Article


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ARTICLE

Mind the Gap(s): Holly Sykes’s Life, the ‘Invisible’ War, and the History of the Future in *The Bone Clocks*

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David Mitchell’s *The Bone Clocks* (2014) features a complex temporal scheme. Critics have discussed the novel as an allegory of mortality and in terms of labyrinthine time and reincarnation time. I herein discuss it in terms of elided time, examining the ellipses or breaks in temporal continuity that the novel so prominently highlights. Although what we might arguably call the main narrative covers Holly Sykes’s lifetime, most of that span is not narrated. Drawing on current discussions of the Anthropocene and climate change, I explore how *The Bone Clocks*, through its narrative ellipses, spurs readers to link past causes and future effects and to pay attention to the attritional environmental destruction that is taking place across a vast time-scale. Mitchell writes a history of the future that cautions us to mind the gaps.

**Keywords:** *The Bone Clocks*; temporal structure; gaps; Anthropocene; climate change; history of the future

‘We’re complacent, humanity,’ I said. ‘All of us. People. We see the leaves cooking on the trees on a hot August day, and we still don’t believe anything’s really going to change. Our empires will go on forever.’

Neil Gaiman, ‘A Calendar of Tales’

By slow violence I mean a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all.

—Rob Nixon, *Slow Violence and the Environmentalism of the Poor*
It is the gaps in the record that provide much of its organizational structure, and hence its information content.  

—D. G. Smith et al., ‘Strata and Time’

A self-proclaimed ‘maximalist world-builder’ (Mitchell 2015: 16), David Mitchell has described each of his various novels, short stories, and libretti as ‘one chapter in a sort of sprawling macronovel’ (Mason 2010). At this point, the macronovel’s implied narrative trajectory extends from seven millennia in the past (the birth of Moombaki/Esther Little from *The Bone Clocks*) to several hundred years in the future (the post-apocalyptic world in which Zachry of *Cloud Atlas* resides). Mitchell thus draws on a vast time-scale that enables readers to draw connections between causes in the long-ago past and effects in the distant future. It is *The Bone Clocks*, in fact, that reinforces Mitchell’s macronovelistic aims, clarifying that the recurring characters are all participating in an ongoing narrative across Mitchell’s corpus.¹

Each individual narrative in this corpus occupies a discrete temporal space on a grand trajectory—a trajectory that is necessarily full of gaps. Some of these gaps are filled in by new additions to the macronovel. Thus, for example, *The Bone Clocks* gives us new information about the fates of Mo Muntervary from *Ghostwritten* (1999), Hugo Lamb from *Black Swan Green* (2007), and Dr. Lucas Marinus from *The Thousand Autumns of Jacob de Zoet* (2010). However, while filling in gaps in the timeline of the macronovel, *The Bone Clocks* pointedly draws our attention to the temporal gaps in its own storyline.

¹ Paul Harris (2015b: 148) describes *The Bone Clocks* as ‘a tightly woven text that recursively loops through Mitchell’s previous books and ultimately interlaces all his books into an intricate, sprawling intertext.’ Jacob Metz even argues that it ‘mirrors’ what he calls the ‘Über-Book’, the secret war between battling immortals that it describes both serves as a self-reflexive commentary upon Mitchell’s own project and allegorizes ‘a war between theorists, between contesting ways of thinking history, memory and the archive’ (2017: 125, 121). Metz ends with the question of whether, in creating the macronovel, ‘Mitchell is an Anchorite’ who eats the ‘souls’ of his literary children to create a ‘perpetual present’ or whether he is ‘a Horologist, archiving alternative histories, rescuing possibilities, and mobilizing revolutionary potentials.’ Although Metz provides no answer, I would argue that Mitchell’s macronovel is not, as, Metz would have it, ‘redact[ing] its own past and memories’ but enriching that past, providing sedimentary layers. See Schultz (2014) for a chart of the various characters who recur throughout Mitchell’s corpus.
With its vast time-scale, *The Bone Clocks*, like *Cloud Atlas* (2004) before it, is a novel of the Anthropocene, the geologic time period defined by humanity's impact upon the earth, including geologic-scale changes of land, rivers, and seas and an alteration of the atmosphere. Patrick O'Donnell regards the novel as 'an allegory of mortality' in which 'the planet as a whole has taken the predictable death-spiral course charted from the beginning' (2015: 158). Paul Harris discusses it in terms of labyrinthe time: 'a thought experiment about time, identity, and mortality when seen through the lens of the Anthropocene’s deep duration' (2015b: 152). Rose Harris-Birtill examines the function of 'reincarnation time' in the novel, not a 'literal belief in reincarnation but living as if the individual will be reborn to see their own behavioural consequences,' which can constitute an ethical approach to the Anthropocene (2017: 174).

