* (Silverwood 2014), *Tentacle Erotica Mega Bundle* (Trace 2014), *Tentacle Lord: Book 1* (La Mer 2015), *Alien Tentacle Chronicles: Bound* (Styles 2016) and *Seeded by the Alien Tentacle King* (Bright 2017)—to take but eight engrossing titles from the world of pulpy tentacle porn. We should note that many of these are not just soft porn, however, but also soft books, in the sense that they are ebooks, or books without spines. That is, these books are, like their subject matter, invertebrate.

This is not to mention the work of more paper-backed authors such as Matt Ruff, whose *Lovecraft Country* (2016), like China Miéville's *Kraken* (2010), amounts to an apocalyptic conspiracy novel in the tradition of H.P. Lovecraft (about whom more later), and much like Robert Shea and Robert Anton Wilson's earlier Lovecraft-inspired *Illuminatus! Trilogy* (1984), which itself features many subaquatic adventures that are linked to LSD culture and the end of the world. Ruff, Miéville and Shea/Wilson no doubt also link to the work of Thomas Pynchon, whose *Gravity's Rainbow* (1973) has an octopus, Grigori, at its core in its story of war, piracy and the

development of the early drone technology that was the V-2 rocket. Notably, Alex Ross Perry's film *Impolex* (USA, 2009) is a partial adaptation of *Gravity's Rainbow*, and which retains Pynchon's octopus (voiced by Eugene Mirman) as a weird interlocutor for a soldier (Riley O'Bryan), who wanders lost through a forest holding on to the rocket from which the film takes its title.

Beyond these literary manifestations, squid- and octopus-like creatures appear in art galleries, theme parks, architecture, video games, augmented or virtual reality experiences, music videos, television shows, apps, novels, magazines, adverts, online memes, and graphic novels (of which, dear reader, there are enough to overrun this entire book).[1]

Sticking solely to cinema, then, since this is the primary focus of this book, cephalopods have featured in different ways and in numerous films, even though filming underwater is not easy and even though the cephalopod is famous for remaining invisible to the camera/eye as a result of its ability to camouflage itself. Early examples of octopuses and squids onscreen include *The Trail of the Octopus* (Duke Worne, USA, 1919) and *La pieuvre/The Octopus* (Jean Painlevé, France, 1928), with the octopus being revisited by Painlevé nearly forty years later in *Les amours de la pieuvre/Love Life of an Octopus* (Geneviève Hamon and Jean Painlevé, France, 1967). All manner of monster and mutant movies feature cephalopods, from *It Came from Beneath the Sea* (Robert Gordon, USA, 1955) to *Octopussy* (John Glen, UK/USA, 1983) and *Mega Shark vs Giant Octopus* (Ace Hannah, USA, 2009).

Furthermore, if we expand our bestiary to include not just recognized, earthly cephalopods (if cephalopods are indeed earthly), but also betentacled creatures (especially aliens), then we must also consider *It Came from Outer Space* (Jack Arnold, USA, 1953), *The Tingler* (William Castle, USA, 1959), *Possession* (Andrzej

Zuławski, France/West Germany, 1981), *Gwoemul/The Host* (Bong Joon-ho, South Korea, 2006), *Monsters* (Gareth Edwards, UK, 2010), *Spring* (Justin Benson and Aaron Moorhead, USA, 2014), *Arrival* (Denis Villeneuve, USA, 2016), *La región salvaje/The Untamed* (Amat Escalante, Mexico/Denmark/France/Germany/Norway/ Switzerland, 2016), *Miss Peregrine's Home for Peculiar Children* (Tim Burton, UK/Belgium/USA, 2016), *Life* (Daniel Espinosa, USA, 2017) and *Solo: A Star Wars Story* (Ron Howard, USA, 2018), all of which will merit consideration in what follows, together with films like *Ghost in the Shell* (Rupert Sanders, USA/India/China/Japan/Hong Kong/UK/New Zealand/Canada/Australia, 2017), which feature other tentacled marine creatures like jellyfish.

Cephalopods and other tentacled creatures are not limited to global horror and/or sci-fi movies, but also play key roles in arthouse movies from around the world, and from among which we shall consider *Hokusai Manga/Edo Porn* (Kineto Shindô, Japan, 1981), *Maelström* (Denis Villeneuve, Canada, 2000), *L'uomo in più/One Man Up* (Paolo Sorrentino, Italy, 2001), *Oldeuboi/Oldboy* (Park Chan-wook, South Korea, 2003), *Cefalópodo/Cephalopod* (Rubén Imaz, Mexico, 2010), *Évolution/Evolution* (Lucile Hadžihalilović, France/Belgium/Spain, 2015), *Ah-ga-ssi/The Handmaiden* (Park Chan-wook, South Korea, 2016) and *Kékzsakállú* (Gastón Solnicki, Argentina, 2016). On a related note, the title of *Naissance des pieuvres* (Céline Sciamma, France, 2007), which typically is translated as *Water Lilies*, literally means 'birth of the octopuses'—a title that perhaps gives us a far greater clue to the film's meaning than the English translation does. While Noah Baumbach's *The Squid and the Whale* (USA, 2005) and the afore-mentioned *Impolex* both suggest a cephalopodic presence in American indy cinema.

Finally, we shall explore how a relationship between cephalopods and technology is established in *Demonlover* (Olivier Assayas, France, 2002) and *Elle* (Paul Verhoeven, France/Germany/Belgium, 2016), which both feature violent tentacular sex in the cyber realm. Meanwhile, the tentacular Sentinels in *The Matrix* (Andy and Larry Wachowski, USA, 1999) and Dr Otto Octavius, also known as Dr Octopus, in *Spider-Man 2* (Sam Raimi, USA, 2004) also convey a sense of how cephalopods are linked to digital technology.[2]

What we hope to have made clear by unfurling this long tentacular list is that there is a bounty of films that feature invertebrates and cephalopods, cephalopod-like creatures, cephalopod-like or cephalopod-inspired technologies, tentacles and/or which draw upon Lovecraftian Cthulhu mythology in order to tell tales wild and weird. These films stretch across cinema's history, extending into different genres and different national/regional cinemas. While not obvious (perhaps because camouflaged—like an octopus), we wish to suggest, then, that the cephalopod is omnipresent in cinema, but more intensely so in the contemporary era, when digital media practices make clear the cephalopodic logic of these forms.

To similar ends, we would like to note that a tendrilled jellyfish and writhing octopus arms feature prominently in the omnipresent big screen ident for DCM (Digital Cinema Media)—the company that in the UK sells advertising space/time before film screenings (see Figure 1.1). Two things might be worth noting here: firstly, that the octopus welcomed until 2019 virtually all viewers to cinema screenings in the UK (especially at megaplexes run by Virgin, Cineworld, Odeon and VUE); and secondly, that the logic of advertising is perhaps not so different from the logic of cephalopods, cinema and of media more generally—in that it wants to lure us

in through its chromatophoric displays and through its seductive tentacles, affirming its otherness at the same time as it mesmerizes us.

Insert Figure 1.1 [Still from Digital Cinema Media ident]

Loose metaphorics

Our third answer to why cephalopods? is more theoretical. Our previous work on digital effects, digital media and digital environments saw us (individually and collectively) begin theorizing the latest historical ('post-human' and 'post-cinematic') modes of moving and imaging afforded by computer-era filmmaking techniques. With regard to cinema, we have written on various occasions about the new forms of fluid movement that are increasingly enabled by the creation of volumetric digital worlds, and which can be navigated in a decidedly non-human and non-analogue way, not least by permitting a modular point of view to soar through voluminous space as if all within it had melted into water or gas, and/or shift scale at will to pass through tiny holes and/or explore otherwise inaccessible regions (see Brown and Fleming 2011, 2015; Brown 2009a, 2013; Fleming and Brown 2015). However, as we began to re-think these animated gasiform features in light of the seeming omnipresence of cephalopods and tentacles, we suddenly felt that there was a bigger picture, or rather a cephalopodic abstract diagram, lurking within or behind our previous *informe* thoughts. And so, our attention was pricked, and we were on the hunt for new ways and means of proceeding.

Now, animals have of course always been a key part of cinema since its very beginnings, with Rosalind Galt (2015) pointing to the presence of cats in even the earliest films by the Lumière brothers, whose *Sortie de l'usine Lumière à*

Lyon/Workers Leaving the Factory (France, 1895) equally features at least two dogs. Nicole Shukin (2009) has explained how early film stock was created through the use of 'animal glue,' or pulped animals, while various other scholars have recently turned their attention to the animal components of films—in a bid to consider those aspects of cinema that lie beyond simply the human (see, for example, Lippit 2000; Pick 2011; McMahon 2015a; Creed and Reesink 2015). In other words, cinema does not exist without the animal.

What is more, animals and animality have for better and/or for worse played an unquestionably foundational role in the history and structuring of human thought, concept creation, and self-determination more generally. In particular since the nineteenth century, animals have become auspicious figures for thinking through technology and its concomitant transformations of nature. Conversely, and as Akira Mizuta Lippit shows, European modernity can 'be defined by the disappearance of wildlife from humanity's habitat and by the reappearance of the same in humanity's reflections of itself: in philosophy, psychoanalysis, and technological media' (Lippit 2000: 2-3). In this way, animals are not only representationally significant to technology but are conceptually and materially implicated in it as well. This is before we even consider tracing a reverse line wherein biological life itself may be understood as always-already *technological*, or technê proficient, after having initiated processes of becoming-technological qua biotechnological in its primordial appropriation and adaptation of 'external' environmental materials and minerals, to form enabling motile structures and prostheses (see, for example, De Landa 2000: 26; Wills 2008). Accordingly, *Kinoteuthis Infernalis* takes part in the recent 'bestial' turn in film and media studies, which harnesses animals and animality in order to 'widen the possibilities to think media and technological culture' (Parikka 2010: xiv).

Bearing these material dimensions in mind mitigates against engaging solely in what Jussi Parikka might term 'loose metaphorics,' wherein analogy is used 'as a method of explanation, [as] we often try to see one phenomenon in the use of some other, usually a familiar one' (Parikka 2010: xxi). Indeed, Parikka's *Insect Media: An Archaeology of Animals and Technology*, from which we have just cited, demonstrates how insects can come to enrich our understanding of media, as media can perhaps also come to enrich our understanding of insects—such that at times it would appear as though the two are not easily distinguishable the one from the other. That is, media might *best* be understood as insects (and insects as media), begging the question anew as to *why cephalopods* (if insects do the job better, or indeed if one could find commonalities between any two things, much as the adolescent human brain can find sexual innuendo anywhere that it wishes). Or again, cinema and its new media offspring might well have commonalities with cephalopods, but they also have commonalities with insects, cetaceans, arthropods and pachyderms, to take examples from the animal kingdom alone. Why not equally plastics, plants, mud, the elements more broadly, architecture, music, engineering, ghosts and religion, which surely also have connections with cinema and media? Why, then, cephalopods and not anything else?

To this we have ready a material and metaphoric answer. For setting out the former we can briefly return to Henri Bergson's writing in *Creative Evolution*, where he contends that for organic life-forms, the imagistic perception of any given present moment is always already heavily pregnant with the past (see Bergson 1998). Gilbert Simondon and Michel Serres indicate that such also holds true for technological objects and machinic artefacts, which likewise smuggle their own hidden pasts with them into the present (Serres in/and Simondon 1958: 25-26). The latter elsewhere

links this deep and forgotten past to a radical 'newness,' or the open and transforming future, by framing technologies as 'exo-Darwinian' drivers that radically impact human cultures and persons. By becoming free of the need for genes in order to propagate—and thus by slowing the time of evolution—human technologies are able rapidly to sculpt the collectives and individuals that previously sculpted them. In other words, our forgetful *despecialised* species attains new behaviors, abilities and (cultural) intentions with each new tecnologial turn (Serres 2018: 45ff). As Serres puts it, '[i]ndividual and collective, hardware and software' are all technologies that reveal 'cognitive virtues,' or at least 'mnemonic ones,' which act like material memories and change engines (Serres 2018: 47). Among other things, Serres notes how in today's superfast 'bioculture,' modern technologies drastically 'change the scale of time,' speeding us up while concomitantly reconnecting us to the deep and forgotten premordial stratas of the past. That is, they reconnect us to what Serres terms the Grand Narrative, which includes the history of our species, the evolution of life on Earth more generally, the birth of the planet, and the formation of atoms during the early universe (some 15 billion years ago).

