CORA Cork Open Research Archive
Cartlann Taighde Oscailte Chorcaí

Title	Patterns of interference: The ethics of diffraction in Mike McCormack's solar bones
Authors	O'Connor, Maureen
Publication date	2021-07-30
Original Citation	O'Connor, M. (2021) 'Patterns of Interference: The Ethics of Diffraction in Mike McCormack's s Solar Bones', In: Hughes, I., Byrne, E., Mullally, G. and Sage, C. (eds.) Metaphor, Sustainability, Transformation: Transdisciplinary Perspectives. Abingdon, Oxon: Routledge. https://doi.org/10.4324/9781003143567-17
Type of publication	Book chapter
Link to publisher's version	https://doi.org/10.4324/9781003143567-17 - 10.4324/9781003143567-17
Rights	This is an Accepted Manuscript of a book chapter published by Routledge in Metaphor, Sustainability, Transformation: Transdisciplinary Perspectives on 30 July 2021, available online: http://www.routledge.com/9781003143567
Download date	2026-11-15 13:16:58
Item downloaded from	https://hdl.handle.net/10468/13827



UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Maureen O'Connor

Patterns of Interference: The Ethics of Diffraction in Mike McCormack's *Solar Bones*

Few social problems or political conflicts can be considered without taking into account the environmental dimension, especially the fact of diminishing resources along with the suffering, forced migration, and violent conflict to which these changing conditions give rise. The humanities are central to understanding the issues at the core of such crises, including the ways in which the environment is represented and how the role of the human in nature has been theorised and understood. The field of environmental humanities addresses this urgent and ethical need. Ecocritical theory was first developed in literature departments in North American universities in the 1990s. In the ensuing decades, ecocriticism as theoretical praxis has extended well beyond literature and beyond the humanities, though its literary origins remain influential, if not always acknowledged, due to the power of narrative, recognised by environmental theorists across disciplines. For example, in outlining the problems of enshrining dangerous nature/culture dualism in the increasingly cited idea of the "Anthropocene," historian Jason Moore locates the argument's influence in its "storytelling power" (82). Biologist-philosopher Donna Haraway shares Moore's reservations about the limitations of the human-centring implicit in presenting the Anthropocene as a story about the dynamic "ongoingness" of being, arguing that the "practice of thinking […] must be thinking with: storytelling. It matters what thoughts think thoughts; it matters what stories tell stories" ("Trouble" 42).

Recent environmental commentators, including Moore and Haraway, have offered a less hopeless narrative than the teleological Anthropocene plot, shifting the focus away from fatalistic humanity-blaming scenarios about imminent environmental collapse, proven to be

counterproductive. They suggest more positive engagements with the threat posed by climate change; in the words of Haraway, “I want to make a critical and joyful fuss about these matters […] and the only way I know to do this is in generative joy, terror, and collective thinking” (“Trouble” 34). One source of generative and joyful collective thinking with promise for understanding the place of humans in the world is the work of ecofeminist scholars, particularly in the field of new materialism, which can be both illuminating and inspiring. Haraway, Karen Barad, Stacy Alaimo, Serenella Iovino and Serpil Opperman, who often write together, Jane Bennett, Iris Van der Tuin, and Rosa Braidotti are some of the important contributors to this field. The material turn in ecological humanities seeks to destabilise conventional notions of subjectivity, to argue against the idea of independent entities, to understand ourselves and everything around us, seen and unseen, as phenomena in an ongoing process of “becoming” through relationships and interactions with other phenomena. An historically entrenched perception of radical discontinuity between the human and the nonhuman has had disastrous consequences for the environment and all the planet’s inhabitants. Metaphors have been instrumental in the arts and sciences in establishing and perpetuating the idea of objective, scientific “truth” regarding the natural world and natural phenomena. The figure of the mirror that science holds up to its subjects in order to deliver unproblematic, unbiased reflections is one such metaphor. These metaphors have both relied on and created the dangerous concept of “nature” as something unchanging and ahistorical, as constitutively “other” to the human realm of culture.

In her 1992 book, *Promises of Monsters,* Haraway first proposed another metaphor for the relationship between the observing human consciousness and the finally unknowable world around us: diffraction, a different approach to understanding physical phenomena, one that accepts the incomplete nature of human knowledge, that recognises and even embraces the unstable, the plural, and the partial. Tracing the origins of the deployment of this

metaphor and its application in critical humanities, Birgit Mara Kaiser and Kathrin Thiele have summarised its significance: “Drawing on physical optics, where it describes the interference pattern of diffracting light rays, Haraway adopted diffraction to move our images of difference/s from oppositional to differential, from static to productive, and our ideas of scientific knowledge from reflective, disinterested judgment to mattering, embedded involvement” (165). As a metaphor for thinking our place in the world, diffraction extends beyond its origins in science. As Barad has observed, “Diffraction owes as much to a thick legacy of feminist theorising about difference as it does to physics” (“Diffracting” 168), and “attends to the fact that boundary production between disciplines is itself a material-discursive practice” (*Meeting* 90). As a metaphor, then, diffraction, by definition, cannot be restricted to its “original” disciplinary context. According to Haraway, “Diffraction patterns record the history of interaction, interference, reinforcement, difference. Diffraction is about heterogeneous history, not about originals. Unlike reflections, diffractions do not displace the same elsewhere, in more or less distorted form, thereby giving rise to industries of metaphysics” (*Modest* 273).