I push the Anthropocene argument in a different direction by focusing on how the novel’s discontinuous structure, its deliberate withholding of key information, prompts us readers to construct cause-effect sequences ourselves. The ellipses or gaps in temporal continuity heighten our awareness of humanity’s destructive impact on our planet. The chronological storyline of the novel covers Holly Sykes’s lifetime from metaphoric birth to death, but most of that span is not narrated. Within that null narrative time, however, significant events in Holly’s life play out, a

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2 For a discussion of the Anthropocene, see Elizabeth Kolbert’s chapter ‘Welcome to the Anthropocene’ (2014: 92–110). See, too, Anthony Barnosky, who asserts, ‘The human race is impacting the planet in ways that are every bit as dramatic and lasting as what happened when that big rock fell out of the sky at the end of the Cretaceous’ (2014: 28–29). Although the designation Anthropocene has not been officially recognized, the Working Group on the Anthropocene recommended to the International Geological Congress in 2016 that it adopt the term. As Roy Scranton (2015) notes, there is debate over when the Anthropocene began: whether from the dawn of agriculture, the beginning of the Industrial Revolution, the advent of the nuclear age, or the middle of the twentieth century.

3 Harris has also noted that ‘the linear path along the narrative present is disrupted regularly and punctured with holes’ and that ‘crucial events in the storyline (including marriages, childbirths, deaths, abortions) take place “between” narrative sections and are analeptically back-filled’ (2015b: 150). His focus, however, is on the ‘unexpected twists and turns’ of the text’s ‘labyrinthine logic’ rather than the meaning of the gaps themselves. *Cloud Atlas* also features temporal gaps between each of the six stories that compose it and also arguably ‘ends’ by envisaging a destroyed planet. Yet, because it does not focus on the lifespan of one individual but deals with different characters in different time periods, its larger temporal gaps do not seem to play such a significant role.
crucial but largely invisible war between two sets of immortals takes place, and the world descends into the equivalent of ‘a plotless never-ending disaster movie’ as a result of climate change (Mitchell 2014: 551). Exploring how, through its narrative ellipses, *The Bone Clocks* offers a story of complacent disregard as the world spirals into nightmare, I argue that the novel thereby cautions us to mind the gaps—to pay attention to what Rob Nixon (2011) has termed the ‘slow violence’ of attritional environmental destruction. It is a destruction that we, like Mitchell’s characters, so often and so easily ignore and to which we actively continue to contribute.4

**The Discontinuous Life of Holly Sykes**

Claiming that *The Bone Clocks* is about Holly Sykes from birth to death may seem misleading. Certainly, Holly’s birth into adulthood and her probably imminent death bookend the novel. Holly narrates the first section, which takes place in 1984 when, in the words of her friend Ed Brubeck, her ‘second umbilical cord’ is snipped after a terrible fight with her mother and she is thus ‘ready to go off into the big wide world’ (Mitchell 2014: 39). Holly also narrates the final section of the novel, which takes place in 2043, when death—by resurgent cancer, by radioactive fall-out, or by a self-administered fatal drug overdose—looms.

But *The Bone Clocks* is not a *David Copperfield*-like ‘autobiographical’ story told from the vantage point of a single narrator whose life has reached fulfillment and who can now look back and provide a retrospective analysis linking events in a teleological pattern. Like *Ghostwritten* (1999) and *Cloud Atlas*, *The Bone Clocks* is ‘plural,

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4 The term comes from Rob Nixon’s *Slow Violence and the Environmentalism of the Poor* (2011). Nixon analyzes what he calls the ‘environmentally embedded violence’ (7) that particularly impacts vulnerable populations and that is often disregarded because its threats are geographically remote or play out across a vast time span; he focuses on various writer activists, such as Arundhati Roy and Edward Said, who have helped us apprehend such threats. The program notes to the Wilma Theater’s 2016 production of Andrew Bovell’s *When the Rain Stops Falling* (2008) brought to my attention Nixon’s text and the passage from it that I cite in my epigraph. Bowell’s time-bending play, set in London and Australia, spans from 1959–2039, focusing on complicated and dysfunctional family relationships. Like *The Bone Clocks*, it envisages a future in which, during the timespan of its characters, climate change has led to a devastated earth. As Bowell himself has said in an interview, ‘the play is itself a description of the relationship between a family saga and the Anthropocene. […] We inherit what is unresolved from the past and if we do not resolve it ourselves we pass it on to our descendants’ (2016).
polyphonic, and interconnected' (Stephenson 2011: 238) in that a number of different voices tell individual stories that ultimately harmonize. In this case, four other first-person narrators take over each of the sections that intervene between Holly's initial narrative and her concluding one: the charming but unscrupulous college student Hugo Lamb in 1991; Holly's partner, the war journalist Ed Brubeck in 2004; the downwardly mobile author Crispin Hershey from 2015 to 2020; and the 'Atemporal' (a virtually immortal being) Dr. Iris Marinus Fenby in 2025. Holly is thus relegated to a supporting role, albeit an often significant one, in other people's stories for most of the novel. These other stories are more or less self-contained. For example, Hugo Lamb's story deals with his conflict between his incipient love for Holly and a Faustian bargain wherein he could achieve immortality; the conflict is resolved when he ultimately succumbs to the latter because, in his words, 'Life is a terminal illness' (Mitchell 2014: 174). Although Holly is a vital part of Hugo's story, it is his story of opting for immortality over ephemeral human connection and love that matters.