Keeping both this deep, dark history and light-speed acceleration in mind, we might provisionally begin to chart the oft-overlooked role of the cephalopod in the early history of computing development and intelligence. As a first port of call we might remember, as Katherine H. Courage reports, that 'back in the 1940s the Marshall Plan lobbed a hunk of money over to Naples, Italy, to see if a lab there could crack the code of the cephalopod brain to make more efficient computers' (Courage 2013: 4). Working in Naples at this time was the outstanding British zoologist and neurophysiologist John Zachary (J.Z.) Young, famed for his groundbreaking comparative studies between the brains, neural intelligence, and memories of common

octopuses (*octopus vulgaris*) and humans. Accordingly, Nakajima et al note how during the 1950s

> Young was falling more and more under the influences of cybernetics. The comparative project became the octopus project, and the octopus progressively became a mechanical model—a living computer containing, rather than being characterized by, a memory.
>
> The natural end-point of such a development was the attempt at building a learning machine based on what the researchers had learned about the performances and structure of the animal… This machine later came to be subsumed under the wider category of 'perceptron,' or neural networks and is rather part of the pre-history of artificial intelligence (A.I.) than of its history proper… Despite the promises to his patrons (developing a learning computer), what Young had in mind was a comparative study of animal and machine learning, in which not only the animal could provide a blueprint for the machine, but the machine could also help in the interpretation of the structure-function nexus in the octopus. (Nakajima et al 2018: 3)

Cephalopodic forms of thought and intelligence may here be fathomed as entering molecularly into composition with the ancestors of today's digital media assemblages and techno-culture forms, with the cephalopod here becoming the proverbial ghost haunting the computer shell. We shall in the next chapter look at a cephalopodic media archaeology that extends well beyond cinema, before suggesting in our final chapter that an eruption of cephalopodic logic (and alien life) lies at the heart of many (all?) media, from writing to computers. With regard to the former claims we are

certainly not the first. In fact, Vilém Flusser had in the 1980s already noted connections between the latest software beings and the 'soft intelligence' of cephalopods (to purloin a phrase offered by Jacques-Yves Cousteau; see Cousteau and Diolé 1973). Regarding the term *software*, Flusser maintains that 'there can be no doubt that "soft" alludes to molluscs ("soft animals"),' of which cephalopods are of course examples (Flusser and Bec 2012: 67). That is, the cephalopod is inscribed into technology, such that technology—including artificial intelligence—is like a cephalopod. Indeed, tech guru Jaron Lanier suggests that '**Cephalopods + Childhood = Humans + Virtual Reality**,' by which he means that if cephalopods had a human system of parenting, childhood and the ability for adults to pass knowledge on to children, then they would rule the world, while virtual reality will give to humans the ability to morph, hide and hunt as a cephalopod (see Lanier 2010: 189).

Beyond the esoteric philosophy of Serres, Flusser and Lanier, mainstream cultural critics such as Nicholas Carr also proselytize and popularize the idea of digital technologies harboring near-magical abilities to reconfigure and rewire the hyperplastic human brain and nervous systems, moving into daily composition with them, and in the process profoundly transforming what we are both as individuals and as societies (see Carr 2011). But Carr, like Diogenes before him, primarily foregrounds the negative aspects of these transformations, which he sees as making humans shallow and superficial, hence the title of his book, *The Shallows*.

Unlike Carr, however, we do not pine for any 'return' to a pristine or prehistoric species origin. Instead, drawing on philosophers like Serres, Flusser, Gilles Deleuze and Félix Guattari, Donna J. Haraway and Rosi Braidiotti we do not recognise any essential, transcendental, or 'pure' human nature to be perverted or polluted by technologies. Rather, as the world itself changes, so 'minds change with

it,' precisely because minds are always already 'ecological phenomena' (see Reynolds 2019: 50).

To help symbolize what we see as a false Diogenesian problematic, then, we might in passing draw upon a fitting illustration offered by Guattari in *The Three Ecologies,* where the Frenchman aptly relates a televisised experiment with an octopus conducted by Alain Bombard. As Guattari recalls it, Bombard 'produced two glass tanks, one filled with polluted water—of the sort that one might draw from the port of Marseille—containing a healthy, thriving, alomost dancing octopus. The other tank contained, pure, unpolluted seawater. Bombard caught the octopus and immersed it in the 'normal' water; after a few seconds the animal curled up, sank to the bottom and died' (Guattari 2010: 29). Similarly, Danna Staaf reports how climate change might be causing various cephalopod populations not to be diminishing in size (in spite of perceived over-fishing), but in fact to be increasing (Staaf 2017: 192). And so, Guattari/Bombard's unfortunate octopus was undone by what many would errenously consider to be its pure or natural (unpolluted) environment, we do not believe that there is any pure or true pre-technological mindstate for our species to be returned to. There is no 'Ctrl. Alt. Del.' reset to take us back to some form of Edenic mind.

Thinking of minds, though, we might add that cephalopods have also played a significant mediating role in shaping (contaminating? polluting?) the neuroscientific understanding of our own human brains function. Indeed, Nakajima et al note how

> in the late 1930s, the Age of the Squid began. Their so-called giant axon—a syncytium, and as such an exception to the strict Cajalian rule of anatomical independence of nerve cells… was famously re-discovered by the zoologist John Zachary Young in 1936. The Marine Stations of Plymouth and the

> Woods Hole (Massachusetts, US) became hothouses for the introduction and development of this model, which was soon adopted by axonologists worldwide. In particular, the giant axon became the experimental model of the Cambridge biophysical school thanks to the work of Alan Hodgkin, Andrew Huxley… and Bernhard Katz, all of whom it helped to win the Nobel Prize. As Hodgkin later mused: 'It is arguable that the introduction of the squid giant nerve fiber… did more for axonology than any other single advance in technique during the last 40 years. Indeed a distinguished neurophysiologist remarked recently at a congress dinner (not, I thought, with the utmost tact) "It's the squid they really ought to give the Nobel Prize to."' (Nakajima et al 2018: 2-3; see also Staaf 2017: 4-5)

As we accrue more reasons for why cephalopods merit sustained critical attention in our contemporary media-saturated world, we might nonetheless return to the issue of metaphorics. For, if thought is infinite, then why not think infinitely? That is, if numerous or infinite metaphors enrich our understanding of film and media (meda as insects, media as cetaceans, and so on), then why not add another metaphor (media as cephalopods) in order to draw out, thicken, or to deepen, that understanding as the next step in a probably infinite process of greater comprehension? More than this, though, we might suggest that if any two things can be equated if we try soft enough (media as mud, for example), then this is perhaps because we live in a world in which the divisions and separations that are handed down to us do not really exist. Preexisting language would seem to suggest that cinema is not a cephalopod, since we have different words for these two distinct things (if cinema and cephalopods were the same, then they'd be called the same thing). And yet we can find commonalities,

resonances, relationships and links that upset this separation—just as when it tries hard enough the adolescent mind can find relationships of desire between any two different things. This is not simply a matter of humans and cephalopods enjoying relations of desire—even if, despite the fact that the two species cannot procreate, such perversions do exist (most explicitly in the form of *hentai* involving *shokushu*, as we shall explore in Chapter 5). Rather, the very process of finding commonalities, relationships and links demonstrates both that we live with a processual world defined by change and in which anything might well become anything else over a long enough time scale (at the very least in the sense of the molecules from a mollusk ending up being part of a computer or a human and *vice versa*), and that the barriers, divisions, borders and separations between things are an anthropocentric conceit—albeit one that is perhaps necessary for the lifestyle to which many humans have become accustomed (however long that may last). Even though humans like to split creatures into different phyla and species, the tentacles that we see on the so-called 'tree of life' demonstrate that all phyla and species are in fact linked (for a good example of this, see the visualization of the tree of life on OneZoom, a software/website designed by James Rosindell and Yan Wong, the latter of whom co-authored *The Ancestor's Tale: A Pilgrimage to the Dawn of Life* with Richard Dawkins; see Rosindell and Wong n.d.; Dawkins and Wong 2017). In other words, 'metaphorics,' perhaps especially when soft and loose, are perhaps indicative of our tentacular times—and so tentacles become timely metaphors or conceptual beings through which to think… tentacles!

Without the conceit of humans being separate from rather than connected with other species and the world as a whole, we contend that humans would not be able to live in the way that many of them do (which, broadly speaking, is to live under

capitalism). Perhaps this is made clear by the transition from the anthropocene to the chthulucene, in which capital is demonstrated to be unsustainable. But what presently we wish to suggest is that if humans are interconnected or entangled with the world, then cinema can also be a machine that connects objects, not least through montage, which can be a machine for making otherwise different objects connect, or poetically to rhyme. With its connecting and connected tentacles, and its shape-shifting simulating form, the cephalopod may just be a capital metaphor for cinema, then, as well as for a universe defined not by a Euclidean space split into three dimensions, but a dimensionless and cinematic spacetime in which everywhere and everywhen is connected via wormholes to everywhere and everywhen else, being thus a kind of gigantic megabrain that is weird, soft, loose and other, and where all things do connect (here we might distinguish the cephalopodic brain, from the Greek κεφαλη, meaning 'head,' from the 'head' of capital, from the Latin *caput*, also meaning 'head,' since the cephalon-brain is, as we shall see, entangled, while capital-brain is predicated upon a Cartesian split between mind and body and between human and world). Why not use the connected and connecting cephalopod to sum up media that are connected and connecting within a multiverse that is connected and connecting, and where anything can become sexual/erotic, as connections and desire are made across species and perhaps even across life and death?

To further our case for the relevance of the cephalopod, China Miéville has in a critical essay (as opposed to in a fictional story) acknowledged the 'spread of the tentacle' in specifically contemporary culture; it is 'a limb-type with no Gothic or traditional precedents (in "Western" aesthetics).' This means that the tentacle has literally gone 'from a situation of near total absence in Euro-American teratoculture up to the nineteenth century, to one of being the default monstrous appendage of

today'—something that he sees as signaling an epochal 'shift to a Weird culture' (Miéville 2008: 105). Furthermore, Nakajima and colleagues describe our intensifying fascination with tentacular octopuses and squids as signalling the creatures' ascendance to 'model animals,' and our recognition of them as a valuable 'boundary object/subject' that helps to draw together thinkers and practitioners from various different fields, including ethology, ecology, neuroscience, genomics, material industry, camouflage technologies, soft robotics, art, gastronomy and sub-popular culture (Nakajima et al 2018). Finally, Slavoj Žižek also seems to cash in on this cephalopodic moment when he asserts that the Kraken is 'a perfect image of the global Capital, all-powerful and stupid, cunning and blind, whose tentacles regulate our lives'—even though after introducing this image somewhat glibly at the outset of *Disparities*, he then does not return to it at all over the ensuing 380 pages of fizz and fury, and certainly does not address, as we shall later, how the image of the octopus as a metaphor of globalised capital has been with us for over a century (see Žižek 2016: 3).

It should be emerging, then, that the cephalopod is perhaps the very meta-metaphor that connotes the truth of metaphoricity, not just in the sense that we live by metaphors, but also in the sense that metaphors themselves connote a world of connection and non-differentiation. In its extra-corporeal organicity and in its extra-organic corporeality (being a body without organs and an organ without bodies), we shall see that the cephalopod—as a protean *mètic* mechanism oozing organic metaphoricity—offers up another mode of thought that helps us to comprehend a world without boundaries, even at a time when humans are rushing to build walls, tighten borders, exclude immigrants and refugees and thus to create boundaries. For those prepared to change, we wish to work here towards a collective process of

becoming-animal, or becoming-cephalopod, that is linked to wider changes inculcated by networked software techno-culture, mutations in mediated capitalism more generally, and a developing comprehension of the multiverse and our place with it. If humans are currently rushing to create boundaries, perhaps it is because they are faced with the realization that the world is a world without boundaries, a realization that is strongly linked to the digital techno-culture in which many humans now live. In this sense, the dissolution of boundaries and the subsequent coming into contact with the outside constitutes not just the rise of Cthulhu (a threatening monster who would kill us all), but the arrival of the chthulucene (an opportunity for us not to continue in hatred of the outside, but to make kin with it).

