

Through a (First) Contact Lens Darkly: *Arrival*, Unreal Time and Chthulucinema

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Abstract:

Science fiction is often held up as a particularly philosophical genre. For, beyond actualising mind-experiment-like fantasies, science fiction films also commonly toy with speculative ideas, or else engineer encounters with the strange and unknown. Denis Villeneuve's *Arrival* (2016) is a contemporary science fiction film that does exactly this, by introducing Lovecraft-esque tentacular aliens whose arrival on Earth heralds in a novel, but ultimately paralysing, inhuman perspective on the nature of time and reality. This article shows how this cerebral film invites viewers to confront a counterintuitive model of time that at once recalls and reposes what Gilles Deleuze called a "third synthesis" of time, and that which J. M. E. McTaggart named the a-temporal "C series" of "unreal" time. We finally suggest that *Arrival*'s a-temporal conception of the future as having already happened can function as a key to understanding the fate of humanity as a whole as we pass from the anthropocene, in which humans have dominated the planet, to the "chthulucene," in which humans no longer exist on the planet at all.

Keywords: *Arrival*; science fiction; unreal time; Gilles Deleuze; J.M.E. McTaggart; limits of thought

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Arrival, *Unreal Time and Chthulucinema*

Thunderbolts explode between different intensities, but they are preceded by an invisible, imperceptible dark precursor.

(Gilles Deleuze, 1995, p. 119)

And yet in all ages the belief in the unreality of time has proved singularly attractive.

(John M. Ellis McTaggart, 1907, p. 457)

Science fiction is often upheld as a particularly philosophical genre. For, beyond actualising mind-experiment-like fantasies, science fiction films commonly toy with speculative ideas, rev up the culture's "epistemology engines" (see Ihde, 2006, p. 159), or else engineer encounters with the strange and the "unknown" (see Flaxman, 2011, p. 299; Sobchack, 2001, p. 63). Denis Villeneuve's *Arrival* (2016) is a contemporary science fiction film in the "first contact" grain that largely realises the latter, introducing "weird" Lovecraftian tentacular aliens whose encounter with humanity heralds in a novel, but ultimately paralysing, inhuman perspective on the nature of time and reality. This article especially explores how the film throws up a counterintuitive model of time that at once recalls and reposes two existing temporal models forwarded by a pair of unlikely philosophical bedfellows: Gilles Deleuze and J. M. E. McTaggart. Specifically, we argue that *Arrival* makes sensible core elements of what Deleuze calls a "third synthesis" of time, and that which McTaggart names the a-temporal "C series" of "unreal" time. After introducing these two mystifying models, we investigate how the film thinks or advances its own distinctive blend of these positions. Thereafter we consider how this a-temporal conception of the future-as-having-already-happened operates on various philosophical and political levels, at once offering an alarming take on the temporal relations humans now occupy within contemporary computerised "societies of control," while concomitantly offering an ethical key for coming to terms with the fate of humanity as a whole as we pass from the anthropocene, in which humans have dominated the planet, to the "chthulucene," in which humans no longer exist on the planet at all. In this way, we shall contend that *Arrival* marks a burgeoning "chthulucinema."

***Arrival* and Film-Philosophy of the "Unknown" Kind**

Adapted from Ted Chiang's science fiction novella *Story of Your Life* (2015 [1998]), *Arrival* follows the reality-warping story of linguistic expert Louise Banks (Amy Adams) who, after making contact with

an alien species, learns how to communicate, think, and perceive in their outlandish manner. The visitors arrive via a dozen dark disk-shaped “shells,” that float inaudibly thirty feet above twelve seemingly random locations across the globe (for, rather than arriving over recognisable geopolitical power-centres, the ships hover above land and ocean in a pattern that appears meaningless to global media and military observers alike). In contra-distinction to now-clichéd flying saucer conventions, which unite half a century of encounters in films that include *The Flying Saucer* (Mikel Conrad, 1950), *The Day the Earth Stood Still* (Robert Wise, 1951), *Invaders from Mars* (William Cameron Menzies, 1953), *Close Encounters of the Third Kind* (Steven Spielberg, 1977), *Independence Day* (Roland Emmerich, 1996) and *District 9* (Neill Blomkamp, 2009), *Arrival*’s dark discs levitate on a revolutionary vertical, rather than horizontal, axis. Thus, while the novella has the aliens depositing what are called “looking glasses” (Chiang, 2015, p. 117) on Earth to communicate with humanity, the film employs more visually arresting icons to mark the first contact. To such ends, each ship constitutes a 1,500-foot “elongated oval” (Giardina, 2016), composed of an unknown black rock-like material. The Alien Species Wiki aptly describes the design as “resembling an immense, obsidian concave lens” (n.d.) – something that we recognise as being reminiscent of a colossal dark contact lens, not only in the sense that it is black and is a point of “contact” between humans and aliens, but also in the sense that it puts Banks in contact with, and allows her to see, that which to humans is typically in darkness, namely time. This “dark contact lens” ultimately serves to draw perception and thought away from the present and Earth, and towards the future and the cosmic.

In line with these ideas, we also recognise these ships as being uncanny attractors, which can be read as science fiction renderings of what Timothy Morton calls “hyperobjects” (2016). Indeed, hyperobjects are nonlocal objects – such as asteroids, glaciers, or global warming – that are understood as being massively distributed across vast tracts of (phase) space and (deep) time. Interesting to note in such light is that *Arrival*’s space ship was modelled on the look of an actual asteroid called 15 Eunomia (see Giardina, 2016; Levy, 2016), and that the film’s first clear glimpse of these ancient monoliths depicts one in long shot entangled with a dynamic elemental weather system cascading down the foothills of a 480 million-year old Appalachian mountain. Importantly, Morton (2013) links human encounters with hyperobjects to what Jacques Derrida calls *l’avenir*, because they essentially encourage us to “develop an ethics that addresses what Derrida calls *l’arrivant*: the absolutely unexpected and unexpectable arrival, or

what I call the *strange stranger*, the stranger whose strangeness is forever strange – it cannot be tamed or rationalised away” (pp. 123–124). Of further resonance here, Morton describes these strange uncanny objects as radiating “temporality from the future into the present” (p. 91), tending thus to draw thought towards the radically unknown “future future” (p. 123). As if describing or anticipating Banks’ own transformed alien perceptions from within *Arrival*, Morton in this way notes how hyperobjects effectively reveal that: “Appearance is the past. *Essence is the future*” (p. 91).