Furthermore, much of Holly's own story occurs within the temporal gaps between each section. Indeed, what might seem to be some of the most important events in Holly's lifetime take place in these gaps: the aftermath of her brother Jacko's disappearance, Ed Brubeck's becoming Holly's partner and later, apparently, husband (she wears a wedding ring in 2025), the birth of their daughter Aoife, Ed's death, Holly's first bout with cancer and its remission, Aiofe's death. Although Harris notes that events in the storyline are ' analeptically back-filled' (2015b: 150), this back-filling is generally filtered through another narrator in summary, and it is incomplete. We are often offered tantalizing glimpses of what Holly has done in the meantime, but much is left unnarrated, thus compelling us to piece together Holly's life story. Mitchell's use of present-tense narration throughout all of the narratives

The fourth episode of the second season of the innovative television series Sense8, for which David Mitchell served as a consultant, was titled, significantly, 'Polyphony.' In it, Mitchell has a brief cameo doing a reading at San Francisco's City Lights Bookstore, and trans character Nomi and her girlfriend Amanita call him one of their favorite writers. Sense8 concerns eight characters ('sensates') who share consciousnesses with one another. This interconnectedness of the characters in the series has affinities with the interconnectedness of Mitchell's characters, perhaps not surprisingly when we consider that the Wachowski siblings, co-creators of the series, wrote and directed (with Tom Tykwer) the film version of Cloud Atlas.
(with a couple of brief exceptions) also works against the traditional autobiographical fiction structure.

If we try to determine the narrative arc for *The Bone Clocks*, we may find ourselves alternating among several different ways of thinking about the novel: it is Holly’s story from birth to death with great chunks missing; it is a collection of separate narratives, each with its own plot, for which Holly provides a connecting thread; it is a shadow narrative of two decisive battles between two groups of warring Atemporals. Or it is all of these things, with the common factor being the gaps—gaps in knowledge between one narrator and another, gaps in time between each of the sections, and even gaps in the narrators’ memories.6

One of the most sustained discussions of narrative gaps occurs in traditional phenomenological reader-response criticism, which explores gaps as indeterminacies in texts that invite the reader’s heightened participation in the meaning-making process. Wolfgang Iser argues that ‘it is only through inevitable omissions that a story gains its dynamism’: ‘Thus whenever the flow is interrupted and we are led off in unexpected directions, the opportunity is given to us to bring into play our own faculty for establishing connections—for filling in the gaps left by the text itself’ (1974: 280). Although Iser’s focus is not temporal gaps but gaps in determinate meaning, his point about the reader’s heightened involvement in attempting to bridge the gap is pertinent. As Iser notes in a later study, ‘As blanks suspend connectability of textual patterns, the resultant break in *good continuation* intensifies the acts of ideation on the reader’s part’ (1978: 189; Iser’s emphasis).7 Emma Kafalenos also provides a useful discussion of how readers process narratives ‘when information is deferred or suppressed’: ‘First we organize the events we know about in a chronological sequence and then we look for possible causal relations among chronologically ordered events’ (1999: 34, 35). Readers construct a sequence and then consider whether an event is an effect of prior events or a cause of later ones.

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6 In *Cloud Atlas*, the chronologically later narrators are aware of the chronologically earlier ones through the artefacts that they read, view, or hear. This connectedness among narrators does not occur in *The Bone Clocks*, however.

7 In this later text, Iser’s preferred term is ‘blanks,’ but the notion that what is left out prompts the reader to supply what is missing still pertains.
The key idea put forward by both Iser and Kalefanos is the way in which narrative gaps intensify mental activity on the part of the readers. Drawing on both Iser and Kalefanos, I would suggest that the intensified acts of ideation involve constructing causal connections among events both despite and because of the absence of links. What I wish to emphasize is that Mitchell compels us to pay attention to what is unnarrated, maybe even unnarratable. By minding these gaps, we readers construct the links of cause-and-effect. What has not been narrated is essential to our overall understanding of the text.

By bookending The Bone Clocks with Holly’s birth into adulthood and imminent death, Mitchell illustrates what may happen in a single lifetime—indeed, the lifetimes of us readers. Although a heartbroken runaway in 1984, Holly has at that time what we might consider a good life, a ‘normal’ life, but by 2043 she lives in the dystopic nightmare of the ‘Endarkenment.’ As I discuss in the following section, the change comes about not because of cataclysmic transformation but, in Nixon’s terms, a slow violence, which is ‘instrumental and accretive, its calamitous repercussions playing out across a range of temporal scales’ (2011: 2). In effect, the transformation from 1984 to 2043 is caused by ongoing and irreversible climate change due to human influence, which occurs over such a long duration that its effects may go unnoticed until it is too late.