A soft touch

The cephalopod is a mollusk and the mollusk is soft (from the Latin *mollis*, meaning soft). Rather than play hard and fast, then, we here play soft and loose. For, as discussed, the boneless octopus is precisely a creature that has no fixed form and which engages in endless becomings that do indeed challenge the distinction between self and other, mind and body, and terrestrial and cosmic, suggesting that everything is linked and that the octopus exists, in the language of Gilles Deleuze and Félix Guattari, in the realm of the Body without Organs (BwO). In specifically the language of sexual innuendo, Deleuze and Guattari suggest that ‘on it [the BwO] we penetrate and are penetrated; on it we love... The BwO: it is already under way the moment the body has had enough of organs and wants to slough them off, or loses them’ (Deleuze and Guattari 2004: 166). The Body without Organs, or what Serres refers to as the white or incandescent ‘stem body’ (Serres 2018: 63), is the space (and time) of connection, creation, despecialisation and non-differentiation. In some senses, this is

the world of the octopus, the world of cinema/media and, as we shall see, the world of the human—even if to assert as much runs against our common-sense understanding of what it means to be human (i.e. a body separate from the rest of the world, or a world separate from the rest of the cosmos). It is perhaps more accurate, after Žižek, to assert therefore that the cephalopod, cinema/media and humans all are not so much Bodies without Organs as Organs without Bodies, in the sense that the octopus is, for example, all eye, all brain, all skin, all tongue, and all sex organ—which might equally be a fecund way of thinking about cinema, media and the human (see Žižek 2003). Or perhaps, best yet, the octopus, cinema, media and the human are in some senses bodies without organs without bodies (without organs)—or even organs with bodies with organs (with bodies)—an ongoing becoming that takes place in a space of myriad connections and non-indifferentiation (where the distinction between with and without blurs), a realm that can be defined anthropocentrically and positively as weird and of madness. And here, we already appear to be speedily coasting through the twisted Deleuzo-Guattarian undercurrents of delirium and drift that will in time reveal connections with superpositions and weird quantum vibrations.

Our 'soft' form of cephalopodic theory is designed to offset otherwise 'hard' science-based methods and all-too-familiar sclerotic, or ossified, humanist thought systems—the priggish sort that usually promote detached and rationally enlightened or logocentric relationships to the objective world, with their discreet and compartmentalized subjects and objects (and their framing devices *qua* disciplinary lenses). A straw man, perhaps, but one that nonetheless is conceptually contoured as a patriarchal and heterosexual white male, capitalist in fashion, and whose line of sight is standardly Eurocentric in nature (or rather culture). But, even beneath such armoring, we also disband the very frame of an upright (standard) mammalian ape,

who, after being weaned on the breast milk of a nurturing mother, is inclined to perceive the frontiers of his galactic home in a predictably milky way. No—with licks of Friedrich Nietzsche (or having Friedrich Nietzsche licked *à la* Luce Irigaray), we prankishly reject such drawbacks here, in a way commensurate to how, as Miéville puts it, (hard) 'scientism rejects the tentacle' (Miéville 2008: 108). A rejection that remains the case a full decade on from when Miéville inked these comments, as can be recognised by the public rejection by Karin Moelling, a professor at the Max Planck Institute of Molecular Genetics, of a multidisciplinary (and thus impressionistic?) review by 33 interdisciplinary scientists who suggest that the DNA of the contemporary octopus has extraterrestrial roots thanks to the arrival on Earth of life-bearing (or retrovirus-laden) comets hundreds of millions of years ago (see, *inter alia*, Gabbatiss 2018; Steele et al 2018). Moelling's rejection of this weird science goes to show how the buttoned-down Royal Science community still cocks a snook at paradigm-shifting (creative) interdisciplinary thought models (which are essentially the mode of all advancement)—in this case dismissing out of hand the Hoyle-Wickramasinghe (H-W) thesis of Cometary Biology, which posits the existence of an expanded interstellar biosphere teeming with *Cosmic Gene Pools*, which literally impact life on Earth and become entangled with the evolution of terrestrial species.

If the more hardened members of the scientific and academic community openly laugh at such 'crack-pot' stuff, we here—along with the weird butts of their jokes—return their laugher eight-fold in the face of their own rigidity of habit, thought, perception and action. For, *pace* Henri Bergson, we perceive their stiffness and inflexibility to be utterly comedic, and believe that laughter is both the correct punishment and the key to unleashing our own inner elasticity and flexibility (Bergson 2013: 10). With this in mind, we also suck up all anticipated platitudes and

acculturated heckles of our being a ‘soft touch’ or a bit ‘soft in the head’—not least because the soft outlandish invertebrates from which we draw inspiration (mollusks) are without contradiction formidable muscular hunters and sharp thinkers. Ergo (if not to err as we go, as is all too human) we recognize that without vertebra, things cannot stand. And so, for invertebrate thought there can be no understanding. But just because we cannot understand, this does not mean that we cannot know. (For example, no one can understand death, just as no one can stand death, which leaves us jaw-dropped/open-mouthed and horizontal, before breaking our bones and reducing us to mud. But even if we cannot stand/understand death, we will all come to know it.)

As we shall see, it might be easy also to find and/or to pick holes in what follows, because ours is an argument of the hole, in particular of wormholes and cephalo-holes that connect across space and time, and which the human body perhaps becomes after death, when it is holed out by worms. Furthermore, we also have a grip already on the notion that our approach is spineless, nebulous, protean, and unrigorous—the sort of criticism that has been leveled at many thinkers before us, including Aristotle, whose thought-systems his confused contemporaries and posterior critics accused of being too cephalopodic in nature, in that he worked ‘like the cuttlefish who obscures himself in his own ink when he feels himself about to be grasped’ (see Schmitt 1965: 60, quoted in Derby 2014: 2701). So, against hard-scientific and phallic (‘boner’) thought we propose to advance with impressionistic intuition and feeling, using a soft, sticky, billowous and pulpy mode of progressing. One that is perhaps holy.

We shall revert to the figure of the compressed, desiccated and bony man in due course. But presently, dear reader, it is perhaps a good time to consider that we as authors have been compelled to desire a new *mollusca* methodology. That is, we are

ourselves media enrobed in a larger event, and simply excreting or effusing a new form of thinking and moving suitable for adequately diagramming the crepuscular contemporary assemblage of which, no doubt, we are all in some way, shape, or form a part. With these ideas in mind, consider here a line of argument offered by Jakub Zdebik regarding the nature of diagrams and assemblages:

> An assemblage, like archipelagos and spinal columns of quadrupeds and cephalopods, relies on the diagrammatic process of abstraction, here described as folding and unfolding, for the connection, based on function, of heterogeneous parts. Most strikingly, the image of a mammal contorting into the shape of a cephalopod drives the point home. We can imagine the bones cracking, the limbs twisting and the body contracting. The squid is the animal that emblematizes the diagrammatic process. (Zdebik 2012: 176)

In other words, through our encounter with the cephalopod, we hope to achieve a mode of thought that is not ossified and bony, but which instead allows us to think in an invertebrate fashion. It is only in so doing that we can fathom invertebrate media and our invertebrate multiverse.

Vampyroteuthis Infernalis

In seeking further to unfold these compressed ideas, we could do worse than to make as our next port of call *Vampyroteuthis Infernalis: A Treatise, with a Report by the Institut Scientifique de Recherche Paranaturaliste*, the biophilosophical masterwork by Vilém Flusser and Louis Bec. There, Flusser notes how humans must share with the squid an ancient ancestor—since all creatures on the tree of life are not separate

but connected. For Flusser, this ancestor is a sort of worm, the body of which somehow contained within itself—amongst a shimmering potential universe of other virtual and compossible larval body maps—the futural topological arrangements for calcified land-dwelling bipedal mammalian vertebrates like us *and* for gelatinous and boneless cephalopods that inhabit the darkest recesses of the ocean. In spite of this common ancestor, however, squids surface as our (and we as their) 'physiological antipodes' (Flusser and Bec 2012: 39). That is, these uncustomary sea creatures divulge inverse body-brain-milieu configurations to us, which gesture towards valuably divergent modes of being in and with the world.

Peter Godfrey-Smith makes similar claims in *Other Minds: The Octopus and the Evolution of Intelligent Life* (2016), pointing to how most animals' action-guiding bodies generate specific constraints and opportunities (as with humans' arrangement of their thumbs and fingers, say, or their forward-facing eyes, the angle of their knees, elbows, shoulders, and so forth), which in turn impact and instruct their gestalt modes of cognizing/acting. For some readers, this idea may contain distant echoes of Baruch/Benedict de Spinoza's concept of body and mind 'parallelism' (see Spinoza 1996). That is, a non-Cartesian position that refutes a body/mind dualism, and which, with respect to the human species at least, has gained increasing support from ever-new fields of pursuit in the centuries since Spinoza spilt his (cuttlefish) ink.[3] To help illustrate our point, we might gloss/lick George Lakoff and Mark Johnson's *Metaphors We Live By* (2003), to which we alluded earlier and which asks us to prehend how the structures of human language and thought remain deeply grounded in our physical forms, and the manner in which our (acculturated) bodies move, act, become affected and desire. Consider *in this light*, and, if you will, *on the one hand*, notions of *grasping* new concepts, *seeing things from a new perspective*, or simply

advancing through an argument *towards* a conclusion. Or *on the other hand*, of feeling *in over your head, out in the cold, left in the dark*, and feeling completely *disoriented* by a vertiginous whirl of alien concepts. Such workaday English phrases and metaphors each betray their epistemic foundations in an embodied and acculturated mode of living and being with the world.

Comparable ideas abound in work by the neuroscientist Antonio Damasio, who across *Descartes' Error* (1994), *The Feeling of What Happens* (1999), and *Looking for Spinoza* (2004) exposes how human organs and their arrangements profoundly inform and shape 'higher' levels of thought and cognition. Damasio suggests we must accordingly disavow notions of mind and body dualism, or of a homunculus steering the body, and recognize instead that our 'brain's body-furnished, body-minded mind' is the servant of the entire human organism (Damasio 2004: 206). By similar coin, Godfrey-Smith stresses that understanding another animal's action-guided intelligence often presupposes that there *be* a shape to its body in the first place (Godfrey-Smith 2016: 75). But, as is hopefully slowly becoming clear, because cephalopods boast no joints, and various species have no natural angles, nor even fixed distances between what are effectively non-discreet parts, we might begin intuiting that they also come into a soft and malleable ('molleable'?) form of (conceptual?) intelligence (Godfrey-Smith 2016: 75).

In contrasting our diverged phenomenal and ontological experiences, Flusser is moved to observe that whereas we humans are upright and extended, and thus perceive ourselves moving and manipulating objects in an enlightened space, vampire squids by contrast live immersed in a dark watery world, wherein free-floating substances most often stream or tumble into them. He accordingly suggests that where we humans perceive 'problems,' or 'things in our way,' the squid derives

‘impressions’ of its world. That is, the squid’s method of comprehension is ‘impressionistic’ in nature, with its subvenient mode of existence being a ‘critique of impressions’ (Flusser and Bec 2012: 39). Taking stock of such ideas—alongside considerations of their *art* of expelling nebulous ink billows into the brine—Flusser deduces (in the tradition of von Uexküll and in a foreshadowing of Lakoff and Johnson and Damasio) that it is simply ‘unimaginable’ for these amorphous beings to conceive of ‘immutable and eternal’ Platonic (or what we might recast here as Eurocentric) forms, such as triangles or circles (Flusser and Bec 2012: 42). Unquestionably, the outlandish geometry and philosophy of *Vampyroteuthis* will likewise appear quite alien to us, too, and therefore difficult to comprehend. Indeed, cephalopods, the octopus in particular, vaunt such a radically ‘different embodiment’ to most other animals that they fundamentally unground and up-end our most basic understandings of brain-based and body-based knowledge distinctions. Godfrey-Smith again:

> [t]he octopus lives outside both the usual pictures. Its embodiment *prevents* it… The octopus, in a sense, is *disembodied.* That word makes it sound immaterial, which is not, of course, what I have in mind. It has a body, and is a material object. But the body itself is protean, all possibility; it has none of the costs and gains of a constraining and action-guiding body. The octopus lives outside the usual body/brain divide. (Godfrey-Smith 2016: 75-76)

We have already suggested how ‘understanding’ is perhaps too anthropocentric, mammalian or vertebrate a concept—since the cephalopod has no bones and therefore does not stand. Our failure to understand (but our ability to plumb the depths and to

fathom?) shadows (and foreshadows) our impending engagement with H.P. Lovecraft, whose fictional encounters with the outside saw characters come up against the 'hard' limits of thought. But this is where our soft theory perhaps empowers us to grasp as many different aspects of the as-yet unknown and unthought as we can (like the limbs of the cephalopod). In this way, cephalopods need not embody (or, as Lakoff and Johnson would put it, live by) a concept of consciously standing (under, among, or otherwise) in relation to what a human, in their Euclidean-conceptual *umwelt*, might consider an object or 'problem' (see Flusser and Bec 2012: 39). That is, what humans find problematic may not be so for the cephalopod—and *vice versa*. Perhaps, therefore, cephalopodic thought can help us to overcome humanity's problems.[4]

Screwy logic

While Godfrey-Smith is correct to see protean possibility as the octopus' existential default, Flusser is not wrong to note that these animals share a common action-guiding substratum. For, like all cephalopods and coleoid creatures, Flusser's *Vampyroteuthis* (be it squid or octopus or neither or both; see Note 4) possesses a coiled or 'screw-like' form, and thus harbors a vortexual cavity or 'spiral axis' within itself, which allows for a corkscrewing mode of advancing, or retreating (as well as for uncorking its intoxicating wine-ink). This is an idea made vividly apparent by the animated film *Deep,* which shows the giant kraken squid using a twisting-screwing mode of propulsing-advancing—while Hamon and Painlevé's *Love Life of an Octopus* also shows in magisterial and extreme close-up how the infant octopus literally spirals into existence (all set to Pierre Henry's weird electronic score—another early hint of the link between the octopus and the computer).