But we already are getting ahead of ourselves. For, within the film, Banks is a university linguist who retains outstanding high security clearance after having previously taken on commissions to translate Farsi tapes for US military intelligence. After the alien arrival, she is initially headhunted by an impressed colonel Weber (Forest Whitaker), and by degrees helicoptered to the US alien contact site/sight in Virginia. En route she meets Ian Donnelly (Jeremy Renner), a theoretical physicist also part of the team. After briefings, a select crew enters the vessel’s topsy-turvy interior from an extendable platform beneath. Therein, Earth’s gravity is strangely reconfigured, and the humans take a literal leap of faith up into an open vertical shaft, which they are then able to walk up, as if it were a horizontal tunnel. At the end of the shaft is a communication chamber, which contains a glass screen, behind which a cloudy gaseous environment can be discerned, as well as two “heptapods” (from the Greek for seven and foot) – alien chimera whose grey-black betentacled bodies appear to blend the physiology of octopus, starfish, and anemone.

With halting progress, somewhat curtailed by military paranoia, Banks and Donnelly begin to make promising exchanges with the aliens. Banks gradually makes a series of breakthroughs, which Donnelly explains in an educational “here are some of the many things we don’t know about heptapods” voice-over:

How do they communicate? Here, Louise is putting us all to shame. The first breakthrough was to discover that there is no correlation between what a heptapod says and a heptapod writes. Unlike all written human languages, their writing is semasiographic. It conveys meaning. It doesn’t represent sound. Perhaps they view our form of writing as a wasted opportunity? Passing up a second communications channel. We have our friends in Pakistan to thank for their study of how heptapods write. Because unlike speech, a logogram is free of time. Like their ship, or their bodies, their written language has no forward or backward direction. Linguists call this non-linear orthography. Which raises the question, is this how they think?

There are echoes here of Banks' familiarity with George Lakoff and Mark Johnson's (2003 [1987]) work on the embodied nature of the concepts and metaphors that we, and by extension the heptapods, must live by.

However, the above lecture also helps to link *Arrival* to an illustrious line of "worthy" science fiction predecessors that include *Solaris* (*Solyaris*, Andrei Tarkovsky, 1972) and *2001: A Space Odyssey* (Stanley Kubrick, 1968). In fact, the plethora of embedded audio and visual homages to the latter film strongly suggests that *Arrival* positions itself as a modern descendant of Kubrick's masterwork. Beyond tangible visual rhymes like the two films' utilisation of vertical black-stone monoliths, close-up images of Donnelly's gloved hand reaching out to touch the dark alien object overtly recall Kubrick's touchstone film, as does the final creation of a new child, tied in each case to a new epoch for an evolving mankind.

Arrival's penchant for cosmic themes recalls Vivian Sobchack's (2001) suggestion that films like *2001* attempt to "reconcile man with the unknown" – in a fashion not too dissimilar from the "transcendentalism of magic and religion" (p. 63). Gregory Flaxman (2011) equally celebrates "sci phi" (a somewhat unnecessary portmanteau or neologism coined to highlight the plication of science fiction and philosophy) films, including *2001* and *Inception* (Christopher Nolan, 2010), for devoting themselves to "the 'not yet,' the 'otherwise,' or the 'Outside,'" (p. 295) notions drawn from Gilles Deleuze, who himself believed that philosophy as a practice (or the creation of concepts) must follow science fiction's suit. By distinguishing cerebral science fiction, Flaxman privileges thought-provoking films that confront "metaphysical anomalies, baffling mutations, [and] cracks in time," which therefore unleash "signs and images that 'do not compute' according to the science of this or any other world" (2011, pp. 299–300). What Flaxman lauds most in such cinematic encounters, though, is their creation of enigmatic images "that outstrip any image of thought" (p. 299). And by such measure, *Arrival* meets his requirements in spades, not least through its *Inception*-like time-bending memory and fantasy themes.

The film's deep and perplexing images of time, tied to the appearance of betentacled aliens, also suggest the "Weird" supernatural science-fiction horror of H. P. Lovecraft, not least because the value of Lovecraft's Cthulhu stories – based on a betentacled monster/alien/god from the deepest depths of time – is also commonly associated with the outstripping of extant thought models. In *Tentacles Longer Than Night*, for example, Eugene Thacker (2015) describes Lovecraft's supernatural horror as a mode that, like philosophy, frequently demands that we confront the limits of thought, or better, wrestle with "the thought of the

impossibility of thought” (p. 115). Recalling and recalibrating Flaxman, then, Thacker elucidates in a decidedly Deleuzian manner that “what intimately ties horror to philosophy – not that philosophy, which explains everything, would explain horror, making it both meaningful and actionable for us, but that philosophy – all philosophy – eventually discovers within itself a hard limit to what can be known, what can be thought, and what can be said” (pp. 162–163). Lovecraft’s work specifically achieves this by forcing characters (and perhaps readers) to “see something different, something of the order of deep time and the scale of the unhuman” (Thacker, 2015, p. 128), and which ultimately leads to their running up against the paralysing boundaries of knowledge/conceptualisations of reality. By thus exposing “the relative horizon of the thinkable” (p. 128), Lovecraft’s stories occasion arresting moments of frozen thought. That is, they expose the uncanny “degree zero” of thinking, which in some sense anticipates and reflects Morton’s descriptions of confronting a massively distributed hyperobject, which similarly leads to the undermining of everyday commonsensical thinking about the nature of time and reality. Indeed, for Thacker, Lovecraft’s paralysing encounters catalyse a “*reductio ad absurdum* of philosophy” that ultimately highlights the “impossibility of experience” (p. 128).