The Horologists’ ‘Invisible War’

During 15-year-old Holly’s ill-fated flight from her home in the 1984 section of the novel, she is picked up by two committed young socialists, Heidi and Ian, who attempt somewhat incongruously to instruct her in the finer points of capitalism’s wrongs as they cook her a five-star full English breakfast in lavish surroundings (Mitchell 2014: 55). Heidi speaks of an ‘invisible war’ that has been going on ‘all through history’ (54). Many years later, Iris Marinus Fenby, an Atemporal now in her/his thirty-ninth or fortieth lifetime (451), speaks of ‘This never-ending accursed War’ (442). On the

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8 Forty-nine days after death, ‘Returnee’ Atemporals are born into the bodies of dying children, changing sex with each reincarnation. Marinus is the ‘true name’ (Mitchell 2014: 432) of the immortal who first makes an appearance in Mitchell’s The Thousand Autumns of Jacob de Zoet. In her 2014 interview with Mitchell, Kathryn Schultz notes how Mitchell’s later novels cause earlier ones to ‘shape-shift’: for
one hand, Heidi is referring to ‘the class war’: ‘Owners versus slaves, nobles versus serfs, the bloated bosses versus workers, the haves versus the have-nots’ (54). On the other hand, Marinus is referring to the war between the true Atemporals—specifically, a group calling themselves Horologists—and the Anchorites, a ‘pack’ of ‘carnivorous Atemporals [...] who consume the psychovoltaic souls of innocent people in order to fuel their own immortality’ (452); that is, the souls of ‘Engifted’ or psychic children are decanted into a ‘Black Wine’ that the Anchorites ritually drink.

Although the class war has a basis in reality and the Horologists’ war only in fantasy, both are inextricably linked in the world of *The Bone Clocks* and, in fact, the entire Mitchellverse. I would argue that the class war to which Heidi refers is a contributor to the destruction besetting our planet while the Horologist/Anchorite war is a trope for it. The Anchorites’ literal consumption of others’ bodies for their own gratification is analogous to the capitalist drive for consumption—for present gratification at the risk of future devastation—that fuels the reckless policies leading humanity to an environmental tipping point.

Although readers have had mixed reactions to the fantasy elements in *The Bone Clocks*, the cosmology of true and artificially-induced Atemporality that undergirds it ends up absorbing the novels that preceded it, making clear that the fantastic is integral to Mitchell’s macronovel. The motif of soul-devouring Carnivores is certainly replicated, if not always fantastically, in other Mitchell novels. I think particularly of the murderous doctor Henry Goose’s cynical assessment in *Cloud Atlas*: ‘But, Adam, the world is wicked. Maoris prey on Moriori, Whites prey on darker-hued cousins, fleas prey on mice, cats prey on rats, Christians on infidels, first mates on cabin

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For a generally positive view, see Skidelsky (2014). Although Le Guin disparages the fantasy element, she regards the novel as having ‘the quality of a true vision’ (2016: 262). For a negative view, see Collins (2014).
boys, Death on the Living. “The weak are meat, the strong do eat” (Mitchell 2004: 503). The Carnivores simply serve as fantasy equivalents of the various characters, groups, corporations, governmental agencies, authoritarian leaders, and so forth, that exploit, enslave, and destroy others in order to benefit themselves. It is perhaps not insignificant that, when the Horologist’s traitorous servant thinks that the Anchorites will reward him with artificial immortality, they instead castigate him as ‘A talentless, chakraless, brown traitor’ (Mitchell 2014: 528; Mitchell’s emphasis) before twisting his neck.

When Marinus speaks of how the Horologists have not spent their immortal lives, he implicates a mindset that, unsurprisingly, humanity often assumes: ‘if we spent our metalive amassing the wealth of empires and getting stoned on the opiates of wealth and power, knowing what we know yet doing nothing about it, we would be implicit in the psychoslaughter of the innocents’ (445). If we drop the prefixes ‘meta’ and ‘psycho’ from the sentence, it could very well refer to what has taken place and is taking place in our own world, wherein amassing wealth and power so often happens at the expense of the most vulnerable. As I have said, the Horologist/Anchorite War is analogous to the class war that Heidi describes, and the class war itself results from the drive for wealth and power that precipitates the ‘Endarkenment’ occurring in the final section of *The Bone Clocks*—a time when climate change due to corporate greed, lax policies, and individual disregard and inaction has ravaged Earth. In *This Changes Everything: Capitalism vs. the Climate*, Naomi Klein argues: ‘we have not done the things that are necessary to lower emissions because those things fundamentally conflict with deregulated capitalism, the reigning ideology for the entire period we have been struggling to find a way out of this crisis’ (2014: 18). Throughout her study, as the subtitle indicates, Klein makes a sustained case for the way in which climate change derives from capitalist ideology and that it is indeed a form of class war—an implicit argument of *The Bone Clocks* as well.10