As Flusser puts it, and as we see in the Hamon/Painlevé film, these animals are inclined to coil, and thus they retain a propensity for 'deflectionary dynamism' (Flusser and Bec 2012: 21). By extension, while the quickest route between two points is imagined to be a straight line for us vertebrates (especially those of the logocentric and teleologically acculturated stripe), for cephalopods it is more precisely where the two ends of a coil or spring come together and meet (something that also has consequences for our thinking of time and temporality, as we shall discover in Chapter 7). Appropriately, Flusser contends that if our species bears a tendency to 'think linearly ("rightly"),' the squid 'thinks circularly ("eccentrically")' (Flusser and Bec 2012: 41-42). He continues:

> our respective worlds reflect the difference between our dialectical thinking. Ours is flat and, for us, bodies are simply bulging surfaces (mountains). It lives in a water container, of which the seabed constitutes only one of the walls. For it, then, two-dimensionality is an abstraction of the three-dimensionality of everything that is objective, everything that it licks with its toothy tongue. When it soars, it does not do so from a surface into space, as we do, but rather it shoots into volume. Its soaring is not a breakthrough from a plane into the third dimension, as ours is. It bores through watery volumes like a screw. (Flusser and Bec 2012: 42)

If cephalopods are fundamentally springs/screws that occasionally explode into straight lines, then in trying to meet them halfway on our unmoored voyage here, we might jettison our (preference for) 'straight' thinking, and instead embrace a decidedly more *screwy* manner of advancing (and which may well involve some

screwing, as per Chapter 5). Or, as David Wills might put it in his study of dorsality, we shall go against vertebrate thought (we shall controvert) and we shall aim instead for something more queer, even if that would be back-breaking (see Wills 2008).

To examine these differences a bit more, we may also note how a cephalopod's bi-directional nervous system, with its 'ladder-like' form, works to connect parts that can be paradoxically understood as self and non-self at the same time. Something that results in these intelligent and curious creatures inhabiting a hybrid situation, wherein although we must say that they are sentient, we cannot say that they experience their world because of a 'higher' (vertically aligned) level of consciousness, as we typically understand it in ourselves. Octopuses do, for example, have a centralized brain, but this is effectively articulated to eight semi-autonomous peripheral neural-net organs, or 'decentralized decision-making areas' that (most often) appear to act and 'think' independently of it (see Nakajima et al 2018). For Flusser, the animal's 'consciousness' is thus best conceived of as operating underneath a primordial tentacular unconsciousness. A form of (sub)conscious autonomous mind, if you will, located within the usual workaday heteronomous unconscious. The former is only occasionally hailed into sovereign pilot mode (when, say, in pain or peril) in order to take control of the partially non-self limbs and organs that otherwise impressionistically feel their way through the currents and crannies of their supersaturated world. To a similar end, Godfrey-Smith believes that the octopus' central intelligence most often experiences 'primordial emotions' such as pain, starvation, or suffocation, which impress themselves with 'an imperious role when present,' in a way that cannot be (sub)consciously ignored (Godfrey-Smith 2016: 98-103). Spiraling back to our model of body-mind parallelism with this sketch in mind,

and seeing that *Vampyroteuthis* is both passive to its world but also at times an active reactor or predator, means that such animals acquire

> ontological categories that differ from our own. Its are those of nocturnal passion, ours of diurnal clarity. Not one of wakeful reason, the vampyroteuthic world is rather one of dreams. In this regard our respective *Daseins* are not radically different. As complex beings with complex brains, we are both partially rational and partially oneiric, and yet these two levels of consciousness are inversely proportioned between us. What to us is wakeful consciousness is, to it, the subconscious, a fact that manifests itself phenomenally in its stance toward life: head down, belly up. Its critique of pure reason is our psychoanalysis. (Flusser and Bec 2012: 41)

And here, in the inverse picture of the human sleeper who awakens from a nightmare into a calm, waking reality, the cephalopod experiences an inverted eruption of its tranquil (sub)conscious into an impassioned, nightmarish real(m).

But what could this have to do with chthulumedia and us? Well, even citizens of the first world—as most readers of this speculative philosophical book are wont to be?—are at least dimly aware of a real *alarming* nightmare impressing upon them today. That is, a cacophony of inconvenient truths and telegraphed eco-catastrophes is beginning imperiously to press in on our collective conscious/conscience. News of ongoing and impending disaster often comes courtesy of our tactile digital screens, which at times also function literally as our waking alarms. And this news affectively/effectively threatens our radically comfortable and somnambulistic torpor, even though those self-same digital screens induce that very torpor, caught as we are

in the screen's basilisk stare, screen-walking (if not sleep-walking) through our urban landscapes, paying no heed to anyone or anything except our screen. Today humanity is living the dream of screen-saturation—until an angry encounter takes place after a blind collision, with any and all contact with the outside of the screen becoming so traumatic that a new cephalopodic discourse must be invented to 'critique its pure reason.'

Today, then, our tentacular devices hold our gaze and increasingly relay fragmentary impressions of real primordial states of pain, starvation, suffocation, desperation and thirst that are most commonly experienced by the not-quite-us, or the less-than-human beings and wretches that are only peripherally articulated to our 'post-human' image-worlds (melting ice caps, burning forests, dying animals of all species and stripes, and subaltern humans—boat people, sweat shop laborers, sex slaves, imprisoned miners, shanghaied pirates, refugees, traffickers and migrants, the global poor). These are nightmarish but realities all the same, and our software-driven tentacular devices might just yet bring first world cultures to grips with its denied but conjoined outside—thereby *raising consciousness* from within our mass waking-dream wherein, as Gilles Deleuze has it, life increasingly appears like a bad movie (Deleuze 2005b: 166).[5]

By such means, *Kinoteuthis Infernalis, or The Squid-Cinema from Hell* at times connects us to aggressive impressing forces that threaten us all with death, but by doing so it perhaps also innervates new forms of (sub)consciousness-raising life (Cthulhu rises). Thus, and with Diogenes still in mind, we hereafter throw up these alien animals to show how recent technology might have brought humanity to new forms of animality—and how humanity might have brought technology to life (or perhaps technology has brought humanity to life). In this way, we dive (non-cynically)

into the withdrawn depths of cephalopods as a means better to fathom our current embrace of transformative digital technologies, which not only seem through their molluskian affects to reconnect twenty-first century human techno-cultures to the dark ethological universes of cephalopods, but which also bring us to the cusp of a new era of being and thinking. On this note, let us revert as promised to the figure of the compressed, desiccated and bony man.

Things to come

Of(f) course, as Spinoza, Bergson and Flusser's precocious and eccentric attempts have already demonstrated, we *must* do essential violence to ourselves and to our cramped or sedimented modes of habitual thinking and acting if we are to be flexible enough to grow, evolve, increase our affections, and perhaps even acquire more adequate ideas (rational or otherwise) about how best to proceed. As indicated, it is for such reasons that *Kinoteuthis Infernalis* channels the body and—as per the title of Sy Montgomery's study—the soul of an octopus (see Montgomery 2015). Consequently, the soft, many-legged experiment that follows constitutes an immersive sucking up of a large volume of our supersaturated media environment, which we cyclonically churn, and occasionally expel in compressed bursts (to squirt-attack, withdraw, or proceed in our screwy manner). From behind our billowing inky screens, our eight decentralized and semi-autonomous tentacles (by which we mean, our eight chapters) report back on their independent and impressionistic tickles and tackles with this and that, from here, there, and everywhere.

After this introductory chapter, we shall in the next venture, as mentioned, into a cephalopodic media archaeology ('Pulp Fiction and the Media Archaeology of Space'), establishing the links between cephalopods and screen media in particular as

a result of their chromatophoric skins, which can function for purposes of display, camouflage and/or for deimatic purposes, before establishing how the cephalopod's tentacular existence suggests something like a synesthetic/cinesthetic existence, which is linked to the perceived interconnectedness of different spaces. Considering Denis Villeneuve's *Maelström* and Sorrentino's *One Man Up*, we shall then explore how the trope of the octopus gets used in those films precisely to demonstrate the cephalo-logic of the contemporary network narrative (or what we shall generalize as 'pulp fiction')—before going on to consider a history/archaeology of other forms of volumetric space, including that of the human body in medical imaging and artistic practice, that of the internet, and that of space in digital cinema. Each of these different types of volumetric space involves an intensified sense of what in some circles might be called immersion, and which we link to the sensual life of the cephalopod.

In the third chapter, 'Encounters with a 4DX Kino-Kraken', we build upon the second chapter's investigation into volumetric space in order look at how the very space of the cinema is itself deployed molecularly to immerse the viewer in a submarine realm during the 4DX experience. After a consideration of William Castle's earlier attempts at multisensory film experiences, especially as they relate to *The Tingler*, we shall look at how contemporary 4DX cinema, which shifts seats around on several axes while simultaneously deploying jets of air and vapor, is indeed a kind of kino-kraken that drags viewers into its realm. However, 4DX cinema is also the 'vaporization' of cinema as the use of perfumes and other techniques asks viewers to smell cinema, which is sprayed on to our faces in a strange expression of cinema-as-capital as viewers collectively experience a sort of weird 'money shot.'

Analyzing the work of Scarlett Johansson, we draw on set theory in Chapter 4, 'Actorly Squid/Sets and Cephalopod Realism', to discuss the distinction/overlap between actors and characters, before then considering how, across a series of roles, ScarJo repeatedly plays technologized, shape-shifting (and thus cephalopodic) aliens who seduce and sucker others, typically men, into their dangerous, liquescent world. In particular we suggest that Johansson's work constitutes an example of squid-like somatechnics, wherein body and brain are not separate, but interconnected and integrated with each other, as well as with other technologies that are on or part of the body.

In Chapter 5, we consider 'The Erotic Ecstasy of Cthulhu', looking at how the cephalopod enjoys a mucosal, slimy and yet sensual life, while also in particular analyzing *Hokusai Manga*, *The Handmaiden*, *Oldboy* and *The Untamed* as examples of a cephalopodic cinema in which the cephalopodic itself (typically the octopus) is related to and redolent of often perverse erotic relationships.

This is followed in Chapter 6, 'Cosmic Light, Cosmic Darkness,' by a consideration of how the cephalopod is often depicted in conjunction with notions of (human) evolution across a range of films including *Spring*, *Evolution* and *Life*. The chapter then takes a more theoretical/biophilosophical bent, considering the porosity of the cell, the body, the planet and perhaps even the multiverse to suggest that life is characterized not by separation, but by admixture, or symbiogenesis. We then suggest that our relationship with technology might also be symbiogenetic, looking at how, in tentacled tech films like *Demonlover* and *Elle*, the sexualized digital tentacles that we see suggest the life of digital technology as a possible symbiont, with digital technology itself being a body for capital. We then discuss light and darkness in

similar fashion, suggesting that darkness is perhaps the stuff of life in a multiverse that typically we consider only in terms of light.