Of relevance to our reading of *Arrival*, running up against the “relative horizon of the thinkable” in such a way provides “an enigmatic revelation of the unthinkable” (or alternatively, a partial range of inhuman perspectives), which grants readers a rare form of “*black illumination*” (Thacker, 2015, p. 142), or “dark contact,” especially concerning the real nature of time. In *Arrival*, this novel but ultimately paralysing inhuman perspective is achieved by Banks when she immerses herself in the heptapods’ non-linear semasiographic language (called Heptapod B), and which leads to a staged exegesis between Banks and Donnelly concerning the Sapir-Whorf hypothesis, or the idea that the language one speaks shapes thought and concept creation, and that different languages help fashion different worldviews. Precisely, and as if anticipating recent real-world research into the ways in which “language shapes how the brain perceives time” (Athanasopoulos & Bylund, 2017), *Arrival* explores how an a-temporal alien language imparts a correspondingly inhuman way of perceiving and experiencing time or temporality. Although cut from the film, in Chiang’s novella Donnelly helps Banks to discover the a-temporal foundations of Heptapod B after explaining to her the relevance of Pierre de Fermat’s principle of “least time,” which the aliens seemingly understand, unlike the other human calculus and geometry thrown at them. Using chalk and blackboard to illustrate the fastest path for a beam of light passing through two media (air and water), Donnelly

explains that Fermat's model indicates that action may be teleological rather than causal. For, in this example, the actual path taken by a light beam suggests that it must always already know what the "fastest path" is to a given point – before it even sets off.

Banks' "black illumination"/dark contact thereafter allows her awareness to expand and draw upon memories made during instants of "the yet to come." By the film's ending, *Arrival* thus encourages us retroactively to reframe what had heretofore appeared to be narrative flashbacks – depicting Banks having a child, and then losing her to a rare cancer as a teenager – as flash-forwards, or memories of events that are yet to be. Many of these are enveloped into the film's opening sequence, where Banks explains via a reflective voiceover that "I remember moments in the middle. And this was the end. But now I'm not so sure I believe in beginnings and endings." And it is by such means that we come to grasp that *Arrival's* dark illumination pertains to what we might call the (un) reality of time.

To best get at the philosophical and political relevance of such ideas, we can first turn towards Deleuze's "futural" philosophy for answers, not only because it offers us a style of philosophy that itself "*derives from the future*" (Flaxman, 2011, p. 294), but also because (as with Banks in the film) it "summons the future in order to evacuate the very presence of the present," placing us within "a perpetual *here and now*" (p. 293).

Unknown Encounters of the Third Synthesis Kind?

Deleuze is renowned for describing two epochs of cinema, each with a corresponding image of time, or duration *à la* Henri Bergson (see Deleuze, 2005a [1983], 2005b [1985]). However, Deleuze actually outlays three distinct ways of thinking about time, which can arguably be thought in relation to the Greek time-gods of *Chronos*, *Aion*, and *Kairos*. In *Cinema 1: The Movement-Image* (2005a), for example, Deleuze describes a classical cinema based on sensory-motor systems, chronological action, and habit. Therein, a tripartite group of affection-images, perception-images, and action-images help him account for pre-war cinema's teleological thinking of time, which was most often subjugated to movement and action. If such models correspond to a first synthesis of time in the present, in *Cinema 2: The Time-Image* (2005b), Deleuze goes on to describe the emergence of a new post-war cinema where time increasingly "appeared out of joint," with the past, or virtual realities, appearing to surge forth into the present, somewhat akin to Marcel Proust's involuntary memories in *In Search of Lost Time* (*À la recherche du temps perdu*, 1913; see also Deleuze, 2005b; Pisters, 2012, p. 137). Lesser known to those who do not venture beyond Deleuze's *Cinema* books, though, is that there is also a third model or

synthesis of time that Deleuze hints at. This, Patricia Pisters (2012) points out, was primarily distinguished and developed in *Difference and Repetition* (1995), and it marks both a break from Bergson and an embrace of Friedrich Nietzsche. Pisters sees this third model, associated with the eternal return, as most useful for describing the images of time thought by contemporary digital cinema. She labels this new regime “neuro images,” which she sees as becoming responsible for altering “the temporality of the brain’s ‘temporal signature’” (Pisters, 2012, p. 303). For Pisters,

if the movement-image is founded in the first synthesis of time of the present, and the time-image is grounded in the second synthesis of the past, the neuro-image belongs to the third synthesis of time, the time of the future. (p. 303)

As is the case with Pisters’s explorations of third synthesis films such as *The Butterfly Effect* (Eric Bress & J. Mackye Gruber, 2004), the temporal models encountered in *Arrival* appear primarily concerned with “reprising the future, death, and new beginnings (eternal return)” (p. 156). Indeed, the death of Banks’ daughter, Hannah, is in the future, and a new beginning for the human race is promised by the gift of Heptapod B, which “opens time” and exposes those who can use it to “what’s to come.”

This new beginning is thus linked to a literal rewiring of the erroneous human brain’s perception of time and reality, as is made clear by Banks’ forward-oriented memories, which index a form of “future ‘time that is now,’” with past and present becoming re-grounded in an image of the future (see Pisters, 2012, pp. 140, 303). By such token, *Arrival* also attests to how cinema’s third synthesis of time “relates explicitly to the cosmic” (p. 154), in that to think of the future as if present, or as a future folded into the present (to think of the future as a *fait ac-com-pli*), is to think not only one’s own death, but also the death of the human species and the planet on which it currently resides, together with the heat death of our sun, and the “freezing” of this and other universes as a whole. In addition, Banks’ expanded perception of the future unleashes a different type of “frozen thought,” not least because her expanded vision of time leaves little or no room for free will or change.

However, if the future is fate, or a *fait accompli*, then in the final analysis we are left with a decidedly un-Deleuzian and un-Nietzschean conception of the world. That is, if Heptapod B reveals a seemingly fatalistic view of Banks’ future (and her child’s death), the present (marked by time and free will) effectively becomes an illusion, meaning that Deleuze’s models break down, since they are primarily defined by openness and change

(things could be otherwise). In order to resolve this conundrum (how can there be free will if everything is already decided?), we now turn to J.M.E. McTaggart's (1908) famous analytical proof that "time is unreal," (p. 457) and that "whenever we judge anything to exist in time, we are in error" (p. 470).

Seeing *Arrival* as C Series Cinema?