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10 Klein (2014: 21) states, ‘our economic system and our planetary system are now at war.’ She even suggests that the climate change crisis may be exploited in the interest of capitalism: ‘rather than sparking solutions that have a real chance of preventing the catastrophic warming and protecting us from inevitable disasters, the crisis will once again be seized upon to hand over yet more resources to the 1 percent’ (8). As Klein argues, it is people living in poverty who are and will be most quickly
Like Heidi’s ‘invisible’ class war, the fantastical war between the Horologists and the Anchorites mainly takes place in the shadows—or, more precisely, the gaps. In the first four sections of the novel, we are given just enigmatic glimpses of the ongoing conflict. Horologist Esther Little’s description of precognition might serve as an apt description of our own reading experience: ‘It’s a flicker of glimpses. It’s points on a map, but it’s never the whole map’ (Mitchell 2014: 502). However, the penultimate—and longest—section of The Bone Clocks, the provocatively titled ‘An Horologist’s Labyrinth,’ is explicitly devoted to the war and much of the Atemporal mythology, and, as we readers discover, the Horologist/Anchorite conflict clearly has been taking place all along. Although not exactly transforming the previous stories, this section causes us to revise them in light of our new knowledge. The teenage Holly’s story of rebellion and loss overlays a story of the Horologist’s first and ill-fated mission against the Anchorites, which leads to Esther’s soul taking sanctuary in Holly. Hugo Lamb’s story of his venal schemes and conflict over love or immortality overlays a story of his being ‘headhunted’ (198) so that he might be trained as a ‘groomer’ (440), a sourcer of ‘prey’ (489) for the Anchorite blood rituals. Ed Brubeck’s attempts to come to grips with his traumatic experiences as a war correspondent in Iraq and to balance the demands of family and work overlay a story of Holly’s channeling of Esther Little in order to locate their lost daughter. And Crispin’s story of spiteful revenge and growing love for Holly overlays a story of an unhinged poet who stalks him in an effort to bring the Horologist/Anchorite war to light.

Whereas the invisible but influential war between Horologists and Anchorites that takes place in the gaps and shadows is fantastical, what is not fantastical is the slow destruction of the planet that occurs over Holly’s lifetime—that occurs in the gaps. There are hints early on that the world is spiraling downward. Significantly, Holly runs away during the British coalminers’ ill-fated strike of 1984–85, and, when she and Ed Brubeck break into a church for lodging, they overhear a political and negatively affected by climate change. For example, ‘In the wealthier nations, we will protect our major cities with costly seawalls and storm barriers while leaving vast areas of coastline that are inhabited by poor and Indigenous people to the ravages of storms and rising seas’ (49). Nixon’s Slow Violence also addresses this issue.
discussion, with one participant worrying about energy: ‘the North Sea oil fields won’t last forever, and then what?’ (36). When, in 2025, Iris Marinus Fenby summarizes 41 years of history for the newly embodied Moombaki/Esther Little, she notes, ‘Oil’s running out. [...] Earth’s population is eight billion, mass extinctions of flora and fauna are commonplace, climate change is foreclosing the Holocene Era’ (500). Esther herself prophesies, ‘Books’ll be back. [...] Wait till the power grids start failing in the late 2030s and the datavats get erased. It’s not far away. The future looks a lot like the past’ (502). The dystopia that we find in 2043 has been predicted all along.

What is noteworthy, however, is how oblivious Mitchell’s characters are to the inevitable fate that awaits them. What we readers see in the 2025 ‘An Horologist’s Labyrinth’ section approximates the sort of lives that many Western readers live now (that is, if Atemporals were living among us). Holly herself lives well, staying in fine hotels, jetting between Ireland and the States—and presumably increasing her carbon footprint. As she recalls after her experiences with the Horologists, ‘ordinary life carried on with the speed of time’ (554).

As is made clear in the 2043 episode, the seeds for that dystopia were planted in the earlier time periods that the novel covers. Hood, the marauding militiaman who strips the solar panels from the roof of Holly’s neighbor Mo Muntevary, tells her, ‘Your power stations. Your cars. Your creature comforts. Well, you lived too long. The bill’s due’ (599). When Mo accuses him of ‘reinstating the law of the jungle,’ he replies, ‘you were bringing it back, every time you filled your tank’ (600). Hood makes clear that past action (or inaction) on Holly’s and Mo’s part helped determine the present in which they find themselves, as Holly herself realizes. When her adopted grandson Rafiq says he wants to be an engineer who will ‘fix stuff, build stuff, move stuff [...] but do it all without oil,’ she thinks to herself ‘And start forty years ago’ (589; Mitchell’s emphasis). Mitchell suggests that we may already be too late to fix the problems.