Our discussion of darkness leads directly into Chapter 7, 'The Backwash of Becoming Cthulhu, Or, L∞py, Tentacular Time,' since if light is the measure of speed, then darkness must in some senses elude time. Looking primarily at *Arrival*, this chapter argues that it is a dark contact with tentacled aliens that gives to Louise Banks, the film's main protagonist played by Amy Adams, an ability to see time both forwards and backwards. Synthesizing the temporal philosophies of Gilles Deleuze and J. M. E. McTaggart, we suggest that *Arrival* is an example of '3C' cinema, as in that film the future is remembered as if it were the past, suggesting a different approach to time from that found in anthropocentric cinema that features linear causality. We then consider the connection between comets, terrestrial life and time, suggesting the interconnection between deep, galactic time and our human present.

And then finally, in Chapter 8 we consider how the digital era has involved a shift 'From the Modern Prometheus to the Modern Medusa', in that digital technology constitutes a tentacular Medusa that petrifies us—as we stare only and always at the ubiquitous screens of digital culture, petrified of any contact with the outside (so-called 'real') world. We then relate this to Roko's basilisk, a 'dangerous' thought experiment concerning artificial intelligence, and which not only argues that once you start looking at the singularity you cannot stop, but which also helps to reinforce our suggestion that cinema and its offspring digital media technologies are already expressions of the singularity. That is, cinema is alive—and perhaps has been for much longer than humans, who are a product of media and not, as we typically think, the other way round.

Or at least, the above is a relatively straight version of what is to follow. As the tentacles actually unfurl, you will see that there are in fact various simultaneous and weird things going on in each chapter, drawing you ever-closer to look into the eye and to feel the suckers of the tentacles of the octopus.

Vert-I-Go

Much as the above-described *divertissements* await, though, we presently have more to discuss regarding our book's unusual mode of moving, as well as its ludic aims to subvert or controvert ossified/ossifying systems of thought. Please note, dear reader, that heretofore our purple patches and green (*vert*) lyrical (*verse*) style hopes to divert, perhaps even to pervert, the more sedimented linear habits of vertebrate thinking (by, among other things, undermining preferences for verticalities or hierarchies, while also discharging the stiff spinal columns of academic argumentation). Henceforward we overtly, rather than covertly, aim to (inter)convert you to our soft, sticky, screwy and pulpy modes of moving—hoping that you too might in turn advertise our perverse invertebrate methods (that is, if you like it, you might tell people about what you read here). However, we more seriously hope that the section header and the three sentences inked above help to draw out an old but new, visible but invisible (and otherwise hidden in plain sight) dynamic English verb form that we wish to grant new cephalopodic life and meaning. Namely, to *vert*—a dynamic term we take to connote moving off the straight (and narrow) path, in specific relation to something else.

A quick example, to screw home a point: since octopuses use copper instead of iron to carry oxygen around their body, the blood of octopuses is blue-green (Godfrey-Smith 2017: 74). Green and blue (*vert et bleu*) are also colors that lie at the heart of cinema in the digital age, as increasing numbers of images have at their core

the green/*vert* screen on to which is digitally painted elements of a dataset *mise-en-scène* after the capturing of human subjects and/or carbon objects. Likely a bit too fanciful for some readers, we might nonetheless posit that like the cephalopod, digital cinema also has '*vert*' blood, the greenness of which equally recalls the economic bottom line of much contemporary cinema (the green of dollar bills), while also implicitly giving reference to the green movement, in the sense of would-be ecological rehabilitation—against which the dictates and demands of contemporary neoliberal capital seem at times to stand. A poetic interpretation of the creature's green/*vert* blood may nonetheless allow us later to explore how the cephalopod and cinema may both indeed combine the twin forces of ecological cataclysm and capitalism. In this, we are not far from David Wills' understanding of *versions*, in that like Wills we shall also use verting, or twisting and turning (from the ProtoIndoEuropean root *wer*-, meaning to turn or to bend), in order to show how the universe might not be quite as we typically think it (see Wills 2008: 19). Indeed, we shall even show that the universe is a false concept, or at the very least a misnomer, since the verse is multiple and verily we live in a (poetic) multiverse, which has no single version, but only multiple, infinite versions as it twists and bends (the multiverse as bender, with its principal filmmaker being the screwy David Abelevich Kaufman, most commonly known as Dziga Vertov, and whose *Chelovek s kino-apparatom/Man with a Movie Camera* Lev Manovich fittingly considers to be a digital database film *avant la lettre*; see Manovich 2001: xiv-xxxvi).

As Charles Baudelaire demonstrated in 'Le Soleil,' a poem from his celebrated 1857 collection, *Les Fleurs du Mal*, the *ver*, or worm, is also akin to the *vers*, or line of poetry (see Baudelaire 2018), in that both are, like the octopus' tentacles, 'long thin thing[s] possessing a kind of life' (McGrath and Comenetz 2011: 144). In this way, to

vert is to go into wormholes and to spiral into vertigo, but also to be poetic, to find the poetry that spins throughout our multiverse of ongoing becoming/creation/*poiesis*, even if poetry must involve becoming worm-fodder and death. As we understand it, then, *Kinoteuthis Infernalis* vers, verses and verts. Or, in its weird and twisted manner it advances in an invertebrate way. It is vertiginous, but ne-ver-theless purposely patterned to invert and willfully pervert our hard-wired embodied preferences for vertebrate thinking. In this way, we have written a book that is not very anything, but which is just *very*, and which thus leads us towards veracity, or truth. But this is not a single or singular truth. It is multiple, tentacular and weird. Indeed, we aver that we have an aversion for any single truth, for there can never be simply a version (singular), but only aversion, or many versions.[6]

Twisting tentacle book

It should by now be clear that *Kinoteuthis Infernalis* is a neomaterialist study of (bio)media. It situates itself in a tradition inspired by Deleuze and Guattari, who approach media as a realm of potentials, affects and energies, which materially interconnect human and non-human bodies (and brains)—while also allowing intensive and transformative flows to pass between them. Such approaches also inform and inspire an *informe* body of more recent titles such as Rosi Braidotti's *Metamorphoses: Towards a Materialist Theory of Becoming* (2002), Siegfried Zielinski's *Deep Time of the Media: Toward an Archaeology of Seeing and Hearing by Technical Means* (2006), Patricia MacCormack's *Cinesexuality* (2008), Jussi Parikka's *Insect Media* (2010), Patricia Pisters' *The Neuro-Image: A Deleuzian Film-Philosophy of Digital Screen Culture* (2012), William Brown's *Supercinema: Film-Philosophy for the Digital Age* (2013), Sean Cubitt's *The Practice of Light: A*

Genealogy of Visual Technologies from Prints to Pixels (2014), and Steven Shaviro's *The Universe of Things: On Speculative Realism* (2014). Like these eight tentacles of thought, we are here primarily concerned with our, and the media's, becoming different/different becomings, and the new possibilities opened up for thought and action through these. Of particular pedagogical interest to us here are Zielinski, Parikka and Cubitt's media archaeologies. For, by taking ancient coleoid animals as our object of study, *Kinoteuthis Infernalis* respects and honors Zielinski's plea 'to keep the concept of media as wide open as possible' (Zielinski 2006: 33), and his elliptical call to discover the new in the old (as opposed to the more common scholarly drive of today to catalogue the return of the old in the new). This was certainly a prominent theme in our earlier archaeological outing exploring the notion of the 'skeuomorph' to help us understand digital cinema (Fleming and Brown 2015a). However, in ways already outlined above, *Kinoteuthis Infernalis* also draws inspiration from Parikka's cry to undertake a 'twisted media archaeology,' while practicing a bolder 'media theory of a nonhuman kind' (Parikka 2010: xxv). In such manner, we treat real octopods (octopuses and deep sea vampyromorpha) and decapods (squid and cuttlefish) not merely as representational metaphors or 'icky animals, but as carriers of intensities (potentials) and modes of aesthetic, political, economic, and technological thought' (Parikka 2010: xiii).

In addition to being a neomaterialist study of (bio)media, *Kinoteuthis Infernalis* also surfaces as a work of political 'biophilosophy.' This being a broad and far-reaching label that hauls together the bodies of otherwise unrelated philosophers and thinkers including Flusser, Godfrey-Smith and Eugene Thacker, to name but three beating hearts whose work courses through this book's ink (when in print) and plasma (when on screen). By way of introduction, we might here embrace Thacker, who

argues that biophilosophers of all stripes understand life in terms of multiplicity, and therefore are driven to pose ontological, as opposed to epistemological, questions. As he has it, if the philosophy of biology asks 'what is Life?,' then biophilosophers more often than not also investigate 'what is not-life?' (Thacker 2005). Along such spiralling lines the biophilosophy of *Kinoteuthis Infernalis* verts into considerations of the non-organic life of film, via what has variously been called object-oriented ontology (OOO), or strange forms of speculative realism (on which, more shortly). Thacker appropriately concedes that the weird (political) ontologies that these undertakings ceaselessly spin out—with regard to the ever-changing nature of the real—mean that (like the shapes and forms of the protean octopus, we might add) none of them are final, 'none of them lasting' (Thacker 2005). But this does not mean that they are worthless. For, as Thacker elaborates,

> [b]iophilosophy implies a critique of the dialectics of 'life itself.' It abandons the concept of 'life itself' that is forever caught between the poles of nature and culture, biology and technology, human and machine. Instead it develops concepts that always cut across and that form networks: the molecular, multiplicity, becoming-animal, life-resistance… But the point is not to simply repeat Deleuzianisms, but rather to invent or diverge: the autonomy of affect, germinal life, wetwares, previtial transductions, organismic soft control, abstract sex, molecular invasions, geophilosophy, and what Deleuze calls 'the mathematico-biological systems of differenc/tiation.' (Thacker 2005)

In the spirit of Thacker, then, *Kinoteuthis Infernalis* takes from Deleuze (and Guattari) without repeating him (or them), not least because Flusser's influence renders it a

biophilosophical quest in the cryptozoology film-philosophy vein (cryptids being unknown, hidden, or fabled animals). Indeed, *Kinoteuthis Infernalis* is perhaps a virtual beast, rather than an actual one, believed by some to be hiding from mankind in the manner of Nessie or Big Foot (the definition of cryptozoology is '[t]he search for and study of animals whose existence or survival is disputed or unsubstantiated, such as the Loch Ness monster or yeti'; see English Oxford Living Dictionaries n.d.). From the other direction, however, *Kinoteuthis Infernalis* also emerges as an exercise in modern film-philosophy, in the respect that while biophilosophers are driven to ask 'what is not-life?,' modern film scholars and film-philosophers have increasingly been prompted to ask 'what is not cinema?' (Beller 2006; Fan 2015: 222; Brown 2016 and 2018; Nagib 2016; Fleming 2017: 6 and 2018). In this vein, we frame squids, octopuses and cuttlefish as organic forms of 'non-cinema,' recognizing them as vital and extroverted pop-up brain-screens that index the alien biological processes of becoming-cinema. At the same time, we also form links to digital media and digital culture's own apparent processes of becoming-cephalopod, in its own re-innervated intensive block of becoming-animal.

As if in response to such innervations between the virtual and the actual, there has been a liberal surge in academic and popular literature upon cephalopods of late, as was surveyed in Nakajima et al's 2018 article mentioned above. With regard to octopuses, we might also enumerate recent monographs on the creatures by Katherine Harmon Courage (2013), Richard Schweid (2014) and Sy Montgomery (2015), as well as Godfrey-Smith (2016), and each of which offers an insightful analysis of the lives and in particular the *intelligence* of octopuses (and perhaps cephalopods more generally, although the shell-bearing nautilus is not typically considered to be as smart as the octopus, the cuttlefish or the squid). What is more, the squid forms the

focus of Flusser and Bec's afore-mentioned *Vampyroteuthis Infernalis*, from which we take our title with a large doff of the cap. To Miéville's ongoing fascination for cephalopods (2008, 2010) we might also add the weird speculations of Dan Mellamphy and Nandita Biswas Mellamphy (Mellamphy and Biswas Mellamphy 2015; Mellamphy forthcoming), which will also twist their tentacular way into what follows. Jane Gilgun's self-published ebook, *The Tentacles of Shame: How Shame Works* (2015), equally conjures cephalopods into the self-help 'sheeple' (sheep-people) psychology genre, while Maryanne Wolf's *Proust and the Squid: The Story of Science and the Reading Brain* (2007) harnesses neuroscientific research into the biology of the human brain to reveal how modern interactive computing technologies actively modify and restructure the 'open' or 'hyperplastic' architecture of the human brain/mind.