In "The Unreality of Time," McTaggart (1908) stresses that belief about time's unreality is in and of itself something timeless, appearing as it does in all ages and places. In the world of philosophy, he reminds us, time has before him (if you will) been treated as "unreal" by Baruch Spinoza, Immanuel Kant, G.W.F. Hegel and Arthur Schopenhauer, among others (McTaggart, 1908, p. 457). Seeing time as synonymous with change, McTaggart argues that "whenever we perceive anything as existing in time – which is the only way in which we ever do perceive things – we are perceiving it more or less as it really is not" (p. 470). To drive home his point, he thereafter troubles two commonsensical ways of speaking and thinking about time which he labels the "A series" and the "B series." The A series constitutes a tensed-model that demands thinking about a dynamic series of positions "that run from the far past through to the near past to the present, and then from the present to the near future and the far future" (p. 458). The B series, meanwhile, is a de-tensed series that is defined in terms of relations that run "from earlier to later" (p. 458). While in our everyday lives "we never *observe* time except as forming both these series" (p. 458), McTaggart shows that both models have inherent problems and that, once they are shown to be false, they counter-intuitively lead toward a recognition of the unreality of time. For, briefly summarised, the B series cannot represent change (since time is fixed), and the A series becomes troubled by contradictions and problems of regress.

To illustrate this point further, we might observe how the death of the last dinosaur that we now call *Tyrannosaurus Rex* occurred earlier in time than the film called *Jurassic Park* (Steven Spielberg, 1993). From a B series perspective, it will always be true that the film screens later than the Cretaceous-Paleogene extinction event. Because these relations are forever fixed, McTaggart argues that the B series cannot adequately represent change. That is, the relation of before to after, and/or of earlier to later, is unchanging and therefore timelessly true. *Prima facie*, the dynamic A series model appears better able to represent change, because from this vantage we can intuit that the day after the death of the last *Tyrannosaurus Rex* on Laramidia, the former island continent that now is part of North America and where many dinosaur fossils have been

found, the cinematic premiere of *Jurassic Park* was/is located in the far distant future. Every passing moment over the ensuing 65 million or so years brings the film's release into ever-closer proximity – until eventually, on 11 June 1993, the theatrical release appears in the present. At the time of writing, however, the world premiere of *Jurassic Park* is an event located in the near past, and which is ever-receding towards the far past. McTaggart notes that while the A series has a clear order, we can navigate it in two directions: from past to future as per our dinosaur example above, or, via a reversal, from future to past. Problematically for McTaggart, though, there is both a terminal contradiction and an infinite regress built into the A series model. The contradiction lies in the fact that if we are to perceive time in this ordered fashion, then something like the release of *Jurassic Park* is an event that must simultaneously claim the properties of having been past, present, and future. As these three properties are contraries, McTaggart maintains that we encounter a contradiction. So, even if we might say that the event was past, present, and future at different moments (in 2018, the premiere of *Jurassic Park* is in the past, in 1968 it was in the future, and in 1993 it was briefly in the present), in order to save the model we still have satisfactorily to define “when” each of these co-ordinates was/is. Therefore, while we might now (in 2018) say that *Jurassic Park* was earlier than *Arrival*, and later than the Cretaceous-Paleogene extinction event, in doing so we essentially transform an A series description into a B series description, thereby fixing time and thus undermining our own ability to represent change. As McTaggart clarifies, “we cannot explain what is meant by past, present and future. We can, to some extent, describe them, but they cannot be defined. We can only show their meaning by examples” (1908, p. 463).

We shall return later to the extinction of the dinosaurs and how their destruction at the hands of a meteoroid might also help us to think about life, death, and time on Earth. But what is presently important for our argument, and which often gets neglected in accounts of McTaggart's proof for the unreality of time, is a third series of time, which McTaggart introduces as an a-temporal “C series,” which has order, but no direction. When introducing the C series, he explains that it

is not temporal, for it involves no change, but only an order. Events have an order. They are, let us say, in the order M, N, O, P. And they are therefore not in the order M, O, N, P, or O, N, M, P, or in any other possible order [...] And thus those realities which appear to us as events might form such a series without being entitled to the name of events, since that name is only given to realities which are in a time series. It is only when change and time come

in that the relations of this C series become relations of earlier and later, and so it becomes a B series. (1908, pp. 461–462)

McTaggart elsewhere expands his position on the C series which, as Kris McDaniel (2016) explains, can be thought of as an adequacy series, wherein “states that appear to be present more accurately represent reality than states that appear to be past, but both in turn are less accurate representations than states that appear to be future” (McTaggart, 1909, p. 348, as quoted in McDaniel, 2016). The future here has an important association with the “eternal” for McTaggart, which he further elaborates in “The Relation of Time and Eternity,” explaining that “eternity is as future as anything can be” (1909, p. 355). Elucidating on this enigmatic concept, McDaniel explains that although reality is timeless, McTaggart still “holds that it is appropriate to describe the eternal as being future” (McDaniel, 2016).

McTaggart here recalls Morton’s notion of hyperobjects as revealing the future to be essence and the present an illusion, ideas that in turn resonate with Banks’ memories in *Arrival*, and which a brief return to the novella can help clarify. For Banks notes that

before I learned how to think in Heptapod B, my memories grew like a column of cigarette ash, laid down by the infinitesimal sliver of combustion that was my consciousness, marking the sequential present. After I learned Heptapod B, new memories fell into place like gigantic blocks, each one measuring years in duration, and though they didn’t arrive in order and land contiguously, they soon composed a period of five decades. It is in the period during which I know Heptapod B well enough to think in it, starting during my interviews with [the aliens] and ending with my death.

Usually Heptapod B affects just my memory: my consciousness crawls along as it did before, a glowing sliver crawling forward in time, the difference being that the ash of memory lies ahead as well as behind: there is no real combustion. (Chiang, 2015, p. 166)

Through such descriptions we better grasp how the C series undermines A or B series descriptions and their relation to a real passing present, which here becomes equated with an illusionary “combustion” of consciousness. Nonetheless, we might anticipate an objection with regard to the cinematic adaptation of the story. For, while Banks’ hybrid human-heptapod perception does resonate with McTaggart’s C series modelling in this literary description, the film (more than the novella) harnesses Banks’ all-too-human subjective perspective as a focaliser, using this as a privileged crack that opens onto eternity. That is, by its very nature the film’s narrative form supports a lingering belief in

an anchoring specious present. Accordingly, although Banks senses eternity and can recall the future from an uncanny a-temporal perspective, she here remains a human who still perceives time in the prevailing A and B series fashion. This is not, however, a necessarily terminal objection, for McTaggart concedes that while time itself remains unreal, “our perception of temporal order is not wholly delusory” (McDaniel, 2016). It is rather that for McTaggart the “C series is real, but no terms are really past, present, or future, and there is no real change” (1927, p. 272).