Of relevance is Elizabeth Kolbert’s *New Yorker* article on Greenland’s melting ice sheet. Kolbert states: ‘The climate operates on a time delay. [...] [T]he warming that’s being locked in today won’t be fully felt until today’s toddlers reach middle age. In effect, we are living in the climate of the past, but already we’ve determined the
climate’s future’ (2016: 61). Holly’s unvoiced response to Rafiq, ‘And start 40 years ago’, would mean starting in 2003; we might keep in mind that, although Al Gore’s sobering documentary An Inconvenient Truth appeared in 2006, warnings about climate change had been sounded much earlier than that. As Kolbert makes clear, in the life of the planet, much of the future already exists. Thus Mitchell’s fiction appears anything but speculative.

Mitchell is himself writing within a gap. The devastating effects of climate change have already been put in place and will happen, but we are not taking the actions needed to mitigate them and are even exacerbating them. I write in the wake of the current US president’s indefensible withdrawal of the nation from the Paris climate accord, his systematic dismantling of the US Environmental Protection Agency, and his opening up of the Pacific, Atlantic, and Arctic Oceans to offshore drilling. These actions both work against the global cooperation necessary to tackle climate change and involve the repeal of regulations intended to mitigate it.

To use a phrase that recurs in various forms throughout The Bone Clocks, we might say that the future of the planet already been ‘Scripted’ (61, 261, 498). In The Bone Clocks, the ‘Script’ influences the war between Atemporals, which takes place over a vast temporal span, and to what extent the events in the war are pre-determined is left ambiguous. However, Mitchell implies that the effects of climate change have already been put in place.12

The obliviousness of Mitchell’s characters to this ‘Scripted’ future destruction is in keeping with humanity’s own behavior. In his worrisome study Don’t Even Think About It: Why Our Brains Are Wired to Ignore Climate Change, George Marshall explains how ‘More than any other issue it [climate change] exposes the deepest workings of our mind, and shows our extraordinary and innate talent for seeing only

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11 See, too, Scranton (2015), who says of global warming, ‘we have likely already passed the point where we could have done anything about it.’

12 The term ‘script’ is itself intriguingly ambiguous, for it can refer to the written text of a play or a film, which allows some leeway regarding the actual production, or an executable section of computer code, which is deterministic. Esther Little suggests that the cassette intended for Marinus, which she leaves with a Norwegian educator, may or may not ever be posted, thus indicating that the Script may not be fixed. She is certain, however, that the power grids will fail in the late 2030s (409–10, 502).
what we want to see and disregarding what we would prefer not to know’ (2014: 2).

As he points out, ‘in high carbon societies, everyone contributes to the emissions that cause the problem and everyone has a strong reason to ignore the problem or to write their own alibi’ (42). This ‘existential threat on a scale equaled only by nuclear war […] contains threats at every level: to our sense of place, our identity, our way of life, our expectations of the future, and our deepest instincts that lead us to protect our children and defend our tribe’ (229). Yet we, like Mitchell’s characters, continue to maintain our ‘socially constructed silence’ (82), participating in ‘a crime that [we] have knowingly agreed to’ (70). We are, in fact, living in the gap between causes and slowly accreting effects.

It might seem as if we were ourselves voluntarily submitting to the ‘Act of Hiatus’ (Mitchell 2014: 482) and the redaction of memories to which each of Mitchell’s narrators except Marinus involuntarily submits. Performed by an Atemporal, the Act of Hiatus freezes an unsuspecting mortal in time, and the redaction takes away a memory of a particular event. Both create gaps in time. Esther Little, for example, redacts young Holly Sykes’s memories from the time that she meets Heidi and Ian until she wakes near the bridge to the Isle of Sheppey. Holly loses crucial information about the violent battle that Esther and Marinus wage against the murderous Anchorite Joseph Rhîmes, although the memory loss is a merciful one in this case. I disagree with O’Donnell’s point that Holly is ‘authoring’ the 1984 story from the position of the future perfect, the ‘was to have been’ of a fragment of recovered memory, and from the perspective of a much older Holly Sykes’ (2015: 160). Mitchell stays with the present tense for all his narrators, as I mentioned earlier, and we have no sense of a retrospective narration on any of their parts. Holly conveys what happens with Heidi and Ian as it happens, but then the memory is gone, and white space physically marks the gap in the text. When Holly comes to with the sun beating on her neck, she wonders why she is having ‘sausagey burps’ from the breakfast she no longer remembers (69). This motif of memory loss reinforces our sense of the characters’ obliviousness to the future that lies in wait.