More pressingly, however, we should also highlight how squids, suckers and tentacles form a core component of Thacker's 'Horror of Philosophy' series, including *In the Dust of this Planet* (2011), *Starry Speculative Corpse* (2015a) and *Tentacles Longer than Night* (2015b). In particular, the latter argues not for a philosophy of horror, but that horror *is* philosophy. Linking his work to Flusser's, Thacker argues that the way in which horror can offer 'the sudden realization of a stark, "tentacular" alienation from the world in which one is enmeshed' is fundamentally a philosophical experience (Thacker 2015b: 153). John Ó Maoilearca picks up on a similar thread when he argues for a 'nonhuman philosophy' in his treatment of 'non-philosopher' François Laruelle. Without explaining in full Laruelle's ideas, we wish to acknowledge how Ó Maoilearca ends his book by explaining finally the jellyfish that adorns its cover. 'The brightest thing in the world,' he writes, 'is a jellyfish, a *méduse*, a mutating animal (rather than a "single arbitrary

form" – or [Immanuel] Kant's unchanging animal shape)… it is a deep-sea creature that invents its own light within the darkest place in the world' (Ó Maoilearca 2015: 292). Living in a 'black universe,' the jellyfish/ctenophore is, like the cephalopod, a Medusa-like alien monster, tentacular, shape-shifting/formless and entirely other. In thinking through and perhaps even with the jellyfish, we likewise enter into a philosophical realm of nonhuman thought, where the human is simply one amongst many, perhaps even an infinity of, weird versions of thinking—with the human as a result losing its privileged position in the universe as it realizes that it is with a multiverse, and no longer understanding itself as separate from the world, but instead knowing that it is simultaneously alienated from and, in Thacker's terms, 'enmeshed' with it.

Cthulhu and the chthulucene

If such thinking sounds weird, then we draw now upon the work of Thacker, Graham Harman and H.P. Lovecraft in order to demonstrate how it is deliberately and positively so. In his tentacular horror-philosophy, for instance, Thacker perhaps inevitably has recourse to the work of Lovecraft (for example, Thacker 2011: 74-80; 2015b: 110-168), the creator of Cthulhu, a creature from a time before humans and who is described as something like 'an octopus, a dragon, and a human caricature' (Lovecraft 2002: 141)—but not so much a combination of these things as somehow all of them at once (see Harman 2012: 57-59). Elsewhere, Cthulhu is '[a] monster of vaguely anthropoid outline, but with an octopus-like head whose face was a mass of feelers, a scaly, rubbery-looking body, prodigious claws on hind and fore feet, and long, narrow wings behind' (Lovecraft 2002: 148). Lovecraft also becomes the focus of Harman's *Weird Realism: Lovecraft and Philosophy*, in which the philosopher

argues that the American horror writer is also a philosopher of otherness, who suggests weird realities that lie beyond the realm of human perception. In Lovecraft's own words, which also serve as a frontispiece above: '[t]he most merciful thing in the world, I think, is the inability of the human mind to correlate all its contents. We live on a placid island of ignorance in the midst of black seas of infinity, and it was not meant that we should voyage far' (Lovecraft 2002: 139; also quoted in Harman 2012: 169). Humans cannot understand the immensity of the universe—and yet Lovecraft points to it, notably using an octopus-like creature that one day will rise and bring destruction to the human race. The weird, then, is our working method, and the spreading, speculative tentacles of the weird are part of the rise of Cthulhu, or the end of human times.

While she disavows any connection to Lovecraft, Donna J. Haraway nonetheless evokes Cthulhu when she refers to the current era of existence as the 'chthulucene'—a period that is supposed to have replaced the anthropocene and in which the human race will diminish in importance, while at the same time learning some humility towards the planet (Haraway 2016: 174). What is more, in *Donna Haraway: Story Telling for Earthly Survival* (Fabrizio Terranova, Belgium/France/Spain, 2016), the American thinker is clearly and repeatedly associated with invertebrates as a soft octopus—a molly mollusk!—sits atop a photo on her desk of a human figure that has lost its legs (and which thus cannot stand in the traditional sense), and as a jellyfish occasionally is seen pulsing past Haraway thanks to the use of green screen imaging. Haraway deliberately spells her version of Cthulhu differently to Lovecraft, placing an h after the opening c and removing the h after the l in order more concretely to demonstrate that her chthulucene involves a return/reversion of the chthonic—albeit that Lovecraft's orthography also seems to

recall this term for the subterranean, the earthly, or that which pertains to the underworld. Haraway's chthulucene will be important for the weird arguments that are to follow. Indeed, we doff our cap to her as to Flusser in subtitling our book *Chthulumedia Emerge*. But in refusing her link with Lovecraft, whose Cthulhu she considers to be a 'misogynist racial-nightmare monster' (Haraway 2016: 101; see also Houellebecq 2005: 105-109), a problem with Lovecraft to which we shall return, Haraway overlooks the way in which the tentacular, cephalopod qualities of the creature can perhaps help us to think about the chthulucene more clearly, and how the hieroglyphs presented to us in the tentacular 'cthulhumedia' outlined and analyzed below deliver to us a vision of a radically other, nonhuman universe—even if human figures (whether racist and misogynist or not) remain central to these movies and media.[7]

For, the chthulumedia that we wish to present here, or which after Flusser we also refer to as a *Kinoteuthis Infernalis*, or a 'squid-cinema from hell,' is (collectively if not individually) a horrifically philosophical cinema of tentacles that touches us, and which pulls thought into dark, nonhuman realms, where many of the traditional boundaries, borders and divisions no longer pertain. It is a weird world of connectivity, and which has strong links to the digital era in which we are living—while also pointing towards a posthuman era of a planet perhaps devoid of humans. It is a world of totally different temporalities to those of the anthropocene, a world of modular ecstasy and yet also a world of death, a desert world in which the oceans rise up to drown us as the sun desiccates the land and renders it barren, and where meteors rain down life and death in equal part. It is a world of immanent darkness, but also a world of immanent light, a world in which we may realize that we have never been

human, but at the same time are free to desire all manner of unlawful and public becomings.

The anthropocene is the era in which humanity has not so much lived in 'equilibrium' with the planet, but intensified the ways in which it actively changes and shapes the planet—in a fashion that increasingly today is considered to be for the worse as we face global warming, mass extinctions and ecological cataclysm. Perhaps it is ironic, maybe even fitting, that humans are only able to identify the anthropocene at the moment when it is coming to an end, as films like *Trolljegerene/Trollhunter* (André Øvredal, Norway, 2010), *The Hunter* (Daniel Nettheim, Australia, 2011) and *Beasts of the Southern Wild* (Benh Zeitlin, USA, 2012) all suggest—according to David Martin-Jones (2016) and Selmin Kara (2016) respectively (see also Koutsourakis 2017). As Roy Scranton (2015) would posit, it is important that collectively as humans we learn to die in the anthropocene (or perhaps just accept the tossing of the cosmic die in the Nietzschean sense). It may be by embracing the call of Cthulhu, and by thinking tentacularly and/or like a cephalopod (by realizing that we may already be cephalopods), that we can achieve this. Chthulumedia, to which we shall turn shortly, are not just a matter of life and death, then, but perhaps also the very matter of both life and death. Such ideas are most evidently witnessed in the 'panspermia'-themed cthulhucinema narratives of *The Untamed* and *Annihilation* (Alex Garland, UK/USA, 2018), wherein vital interstellar comets deliver world-changing life forms/forces to Earth.

The former we shall look at in Chapter 5, but with regard to the latter film, the comet tellingly crashes through a phallic lighthouse, and thereafter emits a shimmering and spectrumizing energy-field from its womb-like cavern beneath the earth, and which serves to mash-up and to remix the various organic and non-organic

forms (DNA and crystalline structures) around the impact zone. As the film's title suggests, this ever-expanding shimmering zone at once annihilates life as we know it, while also giving rise to new alien forms and weird interkingdom admixtures: alligators with shark's teeth, bears that are also sort of human, humans that have snake-like guts, and hybrid plants that roughly inhabit a general kind of human form. Interspecies becomings that find comparable forms of expression in other chthulumedia narratives including *Life*, *Prometheus*, and the *Sharktopus* series.

Killing thee softly

Before proceeding to identify what Haraway might call the kinship between the cephalopod and cinema/media, a cephalo-kino (head-cinema?) that is all cine-brain/kin(o)brain, we would like to outline another of our key modes of proceeding. For, to suggest that cthulhumedia are the matter of life and death is paradoxical, in that we typically think of life and death to be separate or compartmentalized states. And yet, perhaps all matter is both life and death at once, with chthulumedia (which may in the fullness of time be understood as all of media) being able verily to show us this, and to make us think and feel as much, too. To create a paradox, or even a plain contradiction in terms (death and life at the same time), runs the risk of being at least weird, and at worst alienating and nonsensical, perhaps even controversial. However, the alienation and the nonsense are partially deliberate and also necessary if we are to grasp the weird world that chthulumedia bring to us. And so, in order to demonstrate the legitimacy of paradox, we turn our attention to Harman's consideration of Lovecraft, since the former analyzes quite clearly how the latter's style depends upon consistent, contradictory-seeming ambiguity.

Harman identifies how Lovecraft 'invests a great deal of energy in undercutting his own statements. In this way, Lovecraft's prose generates a gap between reality and its accessibility to us' (Harman 2012: 28). The afore-mentioned description of Cthulhu can function as a decent example of this. In full, Lovecraft writes the following:

> It seemed to be a sort of monster, or symbol representing a monster, of a form which only a diseased fancy could conceive. If I say that my somewhat extravagant imagination yielded simultaneous pictures of an octopus, a dragon, and a human caricature, I shall not be unfaithful to the spirit of the thing. A pulpy, tentacled head surmounted a grotesque and scaly body with rudimentary wings; but it was the *general outline* of the whole which made it most shockingly frightful. (Lovecraft 2002: 141)

Note how Lovecraft's screwy language is rife with ambiguity: it *seemed to be* a *sort of* monster, perhaps even only a symbol. Only a diseased mind could come up with this—and being the product of a diseased mind, the beast may therefore not be real at all! But while the narrator of Lovecraft's story mentions three species of animal (octopus, dragon, human—notably a mix of the real and the fantastical—with the octopus itself perhaps being a combination of the two), this only gives us *the spirit* of the thing.[8] Finally, it is only its *general outline* (the italics here are Lovecraft's) that is frightful. As Harman explains, the horror comes through the ambiguity of the description, as opposed to its details (see again Harman 2012: 57-59). And we should like to add that it is the contradictory nature of the description that exemplifies the method of superposition (or multiple versions) that we shall be using in our discussion

of chthulumedia and the *Kinoteuthis Infernalis*. Something that again might resonate with the unconscious impressionistic mode of dream-life that the cephalopod experiences before its nightmarish (sub)conscious awakening.

Ruminate: Lovecraft does not specify that Cthulhu is octopus here and dragon there—even if the beast has a tentacled head and wings. Rather, octopus, dragon and human seem all to be superposed, or composited (to use the language of digital imaging culture), one atop the other, Cthulhu thus emerging as all of them at once, as opposed to this bit dragon, and that bit human. It may be a monster, it may be a symbol; or perhaps more accurately, Cthulhu is both of these things at once. Of course, we cannot say better even than *perhaps*; but even with this word, we get a sense of chaos, since perhaps derives from the Middle English word *per* or *par* meaning 'by' or 'through,' and the plural of *hap*, meaning 'chance.' That is, *perhaps* means 'by chance'—not only in the sense of a cosmic coincidence ('by chance I happened to be walking through Providence, Rhode Island, at the same time as Cthulhu appeared there'), but also in the sense of evoking a random, chaotic universe in which events do not take place by divine decree, but precisely according to chance. Where in the past we have had many peer reviewers telling us to remove ambiguity from our language as we write academic essays that are supposed to be infused with objectivity and thus with certainty, here we willfully adopt the language of ambiguity and chaos, for this form seems better to suit our subject matter. *Perhaps, perhaps, perhaps…* we move from hard theory to soft mutiny. Killing thee softly is par for our (off-)course.