Linked to such ideas, and of importance to our reading of *Arrival*'s Sapir-Whorf positioning, McTaggart himself laments that a major difficulty in sketching out his unreality proof “without almost giving the explanation,” relates to the English language having “verb-forms for the past, present, and future, but no form that is common to all three” (McTaggart, 1908, p. 468) – something that the a-temporal signs and images of Heptapod B bypasses, as do the film's own images, which as we shall shortly discover, appear to blend certain C series and third-synthesis features in a distinctive style.

Arrival of 3C Time

Putting theory before the film, or the cart before the proverbial horse, would most likely result in a Deleuzian perspective inviting us to see *Arrival* as a hybrid movement- and time-image film that has become implicated with third synthesis models, while a McTaggartian perspective would allow us to perceive it as a C series film that remains infected by an all-too-human A and B series perception. However, reading the film on its own terms allows us to see it variously making sensible different temporal images that display features of Deleuze's third synthesis concept of eternal recurrence (3) and McTaggart's unreal model of ordered time that becomes energised by a futural eternity (C) – as well as Morton's hyperobject notion of the present being an illusion and the future essence. In this way, we propose the concept of 3C time.

Possibly the best illustration of “3C time” comes during the film's final act, which reveals the present to be a(n eternally) living past or (actual) illusion of presentness that remains dynamically entangled with real (but virtual) future happenings. The film has the alien contact story build towards a duel, wherein human armies threaten to go to war with the alien visitors. There, as various nation states become paranoid about the aliens' use of a symbol that is (mis)translated into the word “weapon” (but which actually is a reference to Heptapod B), the Chinese, under the command of General Shang (Tzi Ma), declare war on the heptapods, followed shortly thereafter by Russia and Sudan. As the exceptional white American protagonist, Banks is burdened with attempting to avert

catastrophe and to save the world as per an action-image hero. However, when trying to realise this goal, Banks increasingly becomes overwhelmed by a redounding tide of subjective future-memories inculcated by her learning of Heptapod B. As time pressures mount, we join Banks in her specious present/past, where she ineffectively scours a screen full of recently expunged Heptapod B symbols. Here, fragments of future-memory increasingly intrude via a temporal parallel editing trope. Thus, in keeping with Deleuze's time-image, a deluge of overwhelming memories and visions results in Banks becoming a dislodged seer and hearer, ostensibly dislocated from the actual action-image world of the present, and rendered inactive by overwhelming apparitions. However, what Banks sees are not exactly involuntary memories or recollection-images as we traditionally know them. Rather, these are third synthesis unfoldings from the time of the future. As Banks stares at the as-yet undeciphered symbols on screen, then, a targeted sheet of future-memory suddenly becomes opened up. This sees Banks recalling cutting open a cardboard box, and by degrees discovering, examining, and then leafing through her newly printed (therefore forthcoming) monograph about (learning) Heptapod B, *The Universal Language* (a name given to cinema during the silent era). Semi-articulated with this futural-recollection is another embedded or co-joined future-memory, which the film also jumps into, depicting Banks delivering a research seminar, wherein she (presumably) works out the knowledge required for the completion of the book. Cutting back to the specious present, Banks' body presently indexes these memories (and expertise) unfolding into her brain like an involuntary Proustian memory in reverse. Thereafter she looks at the previously unidentified heptapod symbols and exclaims: "I can read it!" That is to say, the backwashing surge of memory from the future here reactivates Banks' body as narrative agent, ostensibly transforming the third synthesis seer into a third synthesis action hero, once again empowered in the specious present/past. Banks immediately runs to Weber, then, to inform him that "the weapon is their language," and that the heptapods "gave it all to us" so that we can see the time that "is to come." But at this stage, she is dutifully informed, it is already too late for the US military (a collective Hollywood action body *par excellence*) to influence the outcome of the Chinese-Russian-Sudanese military escalation.

By having the most traditional action heroes retreat from the contact zone (beneath the shadow of the now-shifting alien hyperobject) in anticipation of an immanent intergalactic war, the film illustrates how problems of this magnitude can no longer be solved by action in the present alone. Instead, to be truly effective, action has to become

spirally articulated to the empowering realm of the dark future. And as if reifying this very idea, at this precise moment when the military leave Banks alone on screen, her hybrid superpowers become fully awakened, catalysed by a future-memory of the unborn Hannah, who appears attached to a dark out-of-focus half-waking memory, whispering: "Wake up, Mommy." And from here, Banks suddenly leapfrogs into another involuntary sheet of future-memory, where she is attending a diplomatic event some eighteen months hence. Worth noting here is how the film uses the audiovisual texture of these sequences – with their oneiric selective focus, super-saturated chthonic lighting, and partially-focalised febrile sounds – to signal that these are (re)created memories, rather than objective images of an actual future.

The embassy-party sequence opens with an establishing shot of an anonymous crowd gathered beneath a balcony, captured by a free-floating handheld camera evocative of Tilman Büttner's cinematography in *Russian Ark* (*Russkiy kovcheg*, Aleksandr Sokurov, 2002). The mixed crowd beneath immingle in their evening attire between a curved double staircase. The unstable subjective camera then pans up and to the right, capturing lavish chandeliers and a row of national flags draped from the high ceiling, including those of the USA, China, Denmark, and Japan. We see the bare back and shoulders of Banks as she enters from frame right in medium close up, conspicuously out of focus in her strapless ball gown. While she gazes down on the crowd below, over her right shoulder a white alien flag comes into focus, revealing it to be a balanced Heptapod B symbol. Only after this detail is made discernable does Banks' bare neck and head then clearly get pulled into sharp focus, the close-up revealing a spiralling up-combed hair style that visually rhymes with the Heptapod symbol behind her, while inter-textually quoting Madeleine's (Kim Novak) iconic hairstyle from *Vertigo* (Alfred Hitchcock, 1958), another film where time appears out of joint and where complex associations between memory and action, life and death, past, present, and future play out.