Enthusiastically adopted by other thinkers like Barad and van der Tuin, this metaphor can keep us—literally—grounded, grappling with the material, rather than retreating into transcendent, invisible positions of objective authority. Diffractive reading asks that we truly inhabit our critical positions as well as our environments. Barad argues that “Diffractive readings bring inventive provocations; they are good to think with. They are respectful, detailed, ethical engagements” (Interview 50). The 2016 prize-winning novel, *Solar Bones*, by Irish writer Mike McCormack, not only directly addresses the ecological destruction brought about by late capitalism in twenty-first century Ireland, but also, in the text’s innovative form, enacts the crisis through a diffractive aesthetics of fragmentation and heterogeneity that reveals unsuspected but vital continuities and connections, an example of

"respectful, detailed ethical engagement" with our place in the environment as well as our responsibilities.

Solar Bones is narrated in first-person by a middle-aged family man, Marcus Conway, in a kitchen just outside of the village of Louisberg in County Mayo, where he waits for his wife to return from work. The novel is a single, unbroken sentence, unostentatious in its structural virtuosity, appropriately so, considering Marcus is an engineer obsessed with unseen but vital supporting structures and systems. Textual rhythms and pauses are achieved by apparently random, but ingeniously crafted line breaks so that the prose is delivered, as Martin Ryker describes it, "as if spoken by a friend across the table." The flexibility of this prose style, the openness of its interrogative mode, and its avoidance of even the benign authority of the full stop are formal qualities inextricable from the environmental themes of the novel that trace the enmeshed nature of all phenomena. In the first few pages Marcus, who is scanning the newspapers, refers to an "environmental campaigner who has been on a hunger strike" against the Corrib gas pipeline (10) and a story about "an asbestos conversion plant which will form part of a massive toxic dump to process industrial and medical waste" (12). This last story prompts a childhood memory of Marcus's father working on the construction site of an acrylic yarn factory where "the manufacturing process would utilise a highly toxic compound […] a chemical that would have to be transported overland in the middle of the night under security escort, shipped in double-hulled, crash proof containers," a recollection suffused with a "credible apocalyptic glow," in the light of which his father appears "fearless, heroic" (13). As it unfolds, the novel dedicates much of its energies (and the narrator's) to attending to Mairéad, Marcus's wife, who becomes stricken with cryptosporidiosis, a water-borne disease caused by another environmental disaster, the fecal contamination of Galway's water supply.

The novel's narrative voice is not especially authoritative, nor, despite being first person, does it comfortably occupy a stable subject position. There is no plot; the text proceeds associatively, dissolving and resolving by turns, "swept up in that sort of reverie which has only a tangential connection to what you were thinking of" (McCormack 15). Movement through the novel is horizontal, rhizomatic in offering multiple entry and exit points. The grammatical structure relies on juxtaposition and parataxis; no subject, or train of thought, or even phrase is subordinate to any other. In place of linearity, the text is patterned by interference; the speech, thoughts, and actions of others repeatedly, and productively, interrupt and distract the narrator, as do his own thoughts and recollections. Some of these effects emerge from Marcus's own radical ontological indeterminacy: he is a ghost returning to the family home on All Souls' Day, though he does not realise this until the last pages when he recalls the day of his death months earlier. This layer of "unreality" allows for a narrative that is not traditionally representational, a narrative that both requires and performs a diffractive reading, which "denote[s] a more critical and difference-attentive mode of consciousness and thought" (Geerts and van der Tuin). In her book, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, Barad, whose training is in quantum physics, reveals, through diffraction, "the entangled structure of the changing and contingent ontology of the world, including the ontology of knowing" (73). Reading phenomena diffractively is at the centre of Barad's account of agential realism, which posits that "knowing, thinking, measuring, theorizing, and observing are material practices of intra-acting within and as part of the world" (*Meeting* 90). As a structural engineer, Marcus has been keenly involved in measuring and observing all of his working life, appearing to think more deeply about the implications of these actions than many of his peers. In Barad's relational otology and epistemology, "all bodies, not merely human bodies, come to matter through the world's performativity—its iterative inter-activity" ("Queer" 32).