Superposition

Superposition—whereby a phenomenon can be in two different, supposedly contradictory states at once—is by now a widely understood notion that we can

borrow from physics to illustrate our style. For, much as a photon can be both a wave and a particle, so might Cthulhu be both an octopus and a human. Of course, as per(haps?) the famous 'uncertainty principle' of Werner Heisenberg, the observer helps to determine whether the photon be wave or particle, thereby in some senses eliminating that ambiguity (it may have been a wave and a particle, but now that we have had a look and affected it, we can say that the photon is now a particle; see Heisenberg 2000). However, given that the observer determines the result of the experiment, and that the knowledge of the photon's status as a particle is dependent on the experiment and the experimenter themselves, our uncertainty is a more accurate description than the ensuing seeming-certainty, since the latter is temporary at best, and illusory at worst. Reality in the 'objective' sense is thus perhaps reductive, and certainly impoverished, a version of the truth, but in denial of the very versions of truth. In the footsteps of Niels Bohr, it is not, thus, that there exists some realm of reality in which the photon finally does exist as either a wave or as a particle; on the contrary, we and it exist in the same realm, a realm determined by change as we affect photons and as photons affect us—a realm defined by both complementarity and entanglement (see Bohr 1937; Barad 2007). This is a realm in which a cat can famously be both dead and alive at the same time (see Trimmer 1980)—even if such a smudged 'state' boggles conventional logic.

One of the debates surrounding Erwin Schrödinger's cat is that its being simultaneously alive and dead is a metaphor. For Schrödinger, the cat was actually one of dead or alive—it's just that the person conducting the experiment would not be able to tell until opening the box in which the cat had been placed. However, feminist physicist Karen Barad suggests that the experiment is not just a question of epistemology (we cannot know whether the cat is dead or alive) but that it is also a

question of ontology (the cat actually *is* both dead and alive; see Barad 2007: 275-284). Famously, for Schrödinger, the cat's death or life is determined by whether an atom of a radioactive substance decays over the course of an hour; if it decays, a charge is released that causes a hammer to fall on a flask of cyanide; as the hammer smashes the flask, so does the released cyanide kill the cat. As Heisenberg appeals to a reality of which we cannot be certain, so, too, does Schrödinger imagine that there is a realm of truth—the cat is one of dead or alive—but that we cannot access it. However, as Heisenberg is incorrect to suppose that there is an objective world somewhere beyond our reach, so, too, is Schrödinger incorrect to imagine that the cat is only metaphorically both dead and alive. In a universe of quantum entanglement, the cat is both dead and alive as the photon is both particle and wave—and while this superposition of states (dead and alive as opposed to dead or alive) runs against common sense logic, perhaps it is a more accurate interpretation of our universe, since our entanglement with the radioactive atom and with the cat, as per our entanglement with the photon, would suggest that where the cat begins and ends is not clear, and that we are better off comprehending our universe as one not made up of boundaries between separate entities and/or states (dead or alive, duck or rabbit), but as a multiverse of interconnected and inseparable phenomena (dead and alive, duck and rabbit, octopus and dragon and human).[9]

If we were momentarily to err on the side of a technological determinist—such as Friedrich Kittler, say, who convincingly argues that our 'media determine our situation' (Kittler 1999: xxxix), or even Zielinski, who harbors an interest in 'imaginary media' more generally (Zielinski 2006)—we might sense that, in taking stock of today's cultural assemblages (including science fictional imaginings of fantasy technologies), the above ideas unconceal their own 'real-world' technological

models and modi operandi. For, if the computers that defined the socio-cultural assemblages at the end of the twentieth century (at the end of the anthropocene) operated upon binary systems composed of ones and zeroes (openings and closings, ons and offs), today's cutting-edge quantum computers now push us into the substratal realms of quantum probabilities and operational superpositions. In actual fact, if rendered crudely, today's (chthulucene) quantum computing exploits 'weird' or 'quantum' vibrations to analyze and read what are called 'quibits' (quantum-bits), 'that can be set to zero, one, or, bizarrely zero and one at the same time' (Cho 2018). And this fact virtually ensures that there are consequences for more than simply the programmers of super-expensive Hadron colliders and Wall Street algorithms.

Indeed, as has already been well illustrated by Lewis Mumford in *Technics and Civilization* (2010 [1934]) and in both volumes of *The Myth of the Machine*, namely *Technics and Human Development* (1967) and *The Pentagon of Power* (1970), the addition of new technologies, modes, machines and practices into a dynamic cultural assemblage necessarily leads to the emergence and crystallization of new and different patterns of collective organization, action, axiomatics, metaphor and conceptualizing (or, ways of living, speaking/enunciating, and thinking)—which in turn modify what it means to be 'human' at any given time. Eurocentric studies surrounding the emergence and embrace of the Greek alphabet, or later the printing presses under evolving systems of European capitalism (and its subsidiary technologies)—as per work by Marshall McLuhan (1962), Benedict Anderson (1983), Flusser (2011 [1987]), and Serres (2018)—make such ideas all too clear. Taking heed of such thoughts, our ecological and impressionistic argument would do well to acknowledge that today's quantum computers and networked technologies demand ever-new practical skills (*technē*) and knowledge (*epistēmē*) to build, program and

operate them. And that this, too, will entail their own manifold knock-on butterfly affects/effects (and forms of cross-pollination and innervating encounters) in-between the always already overlapping and interconnected domains of economics, war, medicine, organizational development, environmental engineering, the arts and gaming.

In the above messy and fractalized pictures there is no satisfactory distinction or hierarchy between different 'levels' of the theoretical and technical, between *epistēmē* and *technē,* and between the metaphorical and the ontological. As mentioned in reference to Lakoff and Johnson, we 'live by' metaphors (while metaphors live by us). Of course, recognition of these determinable horizons has in the past accounted for 'heroic' efforts to break out of the all-too-human (magic) circle. From Zhuannzhi's unshackled dreams of being a butterfly to Spinoza's crystalline geometric method of philosophy, right through to the speculative currents of today—which provoke us to consider what it might be like to be a bat (Nagel 1974), a wolf (Deleuze and Guattari 2004), a squid (Flusser and Bec 2012), an inanimate thing (Bogost 2012), an electrical grid (Bennett 2010), global warming (Morton 2013) or a computer, an alien, slime mold and a human being (Shaviro 2016)—countless other ways of experiencing the world are entering into circulation. What does an electron think? Individually and collectively, or in superposition, these other *umwelten* attempt to get us to think differently and to realize that our embodied perspective on the universe is an affordance of our physical existence with it, and the things in it, and not because of some objective insight into it made from a separate and disconnected standpoint. In this way, perhaps the boundaries between the metaphoric and the literal and between the epistemological and the ontological also begin to break down—and fictions as per(haps) Flusser and Bec's can tell us as much about reality as 'hard

scientific' and 'documentary evidence' can. As per the title of the collected works of Jean Painlevé, himself a noted student of the octopus, science is fiction (and *vice versa*).

Perhaps, then, perverse or perverted philosophical science fiction is just our schtick. If so, we're in good company. Flusser himself writes of *Vampyroteuthis Infernalis* that 'a "philosophy of fantasy"… might become a discipline "as rigorous as phenomenology"' (quoted in Jue 2014: 94). In some senses, then, our consideration of chthulumedia and the *Kinoteuthis Infernalis* might equally offer a film-philosophical-fantastical-phenomenological account of contemporary and other cinema(s) and media, putting into practice the superpositional and superpositive style (yes!) that is found in Lovecraft, who like Flusser creates a philosophy of cephalopods and by extension of the chthulucene—which is itself a period to be understood via superposition, paradox and seeming contradiction. As Haraway blends fiction and theory in *Staying with the Trouble* (a trope also pursued by Serres; see Serres 1995), so, too, might we invert fiction and philosophy/theory—not by interpolating specifically and deliberately fictional elements into this work (not least because the creative work of most theorists who dabble in fiction, poetry and/or filmmaking—including perhaps the authors of this book—is perhaps perceived not to be as 'good' as their 'purely' theoretical work), but by demonstrating that the ill-defined 'borders' between theory and fiction—and between fiction and truth—are highly porous, impressionistic, and molleable/malleable.

So… having set the scene, let us advance with our weird speculations and investigate the ways in which we might grasp the contemporary media scene as a *Kinoteuthis Infernalis*, rising like Cthulhu from the deep in order to raise our cephalopodic consciousness, and weirdly to signal the arrival of the chthulucene.

Notes

1. As we shall discuss in Chapter 5, Katsushika Hokusai is a key artist to have explored the octopus in his work, which strongly influenced the likes of Félicien Rops, Pablo Picasso and Gustav Klimt. Cephalopods also have a clear presence in today's art world, featuring in the work of Miquel Barceló and Zak Smith (see Schweid 2014: 143-144), as well as in the work of Yutaka Mukoyama, who produces 'incredibly detailed photorealistic oil paintings of squids,' which Ryuat Nakajima and colleagues describe as 'stunning and mesmerizing' (Nakajima et al 2018: 9). Among various other exhibitions and installations, cephalopods recently surfaced as a popular motif in the *What About the Art?* exhibition curated by Chinese artist Cai Guo-Qiang at the Qatar Museum in 2016, and which featured a giant sea monster created by Huang Yong Ping, while Takashi Murakami's *The Octopus Eats Its Own Leg* exhibition enjoyed record-breaking audiences at Chicago's Museum of Contemporary Art in 2017. Finally, we might also mention the chromatophore-inspired installations/simulations of Todd Anderson (for more on these exhibitions, see Nakajima et al 2018: 9).

In the world of graphic novels and manga, meanwhile, the recent *The Fall of Cthulhu: Godwar* (Michael Alan Nelson et al, 2008-), *Fatale* (Ed Brubaker et al, 2012), *Neonomicon* (Jacen Burrows and Alan Moore, 2013-), *The Squidder* (Ben Templesmith, 2014), *The Wake* (Scott Snyder and Sean Murphy, 2014), *Monstress* (Marjorie Liu and Sana Takeda, 2016-), *L'appel de Cthulhu* (François Baranger, 2017-), and *Providence* (Jacen Burrows and Alan Moore, 2017) stand out as eight

further examples of erotic and/or eradicating interdimensional tentacle beings. Why eight? As David Foster Wallace puts it in his short story, 'Octet,' 'best of British luck explaining to anyone why' (Foster Wallace 2001: 124).

Finally, to give but one example from the realm of virtual reality (VR), we note that the Eurostar between London and various cities in France and Belgium has since 2017 offered an in-train VR experience called *Eurostar Odyssey*, which involves looking at (digitally-rendered) aquatic life, including octopuses, while travelling under the English Channel. Designed with digital agency AKQA, the entire experience involves putting one's smartphone inside a set of special glasses that one can buy from vending machines at the various Eurostar terminals, and which also prominently feature models of octopuses (see Tan 2017).

2. Further audiovisual media products that feature cephalopods, cephalopod-like creatures, and/or prominent tentacles—but which we do not have space to consider more fully—include: *The Navigator* (Donald Crisp and Buster Keaton, USA, 1924), *Mare Nostrum* (Rex Ingram, USA, 1926), *20,000 Leagues Under the Sea* (Richard Fleisher, USA, 1954), *Bride of the Monster* (Edward D. Wood Jr, USA, 1955), *Tentacoli/Tentacles* (Oliver Hellman, Italy/USA, 1977), *Deep Rising* (Stephen Sommers, USA/Canada, 1998), *Octopus* (John Eyres, USA, 2000), *Octopus 2: River of Fear* (Yossi Wein, USA, 2001), *Hellboy* (Guillermo del Toro, USA, 2004), *Kraken: Tentacles of the Deep* (Tibor Takacs, USA/Canada, 2006), *Pirates of the Caribbean: Dead Man's Chest* (Gore Verbinski, USA, 2006), *Slither* (James Gunn, Canada/USA, 2006), *The Mist* (Frank Darabont, USA, 2007), *Pirates of the Caribbean: At World's End* (Gore Verbinski, USA, 2007), *ReGOREgitated Sacrifice* (Lucifer Valentine, Canada, 2008), *Sharktopus* (Declan O'Brien, USA, 2010), *Grabbers* (Jon Wright, Ireland/UK, 2012), *Prometheus* (Ridley Scott, USA/UK,

2012), *Pacific Rim* (Guillermo del Toro, USA, 2013), *Kiseijuu/Parasyte* (Takashi Yamazaki, Japan, 2014), *Monsters: Dark Continent* (Tom Green, UK, 2014), *Bermuda Tentacles* (Nick Lyon, USA, 2014), *Sharktopus vs. Pteracuda* (Kevin O'Neill, USA, 2014), *Transcendence* (Wally Pfister, UK/China/USA, 2014), *Sharktopus vs. Whalewolf* (Kevin O'Neill, USA, 2015), *The Void* (Jeremy Gillespie and Steven Kostanski, USA/UK/Canada, 2016), *Guardians of the Galaxy Vol. 2* (James Gunn, USA/New Zealand/Canada, 2017), *Hagane no renkinjutsushi*/*Fullmetal Alchemist* (Fumihiko Sori, Japan, 2017), *Pirates of the Caribbean: Dead Men Tell No Tales* (Joachim Rønning and Espen Sandberg, USA, 2017), *The Cloverfield Paradox* (Julius Onah, USA, 2018), *Pacific Rim: Uprising* (Steven S. DeKnight, USA/China/UK/Japan, 2018), *A Wrinkle in Time* (Ava DuVernay, USA, 2018) and *Captain Marvel* (Anna Boden and Ryan Fleck, USA, 2019).