Immediately thereafter, the sequence becomes reminiscent of Alain Resnais' *Last Year in Marienbad* (*L'année dernière à Marienbad*, 1961), not least because of the scene's opulent setting and glamorous costumes. For, Banks is here approached by a tuxedoed stranger, General Shang, who shares his memories of a past encounter they have apparently had, but which she cannot here recall. This last detail might give us pause, for it signals that the version of Banks embedded in this future-memory has no recollections of the past (yet), or, more precisely, this moment of past located in-between the future-memory and the moment of specious present that embeds it. There follows a vertiginous and *Marienbad*-esque

dialogue between Banks and Shang, depicted under a near-heavenly fluid golden-orange light:

SHANG: Dr Banks, [it's] a pleasure.

BANKS: General Shang. The pleasure is mine, really.

SHANG: Your president said he was honoured to host me at this celebration.

BANKS: Yes.

SHANG: But I confess, the only reason why I'm here is to meet you in person.

BANKS: Me? Well, I'm flattered. Thank you. (phatic tittering)

SHANG: Eighteen months ago you did something remarkable. Something not even my superior has done.

BANKS: Well, what was that?

SHANG: You changed my mind. You are the reason for this unification.

All because you reached out to me on my private number.

BANKS: Your private number? General, I... I don't know your private number.

SHANG (showing Banks his phone screen): Now you know. I do not claim to know how your mind works. But I believe it was important for you to see that.

BANKS: I called you didn't I!?

SHANG: Yes, you did.

During this final exchange, a familiar deep booming non-diegetic trumpeting sound surges forth on the film's soundscape, the bass resonations of which have already become synonymous as a quasi-leitmotif of the heptapod creatures. In this context, however, the sonorous sound gathers near-religious associations, evoking notions of angelic messages being trumpeted or heralded across eternity. The enduring throbbing noise is also used to bridge a cut back to Banks in the past/present action-image sequence, reinforcing the idea that knowledge and revelation are spreading across the fabric of space-time. As it lingers, Banks begins desperately seeking a phone to call Shang. She finally steals a CIA "satphone," and manages to dial China. The US military is alerted to the call, however, and try to track down who they now believe to be a spy or traitor. As the phone rings, and the military close in, Banks still does not know what the future requires her to say. But, as the present/past time-pressure increases, the film dislodges another important fragment of future-memory, wherein Shang says: "I will never forget what you said."

The film thereafter opts to cut back and forth between present/past and the future-memory, occasionally using sound bridges to overlap the two. And by such means the film depicts the general whispering a Mandarin message into Banks' left ear in the future – which she thereafter (or there-fore) relays to Shang in the past/present. The editing makes clear

that Banks is herself a vanishing mediator of sorts, rather than a classical action(-image) hero or free(-willed) agent as we would typically recognise it. Indeed, the action-image here takes on traits of being the living past, in relation to a future that simultaneously abounds with telescoping time-image features. For, in a counterbalancing move, after hearing Shang's message at the embassy party, the film shows the past Banks relaying the message, before the future Banks melodramatically reconnects with her own past/present, experiencing them as a surging emotional Proustian recollection-image, which render her a frozen time-image seer and hearer. Here, we find a brain circuit in the making. A C-time loop is thus created, nested within an even more expansive third synthesis grounding, suggesting 3C time. The contemplation of 3C time opens thought up to the paralysing notion of order without time as eternity.

Control Time: Towards Political Interpretations

With the above temporal discussions in mind, we might now again make a spiralling return to Deleuze, in order to re-read (or mis-read) his ethical political philosophy. For, Deleuze states in *The Logic of Sense* (2004 [1990]) that the main aim of philosophy is to become worthy of the event, and that in life we should strive only to "become worthy of what happens to us" (p. 170). Events are generated by the interaction between the actual and the virtual, so that before events become "actualised in us" they signal and await us from the future, appearing to "invite us in" (p. 170). On one level, looking forward to, and spiritually cherishing the presentness of the future when it becomes actualised as specious perception, as per Banks in *Arrival*, may minimally invite us to think differently, or otherwise, about what being worthy means on a deterministic plane, or a time without without change.

In Banks' descriptions of her hybrid alien-human perception, the only value of her future-memories for living life is that "the anticipation makes it more fun when you get there," which some might be tempted to interpret as quasi-Buddhist or Stoic nonsense. However, beyond the personal spiritual demands, there also appears a sobering political message to the film's imaging of backwashed time, and which becomes drawn into relief when we consider *Arrival* in relation to its own socio-political "outside." That is, we reframe it as an (un)timely historical artefact that reflects and expresses broader concerns regarding the fate of humanity in the era of digital "control" and the anthropocene.

We can here gain more insight into the nature of this idea if we take a brief detour through Deleuze's short but influential essay, "Postscript on

The Societies of Control” (1992), looking in particular at Deleuze’s argument that today’s collective assemblages are largely defined by the nature of a third generation of electronic computing machines, which are implicated with mutations in capitalism. Deleuze claims that the era of disciplinary panoptics described by Michel Foucault has essentially come to an end, and that it has ceded to a new age of endless modulating control. In brief, Deleuze argues that the earlier forms of disciplinary society explored by Foucault produced individuals and subjectivities within and through various enclosed or carceral institutions (such as the school, barracks, factory and gaol). In these institutions, individuals were for Foucault moulded subjects, who could be understood as being subjected to and internalising a disciplinary gaze. In contrast to this, Deleuze felt that modern societies primarily produce “dividuals,” subjects divided against others and themselves (every man for himself), and who experience self and identity as an ongoing “modulation” (1992, p. 5). In today’s world, we can articulate modulating control logic with a proliferation of actual surveillance, pharmaceutical, economic, digital, and networked technologies that collectively contribute to this new abstract control diagram. Key here is that an important difference between these two techno-social eras can be linked to a concomitant shift in temporal regimes.