The most important of Mitchell’s gaps is that between the 2025 ‘An Horologist’s Labyrinth’ and the 2043 ‘Sheep’s Head.’ Within that eighteen-year gap, the world
falls apart. Food and fuel shortages are rampant, the only power to be had is solar (if one can keep solar panels out of the hands of marauders), gigastorms snap hundreds of airliners in one blow, ‘Ratflu’ wipes out populations, people scavenge for ‘things we used to give to charity shops or send to a landfill’ (570), and roving gangs of ‘Jackdaws’ pillage what little is left. When, in 2043, Holly reads ‘an old copy of *The New Yorker*’ from December 2031, she ‘marvel[s] at the adverts and wealth that existed so recently’ (583).\(^{13}\)

The fantasy war of 2025 gives way to the fantasized bleak reality of 2043, a reality that could, in fact, occur within present-day readers’ lifetimes. Mitchell’s choice of the year 2043 is significant, for scientists are becoming increasingly confident about the dire effects of climate change that will occur by mid-century.\(^{14}\) Over the eighteen year gap, Mitchell takes us readers from a world of Holly’s *New Yorker* adverts and wealth to a world such as that predicted in Kolbert’s *New Yorker* article, one in which the rapidly melting Northeast Greenland Ice Stream on its own ‘has the potential to raise global sea levels by three feet’ (2016: 54). Of course, in the years between 2025 and 2043, catastrophes have happened although Holly has trouble remembering which happened when because of their pervasiveness: ‘Footage of catastrophes flowed so thick and fast through the thirties that it was hard to keep track of which coastal region had been devastated this week, or which city had been decimated by Ebola or Ratflu’ (551). Mitchell, however, elides this in-between time to shock us with the contrast between life as we readers know it and global apocalypse, and to drive

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\(^{13}\) O’Donnell remarks upon ‘the end of many aspects of modern existence’ that occurs within Holly’s lifetime: ‘The utopic future promised by technocratic capitalism—universal access to knowledge, information, and an infinite array of products in a global consumerist social order—has mutated during the single generation of Holly’s lifetime into its dystopic counterpart [...]’ (2015: 179). Significantly, the mutation that O’Donnell describes has occurred within the gaps.

\(^{14}\) As Marshall notes, contemporary scientists have confidence about what will be happening to the climate around the middle of this present century: ‘Scientists, though, always stress the importance of natural variability in climate systems and only start to express confidence in their models in the time horizon that most people see as being beyond their immediate concerns—typically 2050, a date that researchers have found to be set so far in the future as to be ‘almost hypothetical’ for the general public’ (2014: 63). Marshall suggests that the critical four-degree Celsius rise in temperature could occur by the 2070s, but there are even predictions that it could occur by mid-century (241, 242). See also Klein, who discusses not only a four-degree rise but also a possible six-degree one (2014: 13–15).
home the ultimate consequences of behaviors that are easy to disregard because of the time delay of their effects.

Mitchell brings the threats home by exploiting the time delay between sections, compelling us to confront what exists in the gaps. Iser’s point about the ‘unwritten’ is pertinent: ‘the written part of the text gives us the knowledge, but it is the unwritten part that gives us the opportunity to picture things; indeed, without the elements of indeterminacy, the gaps in the text, we should not be able to use our imagination’ (1974: 283). Whereas the human tendency, as Marshall (2014) notes, is to ignore humanity’s ongoing contribution to our planet’s destruction, Mitchell’s gaps bring our imaginative activity to the fore, enabling us to picture what has brought the planet to the state that Holly describes.15 We readers must fill in the gaps and make the causal connection between where we are today and where we might very well be in the not-too-distant future.

In the penultimate section of the novel, the Horologists, at great cost, win their war against the Anchorites, destroying the Chapel of the Dusk and wiping out most of its adherents. Holly is saved, and we have a provisional happy ending.16 But, as we discover in the final section, the real war—the war on the planet that may lead to humanity’s own Endarkenment—has apparently been lost. A new incarnation of Marinus, Harry Veracruz, rescues Holly’s two grandchildren, taking them to the relative safety of Iceland, with its geothermal electricity, medicines, and dentists (although, presumably, no more ice). Iceland, however, appears to be the only locale where a pre-Endarkenment life can take place. In Sheep’s Head, the Net has frayed beyond repair, the Pearl Occident Company that has been protecting ‘the Corden’ in Ireland has withdrawn its protection, warring factions beset the village, and the east wind blowing from England may be carrying radioactivity from a broken nuclear reactor. A fantastical Atemporal may whisk Holly’s beloved grandchildren to safety, but Mitchell implies that there may be no ‘lifeboat and miracles’ (569) for those of us

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15 For another take on how Mitchell compels us to be future thinking, see Harris-Birtill’s (2017) discussion of ‘reincarnation time.’

16 In Slade House, Mitchell shows that the soul of at least one particularly virulent rogue carnivore is still on the loose, however.
whose lifespans coincide with Holly’s. Irreversible processes are already at work, and the ‘vivid illustrations of climate change’ that are now ‘everywhere’ (Kolbert 2016: 61) are but a forerunner of many more dire things to come.