Marcus's intense interest in the structure of all phenomena, human and nonhuman, animate and inanimate, imagined and experienced, provides a compelling literary instance of Barad's diffractive agential realism, with Marcus practising a kind of diffractive methodology himself, in his attention to "fine-grained details" (*Meeting* 90).

Suggesting connections between science and literature is nothing new, though such a link is rarely noted in discussions of *Solar Bones*, the important exception being Sharae Deckard's praise for the novel's foregrounding of "subjects which are often absent or obscure in Irish literary fiction: politics, economy, science." Deckard considers *Solar Bones* to be the "fullest expression" of McCormack's career-long preoccupation "with the way science and technology shape everyday life." Most reviews have made comparisons with the work of Irish Modernist James Joyce, writing and publishing a hundred years earlier. Joyce was composing his late work when quantum mechanics and quantum physics were first theorised, developments of which Joyce was aware and to which he refers in his correspondence and fiction.[1] Andrzej Duszenko has demonstrated that, by the time Joyce was writing his last novel, his working method had become more "scientific":

> the development of a philosophical interpretation of quantum phenomena coincided with the writing of *Finnegans Wake* […]. Joyce, submerged in his new work and as always sensitive to anything that could support his ideas, found quantum physics fitting for inclusion in his project. In *Finnegans Wake* he made use not only of the ontological and epistemological implications of particle physics, but he also enriched his work with numerous references and allusions to specific elements of the subatomic realm that twentieth-century physics finally managed to uncover. (272)

[1] In 1963 physicist Murray Gell-Man reciprocated this interest by using the word "quark" from *Finnegans Wake* to name a then-theoretical subatomic particle of matter smaller than the smallest elements known at the time.

Marcus is a revenant haunting his own life, while the text is haunted by the spectre of Joyce, including a largely unacknowledged indebtedness to theories from sciences and other discourses. Haunting inheres in diffraction, as Barad explains, when describing the way experiments with diffraction undo our perceptions of separation, of hard edges and outlines: "Darkness is not mere absence, but rather an abundance. Indeed, darkness is not light's expelled other, for it haunts its own interior. Diffraction queers binaries and calls out for a rethinking of the notions of identity and difference" ("Diffracting" 171). The hauntings in the novel include, then, not only Marcus's spectral appearance in the family home and the ghosts of Irish writing past, but also alternative, "queer" visions, different from those conventionally allowed to be imagined, of identity, being, time, and even difference itself.

A diffractive methodology moves away from "familiar habits and seductions of representationalism" (Barad, *Meeting* 88), which could also describe Modernist formal experimentation, but, as Ryker notes of *Solar Bones*, the novel is a "wonderfully original, distinctly contemporary book with a debt to modernism but up to something all its own." Barad's formulation of diffractive methodology demands an analytic practice that is not "a self-referential glance back at oneself" that "reflect[s] the world from outside," but requires instead "understanding the world from within and as part of it" (*Meeting* 88). *Solar Bones* is as preoccupied with the partial and fragmented as earlier Modernist work. However, while the subjective artist-self treated heterogeneity as threatening material to be hastily assembled into a new whole, as when T.S. Eliot famously referred to "these fragments I have shored against my ruins," McCormack's text emerges as part of a larger, constant re-configuring of the world. The novel is, from the outset, aware of the process of world-making as an ongoing, dynamic phenomenon, reliant on multiple actors, human and nonhuman, all "materially engaging as part of the world in giving it specific material form" (Barad, *Meeting* 91). Marcus begins by describing himself as:

here

standing in the kitchen

hearing this bell

snag my heart and

draw the whole world into

being here (1-2)

The environmental implications of such an understanding of the world as process are clear, as Haraway has observed: “A common livable world must be composed, bit by bit, or not at all. What used to be called nature has erupted into ordinary human affairs, and vice versa, in such a way and with such permanence as to change fundamentally means and prospects for going on, including going on at all” (“Trouble” 45). Marcus hears the bell contributing to the never-ending re-configuration of the parish and the village of Louisburg, and, therefore, to the whole world’s constant renewal, which has been in process since the “beginning of time”:

drawing up the world again

mountains, rivers and lakes

acres, roods and perches

animal, mineral, vegetable

covenant, cross and crown

the given world with

all its history to brace myself while

standing here in the kitchen (3)

The theme of re-constitution as dynamic and ongoing necessarily challenges stable subject-object dichotomies. The novel does not posit the universe as random disorder for which we can abdicate responsibility, but a protean assemblage in which every part, from the

microscopic to the vast, plays a role and has a connection, or connections, to every other part, if of varying intensities and proximities.