Indeed, if discipline was most often wielded in older societies as a response or reaction to a perceived wrongdoing – through the administration of, say, a disciplinary cane to an errant child’s backside – in control societies a futural logic of anticipation and prevention now reigns. Most often unruly children are diagnosed with ADHD or AD/HD and medicated today so as to prevent tomorrow any irritating child-like behaviours (i.e., behaviours felt *a priori* to be annoying to adults). The result is that the child’s behaviour is controlled medically before it even occurs (see Bray, 2009). Coupled with this, we might note how our handiest devices now also compute and “think” at a speed and rate that far outstrips the glacial pace of the human brain, and which can recall with crystal perfection one’s history of evolving tastes and habits. In other words, at a speed of hundreds of thousands of times per second, and across the duration of a whole online lifetime, one’s behavioural algorithms will easily anticipate and prime your likes, decisions and desires – thereby materially controlling life from the future of an all-too-human present, and behind which our thought always lags.

With this in mind, we might note how *Arrival*’s *mise-en-scène* becomes carved up and over-loaded with ubiquitous computer screens, which in turn feature windows, or screens-within-screens, as well as other prominent screen-like framing devices. Digital computer screens

proliferate within all of the main human spaces: Banks' domestic sphere, her university lecture halls, the military intelligence tent, and the human end of the ship's otherwise minimalist viewing chamber. The film also appears to erect subtle parallels between contemporary technologies and the alien visitors. Carolyn Giardina (2016), for example, tellingly spots how Patrice Vermette's "sleek" design for the heptapod craft would easily "look at home on display in an Apple store". With similar regard to the ship's betentacled pilots, we might recall how Donna J. Haraway (2016) explicitly links "the tentacular" to "nets and networks, IT critters, in and out of clouds" (p. 32). This final reference to clouds in turn recasts the manner in which the heptapod craft quite literally disappears into clouds when the visitors leave. We also get a sense of the ETs' IT connections if we reconsider what is essentially the temporal semasiographic image par excellence of our present epoch, namely the anxiety-raising rotating circle (sometimes called the "throbber" icon) that has become the dynamic screen sign meaning "buffering." That is, the real world animated icon that distantly recalls the round Heptapod B symbols thrown up on the alien touch-screens, and which (here as there) operate as a sign that our connection/perception speed is too slow to keep up (with the present).

The (un)conscious articulation of digital technologies and alien temporality here arguably allows *Arrival* to express a sense that we slow biological beings have further receded from the present. Or rather, that in the real world, our machines alone now inhabit the present as our future makers and vanishing mediators, passing back images and stimuli that we (are often made to) desire. By such cookies, we might read *Arrival* as obliquely expressing a contemporary concern that we as a species have been confined to what is essentially the past, lagging behind the dark future, which has become the territory or realm of our networked media, or our be-tentacled symbiont masters.

From this perspective, *Arrival* appears as veiled cultural expression, (in)directly concerned with control era politics and the increasingly symbiotic relations emerging between human and inhuman agents. At the same moment, however, the dark encounter with strange stone hyper-object ships and their otherworldly aliens concomitantly encourages thought to expand beyond these contemporary concerns, and to confront far darker, near incomprehensible aspects of deep time – and which in a nod to both Lovecraft and Haraway, we will hereafter refer to as the "chthulucene."

Dark Contact: Towards Deep Philosophical Interpretations

We suggested earlier that life and death are compatible with openness and change. In order to explain how this is so, we shall return,

as promised, to the extinction of the dinosaurs. In *Dark Matter and the Dinosaurs: The Astounding Interconnectedness of the Universe* (2015), physicist Lisa Randall offers the remarkable hypothesis that dark matter caused the event that saw Tyrannosaurus Rex disappear from the planet. Randall argues that most of the dark matter in the universe is accumulated in a disk that surrounds the “bright disk of gas and stars” (2015, p. 348) that is our galactic home, the Milky Way. As the galaxy rotates, so on occasion will that dark matter sporadically exert enough force on the numerous hyperobjects that we might typically define as meteoroids, asteroids and comets, and which are gathered in the so-called Oort cloud on the outer reaches of our solar system, such that some of those objects are sent falling towards us. While the Earth remains protected from most of these as a result of its relatively central position within our system, with many meteoroids, for example, colliding with the far larger and thus gravitationally more powerful Jupiter, some will nonetheless on occasion (Randall estimates every 35 million years or so) make their way through to Earth, impacting with it and thus radically changing the living conditions thereupon. This is indeed how Randall understands the impact that took place at Chicxulub in Mexico, and which brought about the demise of the dinosaurs, an idea or *dispositif* that is arguably reflected in the stone-looking heptapod ship, which, as mentioned, was “inspired by the shape of a large asteroid known as [15] Eunomia” (Giardina, 2016).

In fact and fiction alike, then, what takes place in the distant reaches of our known universe is intimately connected to what takes place on Earth. More relevant yet, though, is how Randall frames this hypothesis within the understanding both that comets might have played a key role in bringing to Earth a large amount of the water that covers its surface (2015, pp. 226–227), and that “meteorites on Earth have even been found to contain components of DNA and RNA that presumably came from either asteroids or comets” (p. 103). That is, the most basic components of life as we know it on Earth quite possibly originated in space, meaning that in some senses, all life is “alien” to Earth if we wish to posit the planet as an isolated rather than a permeable biosphere. This is not to mention the hypothesis that Earth as we know it was formed as a result of a “giant impact” with another planet, typically referred to as Theia, which impact also resulted in the creation of our moon (see Herwartz et al., 2014). In other words, our very planet itself is not singular or unified, but a hybrid rock whose origins stretch across the universe.

The reason for this foray into astrophysics is to suggest that our planet and the life that it sustains are not eternal – and that if anything is eternal, it is change itself, as exemplified by the creation of our planet and the

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dependency of the life upon it on the extraterrestrial (and this before we even consider the extent to which life on Earth is dependent on the Sun). If the universe is thus defined by change (not even our planet is permanent), then openness to change is not simply a matter of life (it is potentially as a result of meteoroid impacts that life on Earth exists as such), but it is also a matter of death (the meteoroid that gave life to the planet also took away the life of the dinosaurs; as humans came into existence, so will they cease to exist).