Reinforcing Mitchell’s macronovelistic aims, the post-apocalyptic ending of *The Bone Clocks* connects with the post-apocalyptic chronological endpoint of *Cloud Atlas*, ‘Sloosha’s Crossin’.’ Significantly, Harry Marinus Veracruz tells Holly that in Iceland some of the remaining Horologists ‘operate a think tank’ (619) called ‘Prescience.’ In Zachry’s post-apocalyptic world in *Cloud Atlas*, the last vestiges of civilization seem to be in the hands of a ‘tribe’ called Prescients, who come from ‘an isle named Prescience I […] far-far in the northly blue’ (Mitchell 2004: 248). *Cloud Atlas* anticipates the environmental destruction that we see in *The Bone Clocks*. However, its ‘boomerang’ structure, whereby the novel moves backwards from Zachry’s tale to the narrative with which the novel began, suggests a more hopeful stance on Mitchell’s part that the dire future might be averted if, like the first narrator Adam Ewing, humanity begins to act now.

*The Bone Clocks* intimates that humanity may be too late—we may already be doomed. In her review of *The Bone Clocks*, Ursuila K. Le Guin notes, ‘death is at the heart of this novel. And there lies its depth and darkness. […] And in it, under all the klaxons and saxophones and Irish fiddles, is that hidden, haunting silence at the centre’ (2016: 262–63). Interestingly, in *Don’t Even Think About It*, Marshall’s comment makes the connection between climate change and peoples’ awareness of their mortality: ‘so many thoughtful people […] have spontaneously suggested in my interviews that climate change might be a proxy for death’ (2014: 209)—not simply the ‘hidden, haunting silence’ that awaits us individually but perhaps that awaits our species as well. As Kolbert points out in *The Sixth Extinction*, our disruption of ‘the earth’s biological and geochemical systems’ has put ‘our own survival in danger’ (2014: 267). Indeed, Roy Scranton bluntly notes that ‘this civilization is already dead,’ claiming that ‘in the world of the Anthropocene, the question of individual morality […] is universalized and framed in scales that boggle the imagination’ (2015). At the

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end of *The Bone Clocks*, Holly's impending death is a given; in creating the future world in which she resides, Mitchell suggests that humanity's may be as well.

**Writing the History of the Future**

‘Writing the history of the future’ has become a strategy for organizations, helping them envision and bring about positive outcomes. As futurist Chunka Mui (2015) notes, ‘Future histories fulfill our human need for narratives. [...] We need stories to crystallize and internalize abstract concepts and plans. We need shared stories to unite us, and guide us toward a collective future.’ But writing the history of the future is not simply a strategy to help organizations prosper. Rob Nixon suggests that narrative becomes a means for dealing with the threat posed by climate change:

> To confront slow violence requires, then, that we plot and give figurative shape to formless threats whose fatal repercussions are dispersed across space and time. [...] Imaginative writing can make the unapparent appear, making it accessible and tangible by humanizing drawn-out threats inaccessible to the immediate senses. (2011: 10, 15)

Mitchell gives figurative shape to those formless, dispersed threats that beset us by traveling across space and time to highlight their consequences. He seamlessly melds historical fiction (from 1984) and speculative fiction (to 2043). In some sense, the accounts of a real past and a speculative future ratify the latter. If we can believe in a 15-year-old Holly who chucks her *Fear of Music* album into the Thames, we can also believe in a 74-year-old Holly whose dog, fittingly named Zimbra, kills a henhouse-raiding fox. Mitchell’s history of the recent, recognizable past facilitates his writing the history of the future.

More importantly, it is the gaps in Mitchell’s narrative that make this history of the future so powerful. As we attempt to put together a history of Holly Sykes, we readers are prompted to imagine what took place in the time periods left unnarrated. As we read of the centuries-long ‘invisible war’ between the Horologists and the Anchorites, we are prompted to consider the often unseen destructive forces in our own lives, including those that take place over vast time periods. ‘What is concealed spurs the reader into action,’ Iser states (1978: 169), and the gaps in *The Bone*
Clocks may not only spur us to imagine what has led to the dystopian vision of the future Mitchell envisions. They may also spur us to imagine what we might do to achieve, in Mui’s terms, ‘the collective future’ wherein humankind can survive and thrive. Mitchell writes, and we readers live, within the gap between the past causes of climate change and their future effects. We cannot avert those effects that are on a time delay. We cannot, in Holly’s words ‘start 40 years ago’ (Mitchell 2014: 589) nor can we ‘change the past’ (329), as Crispin regrettfully realizes. But, by minding the gaps and considering the often imperceptible destructive forces that are already at work, we can—perhaps—avert some part of the grim future that Mitchell has envisioned. As Holly’s great-aunt Eilish tells Brubaker, ‘We all of us have less time than we think, Ed’ (262).

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References


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