We might also tally here the tentacles of planetary beings that rise from the earth in films like *Thor: Ragnarok* (Taika Waititi, USA, 2017), *Transformers: The Last Knight* (Michael Bay, USA/China/Canada, 2017) and *Valerian and the City of a Thousand Planets* (Luc Besson, France/China/Belgium/Germany/United Arab Emirates/USA, 2017). Furthermore, we could also throw into the mix tentacular monopods that rise from the earth—as per the worms in *Dune* (David Lynch, USA, 1984) or *Tremors* (Ron Underwood, 1990, USA).

In kids' cinema, noteworthy examples include the Kraken, dumbo octopus, and all-singing-all-dancing vampire squid who have inherited an otherwise abandoned and polluted Earth in *Deep* (Julio Soto Gurpide, Spain/Belgium/Switserland/USA/China/UK, 2017), the terrifying neon squid and astonishing *mètic* octopus named Hank (Ed O'Neill) in *Finding Dory* (Andrew Stanton and Angus MacLane, USA, 2016), and the haughty Squidward Q. Tentacles

(Rodger Bumpass) from *The Spongebob Square Pants Movie* (Stephen Hillenburg and Mark Osborne, USA, 2004). This is not to mention the tentacle-beings threading throughout an array of shorts, including Alejandro Suarez Lozano's *The Fisherman* (Spain, 2015) and animated-shorts including *Oktapodi* (Julien Bocabeille, François-Xavier Chanioux, Olivier Delabarre, Thierry Marchand, Quentin Marmier and Emud Mokhberi, France, 2007), *Catharsis* (Marine Brun, Jean-Guillaume Culot, Sébastien Dusart, Antoine Foulot, Pauline Giraudel and Floriane Hetru, France, 2015) and *Goutte d'or* (Christophe Peladan, Denmark/France, 2016).

What is more, cephalopods have also recently appeared in documentaries like *The Life and Times of Paul the Psychic Octopus* (Alexandre O. Philippe, USA, 2012), a film about the octopus that famously predicted various results for the 2010 football World Cup, as well as *All You Can Eat Bouddha* (Ian Lagarde, Canada/Cuba, 2017), a surrealist tale of a French tourist in Cuba who achieves something like enlightenment after an encounter with an octopus that he frees from a fishing net. *La villa/House by the Sea* (Robert Guédiguian, France, 2017) also features octopuses at key points during its story of inter-generational desire and the onset of global capital on the outskirts of Marseille.

Finally, beyond such big screen appearances there are of course the squid-faced Ood from *Dr Who* (Sydney Newman, UK, 1963-), the megalomaniacal tentacle aliens Kang and Kodos Johnson from *The Simpsons* (James L. Brooks, Matt Groening and Sam Simon, USA, 1989-), the 16-foot telepathic interdimensional Pacific octopus 'Old Night' from *The O.A.* (Zal Batmanglij & Brit Marling, USA, 2016-), and (with a stretch) the octo-pod groups of post-humans in *Sense8* (J. Michael Straczynski, Lana and Lilly Wachowski, USA, 2015), which are all shows that have aired on what is still referred to as television, while also being widely available online. Similarly, the

concept band Gorillaz use cephalopod and jellyfish imagery in a number of the songs from their 2010 album *Plastic Beach*, which includes a single called 'Superfast Jellyfish,' creatures that subsequently reappear in the video for 'On Melancholy Hill,' where one of the band's main characters, guitarist Noodle, is on a ship that is sunk by two attacking Vought F4U Corsair fighter planes. Noodle climbs on to a liferaft with her guitar, before the video goes under water and inside a shark-shaped submarine piloted by the band's bassist, Murdoc Niccals. Here, Virtual Noodle (a digitally animated version of the regular, 2D Noodle) wakes up from a slumber and vomits an octopus with a huge eye. As the shark machine is joined by a fleet of further submarines, among whose pilots are well known musicians like Lou Reed, Snoop Dogg and Gruff Rhys, one piloted by De La Soul smacks into a (Vilém?) fluther of Superfast Jellyfish, churning some of them up in its propellors, thereby leaving a cloud of black ink in its wake. The submarines surface to find a dead manatee on a small, tower-like rock island, with a character known as the boogieman trying to steal its corpse. Virtual Noodle fires a shotgun, but the boogieman escapes. A thick fog descends, through which emerges Plastic Beach, the fictional island after which the album is named. With its cephalopodic digital imagery and its oblique narratives, the videos from *Plastic Beach,* as well as the album as a whole, speak of a world choking on the plastics made from fossil fuels by humans. We shall leave for another occasion a more complete analysis of the videos/album, but as will become clear from the rest of this book, the Gorillaz are surely dealing with various key themes that are linked to the chthulucene (cephalopods, pollution, digital culture, extinction, the rising oceans and more).

Beyond such examples, we feel that each reader will naturally be thinking of many more, some known to us and many more almost certainly not. We leave it to

those readers to become writers and to offer other analyses of chthulumedia in its numerous iterations.

3. In our attempts to discover what form of ink Spinoza used, we ran up against a lack of any real scientific or historical evidence. Our initial searches online and through literature on Spinoza turned up naught. However, our personal correspondences with the Spinozahuis Society and Professor Piet Steenbakkers of Utrecht University offered a tantalizingly inky trail. Steenbakkers notes that 'nothing has been published about the ink [Spinoza] used, nor about the paper, for that matter. In the inventory of his belongings, drawn up by a public notary after his death, there is no mention of ink; the only item that may be relevant in this context is a "Cantoortrechtertje" (an office funnel): one imagines him using that to pour ink from a bottle in the inkwell' (Steenbakkers 2018). Steenbakkers also believes that Spinoza purchased his bottled ink from local apothecaries. To this end, we have ascertained that Mediterranian cuttlefish ink, or *sepia* (the scientific name for the common cuttlefish is *Sepia officinalis*), began popularly to be used for drawing as well as for writing in Holland during the 1700s, as was iron gall ink (made from vegetal matter). Our examination of Spinoza's handwriting in scans of existing manuscripts reveal the ink to be brownish in colour. While brown coloration is a distinctive feature of sepia, this could also perhaps be a property of aged iron gall ink, which is black when applied. Until more advanced tests can be done, we speculate that Spinoza probably did use cuttlefish ink at some point during his lifetime, which coincided with the popularization of sepia (see, for example, Ward 2008: 282).

4. The lack of fixity regarding *Vampyroteuthis Infernalis* even extends to its categorization as a species, regarding which there seems to be much confusion. Regularly considered to be a squid (*teuthis*), Danna Staaf explains that it is in fact an

octopus (Staaf 2017: 118), while Cousteau and Diolé claim that it is 'neither a squid nor an octopus. It has the consistency of a jellyfish and is dark violet in colour' (Cousteau and Diolé 1973: 275). Björn Kröger and colleagues are no less clear when they argue that '[c]oleoids [i.e. soft-bodied cephalopods, which includes squid, octopuses and cuttlefish, but not nautiluses, which retain their shells] are the most diverse cephalopod group today and are divided into two groups—the ten-armed, Decabrachia and the eight-armed Vampyropoda. The latter group comprises the familiar octopods as well as the Vampire squids, which actually have ten arms, but two arms are reduced to sensory filaments' (Kröger et al 2011: 603). Octopus, not squid; neither octopus nor squid; both octopus and squid—the *Vampyroteuthis Infernalis* suitably breaks down the boundaries of hard scientific categorization in a way that is in keeping with the soft logic that we seek to develop here.

5. Today in the global north, spineless Hollywood-style movies and social network screens most often flood us with a self-deceptive point of view that appears to be our own. And here, we might draw yet more links with Flusser's fabled *Vampyroteuthis*. For, *Vampyroteuthis* lives in darkness, but is able, like other cephalopods, to activate bioluminescent chromatophoric pixels on its screen-like skin to illuminate objects and others in the pitch black. Philosophically speaking, Flusser notes that while we humans 'have to penetrate behind appearances in order to free things from the veil of light (*aletheia* = unveiling = truth),' *Vampyroteuthis* instead 'irradiates the world with its own point of view.' But, because the animal's bioluminescence serves to 'engender appearances, that is, phenomena,' it lives in a world of 'self-generated deception' (Flusser and Bec 2012: 39). It was for similar reasons that Flusser claimed that during the video and computing explosion of the 1980s, we were already on the cusp of 'vampyroteuthizing' our own art and culture.

6. As one of our EUP peer reviewers pointed out, Michel Serres makes similar puns when he points us to how the meaning of the word *universe* and the more troubled term *universality* mean 'turned (versus) in such a way as to form a single (unus) whole' (2018: 173). He continues:

> The Latin verb *vertere* signifies 'turning' or 'veering,' 'changing,' but also 'translating' sometimes. The French and English words deriving from it designate a single direction (*averter* [to warn], *vers* and adversary, noted by the Anglo-Latin *versus*), then its change (inversion, subversion, *versatile* [changeable], conversion), lastly every possible direction, from the diverse to the universal. Direction—spatial, temporal or semantic—is produced and organized, dispersed and concentrated, totalized or lost in conversation as well as in flocks of starlings. (Serres 2018: 175)

Perhaps our shared desire for *verting* and *versing* reveals our various ethical projects taking parallel paths of screwy evolution. Or do our labyrinthine impressionistic books rather form fragments of a mosaic mirror reflecting the same 'soft,' morphological and malleable species reshaping and recoding itself in the event of its latest fractal tools? In other words, might our bifurcating books sway and dance to the same background noises and music, verifying the same seachange from within a changing system?

7. Notably, in a letter written in response to Jenny Turner's review of *Staying with the Trouble* in the *London Review of Books*, Haraway laments: 'I wish I had used the term Chthonocene' (Haraway 2017)—precisely because Turner brings her work back to

Lovecraft, a connection that Haraway denies, but which we hope can be developed in a productive fashion (see also Turner 2017).

8. Nakajima et al point out how the myth of the kraken is a retelling of the myth of St George and the dragon (Nakajima et al 2018: 11). In other words, the dragon is potentially a relative of the cephalopod, with dragon-human combinations *à la* Cthulhu conspicuously present in various ongoing 'television' series on Netflix, HBO and SKY. The snake-cum-dragon symbol coiled into an infinity ∞/8 is central to Netflix Originals films and series such as *Annihilation* and *Altered Carbon* (Laeta Kalogridis, USA, 2018-), while also playing a significant role in HBO's *Game of Thrones* (David Benioff and D.B. Weiss, USA/UK, 2011-).

9. Another quantum physicist, Paul Dirac, perhaps emerges here as another important forebear. For in his development of matrices, Dirac in effect wrote superposition and the simultaneous coexistence of different versions into our knowledge of the world. That is, matrices mark the shift from a definite universe to a probabilistic multiverse. What is more, Kurt Gödel's famous 'incompleteness theorem' makes clear Bertrand Russell's suggestion that 'pure mathematics is the subject in which we do not know what we are talking about, or whether what we are saying is true,' since things can be both true and false at the same time (see Nagel and Newman 2005: 9).