In *Arrival*, then, the contact that Banks makes, and which results in her burgeoning ability to see the future, is a contact with the “dark” forces of the universe that both give and take away what we humans consider to be life. Her daughter Hannah will in full consciousness to Banks, and contrary to Donnelly’s presumed wishes (for he leaves Banks because of her decision), both be born and die “prematurely,” since to live at all becomes a miracle of cosmic proportions when we understand the extraterrestrial provenance of practically everything that we know – and it is perhaps hubristic rather than humble of humans to claim to know better who or what merits to live and also to die. All that humans can see, and thus in some senses all that they can know, depends on the light that has wended its way from the Sun to our planet (as evoked in *Arrival* by the repeated use of Max Richter’s “On the Nature of Daylight” on the film’s soundtrack), while yet deeper knowledge may yet be found in seeing (through) the darkness and understanding that all that lies beyond our vision (dark matter, the future, death) also is in some senses always already with us and thus “alive,” or at the very least entangled with us. Such an understanding is verily a paradoxical “black illumination” or “black enlightenment.”

Chthulucinema

In her analysis of the “chthulucene,” Donna J. Haraway (2016) draws upon similar ideas to the ones that we have posited above. Indeed, Haraway suggests that the chthulucene is defined as a possible future period in which humans develop humility towards, rather than a desire to control, their planet, while at the same time drawing upon theories of symbiogenesis in order to suggest that admixture rather than separation is the very stuff of life. Implicitly, then, Haraway understands that while human life is restricted to the (nonetheless shifting) form of each individual, who in turn must die, life itself is birth and death in equal measure. Mixing fiction with theory (for admixture is life), Haraway writes that “until sympoiesis [or the creation of new forms by merging] with the dead could be acknowledged, sympoiesis with the living was radically incomplete” (p. 157). The chthulucene as Haraway imagines it,

then, is a period in which humans do not seek to use the Earth for their own purposes, but learn once again to live in harmony with the planet. This is a possible period that replaces the so-called anthropocene, in which humans have decidedly changed the shape of their world, bringing about mass extinctions as well as perhaps rendering the planet unsustainable for human life itself. While Haraway posits a hopeful future in which humans will survive, she nonetheless suggests that this will happen through a symbiogenetic merging with other species, which Haraway argues we should consider as kin. In other words, the life that Haraway describes will no longer be human life as we know it, but a new form, or multiple new forms, of life. In this sense, Haraway, like Roy Scranton (2015), suggests that humans might do well to “learn how to die” at the end of the anthropocene, the conclusion of which will surely involve there no longer being any anthropoids left to define a -cene at all.

In suggesting that the fates of aliens and humans are entangled, *Arrival* would also seem to posit an interconnected universe in which humans would do well to stop arrogantly pursuing mere self-interest, but instead humbly to unite and to cooperate in an acknowledgement rather than a denial of their own mutually entangled state. In this way, *Arrival* might signal a “chthulucinema,” in which not only do we see depicted the anthropocene, as has been analysed by scholars like Selmin Kara (2016) and David Martin-Jones (2016), but in which we also get a sense of the chthulucene that is to follow, be it because humans simply go extinct or because symbiogenetically they are enfolded into new forms of life. In keeping with the spirit of Haraway’s wider tentacular project, we would suggest that *Arrival* offers hope for humanity rather than extinction. For, by the film’s end we know that 3,000 years hence humans will help the heptapods in their own pre-ordained experience of life and death. That is, humans have at least another 3,000 years left to live.

Now, Haraway specifically brands H.P. Lovecraft as “misogynistic” and “racist” (see Haraway, 2016, p. 101) and insists that the chthulucene is derived from “chthonic,” or that which relates to the underworld (and which for Haraway refers to the muddy earth more generally, with the human being connected to mud, or humus). However, even though she shifts an h (from Cthulhu to chthulu), Haraway’s chthulucene cannot but recall Lovecraft’s most famous monster (and if Haraway were so insistent on distancing herself from Lovecraft, why not simply call it the chthonocene?). Now, racism and sexism are never fully deterritorialised from *Arrival* (see Fleming, forthcoming). But we nonetheless wish to suggest that *Arrival*’s tentacled heptapods

positively resonate both with Haraway's chthulucene and with Lovecraft's Cthulhu, which is often represented by tentacles drooping from a heinous face. Indeed, Cthulhu is a beast from times before humanity and yet who occasionally hears a call that causes him to return to bring about the end of humanity's days. Lovecraft's Cthulhu is intimately linked, then, to the end of humanity, while also embodying precisely how division rather than unity between sexes and races is at the core of the anthropocene.

As indicated, control is a key feature of the anthropocene: the control by some humans of others in the form of enforced labour, the control of women by men, the control of the Earth for the purposes of yielding food (agriculture), the control of animals for the purposes of both labour and sustenance, and the control of the self. This latter form of control is manifested in the human desire to live forever: to control time as we seek never to grow old, never to die, via genetic engineering never to fall ill, and in the possibility both of cloning and the (flawed?) concept of uploading our entire existences into a computerised ether, the possibility of repeating life forevermore. By such measure, humans patently wish not to evolve or change, but to remain the same/to become eternal, thereby contradicting time as change. The human desire to step outside of time (and thus to become what Yuval Noah Harari [2016] might call a *homo deus* or a man-god) is not evolution, but stasis. Meanwhile, in *Arrival* Banks learns to accept evolution, hybridity, and thus death. Paradoxically, then, she learns to accept her fate rather than to destroy the world as a result of a refusal to change. And she learns this thanks to her encounter with tentacular aliens that recall Lovecraft, even if Abbott and Costello (as they are referred to in the film) bring love and not Cthulhu's hate. In this way, *Arrival* becomes an example of chthulucinema, a tentacular cinema that sees Cthulhu rise in the era of mass extinction and environmental destruction, and from which humans might learn a bit more humility (we expand significantly upon this idea in Brown & Fleming, forthcoming). In particular, with its cosmic images of hyper-objects and "3C time," *Arrival* suggests humility before eternity and the unreality/anthropocentrism of A and B/chronological time. To try to halt time, or to privilege the human over and above time, would be to end everything. Meanwhile, to change with(in) time, seen/lived/learned in *Arrival* through a dark contact lens, would be ethically to accept the universe and the cosmic. That is, spiritually to come to terms with the future, which already has been, and to become worthy of events that are yet to come and yet which have already taken place. In understanding that in some senses we are dead already, we learn to appreciate life; in refusing to die, we never truly live.

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