The “luminous bones” of the title refer, inter alia, to sections of a disassembled wind turbine, a symbol to Marcus of a failure of imagination, “the world forfeiting one of its better ideas” (25). It is telling that this defeat in the struggle to imagine a new and better world incites in Marcus, “a renewal of that same old anxiety I had experienced as a nine-year-old” (25), as he recalls his father dismantling a tractor engine. For Marcus, the image evokes “the beginning of the world, the chaotic genesis which drew it together and assembled it from disparate parts” (26). Marcus speaks of himself as similarly susceptible of reassemblage: “my own heartbeat suspended in mid-air, nothing but a fat systolic contraction of the light, waiting for the dawn and the sun to shine upon it so that I might coalesce around it once more flesh and blood / time and again” (150). When he says this, Marcus does not yet realise that he is a revenant whose “coalescence” does not bear the same relationship to time and space as did his mortal form. His anomalous status affords a kind of diffractive perspective:

> Diffractions are untimely. Time is out of joint; it is diffracted, broken apart in different directions, non-contemporaneous with itself. Each moment is an infinite multiplicity. ‘Now’ is not an infinitesimal slice, but an infinitely rich condensed node in a changing field diffracted across spacetime in its ongoing iterative repatterning.” (Barad, “Diffracting” 169)

In this text, the extreme gothic version of “loss” of self and identity through death enables ethical insights into the constitutive patterns and connections amongst all phenomena, insights that decentre the human subject, including conventional androcentric understanding of space and time.

In a diffractive reading, space and time “are intra-actively produced in the making of phenomena; neither space nor time exist as determinate givens, as universals, outside of

phenomena" (Barad, "Entanglements" 260-1). In its representation of time and space as collaborative processes, the novel also acknowledges the historicity of all matter, with implications for the self's contingent plurality:

> all things are out of sync and kilter, things as themselves but slightly different from themselves, every edge and outline blurred or warped and each passing moment belated, lagging a single beat behind its proper measure, the here-and-now beside itself, slightly off by a degree as in
>
> a kind of waking dream in which all things come adrift in their own anxiety
>
> (McCormack 91)

"Things" described here have anxiety and lack clear outlines and self-similarity, things that include the narrator, whose altered relationship to time and space increases his sensitivity to his status as a phenomenon amongst phenomena. Barad observes of diffractive reading that "Past' and 'Present' are iteratively reconfigured and enfolded through the world's ongoing intra-activity […]. Phenomena are not located in space and time; rather phenomena are material entanglements enfolded and threaded through the spacetimemattering of the universe" ("Entanglements" 261).

Marcus becomes most acutely aware of the enfolded nature of all phenomena when his wife falls desperately, frighteningly ill, and the very house seems to pulse with her fever, an uncanny experience of dissolved boundaries and distributed agency that initially reminds Marcus of another crisis decades earlier when Mairéad left the family home for seven weeks, while pregnant with their first child after discovering her husband's infidelity. That earlier experience of unravelling loneliness and loss made household objects also seem poised for flight: "everything slowly shifting through the house as if they had a meeting to keep somewhere else, possibly in some higher realm where all this chaos would resolve into a refined harmony which had no need of my hand or intervention" (166). Marcus abnegates

any possibility of authoritative consciousness, of acting as a powerful, ordering subject. This is a point in the text when Marcus's own ghostliness begins to make itself felt, though not fully understood, through a growing understanding that his sensations don't "belong" to him and never have. The sound of the "interference" on the radio that won't quite resolve into intelligible sounds (187) echoes the "interference" he had been experiencing whenever he struggled to communicate through Skype with his backpacking son thousands of miles distant (149). Ideas of "here" and "there," "then" and "now" grow less secure. Marcus feels "all things, myself included, suspended in a kind of stalled duration, an infinity extended moment spinning like an unmeshed gear […] / time itself could decay here, lapse completely" (230). Not yet fully aware of his own altered state, he nonetheless returns repeatedly to his wife's earlier illness, *her* brush with mortality. He remembers a protest piece by his daughter, Agnes, an artist whose work combines activism and performance, staged in Galway, the source of the cryptosporidium parasite that infected Mairéad and hundreds of others in 2007. Marcus sees the city itself is a suffering body and consciousness during the outbreak, when it "began to inhabit a kind of dreamtime when its past and future unfolded simultaneously, a while city dreaming itself […] every part of it twitched between its real existence and its own dream-life where it morphed through all the changes of itself, its history unfolding in an ongoing delirium" (233).

This picture of Galway parallels an earlier description of Marcus's feelings of helplessness and metaphysical infection in the face of his wife's serious illness: "drifting in that state between sleep and waking it is easy to believe that I inhabit a monochrome X-ray world from which I might have evaporated, flesh and bone gone, eaten up, not by any physical rot or wasting but by some metaphysical virus which devours and leaves nothing of me behind" (150). Galway is given a momentary embodied realism, as fleeting and flickering as Marcus's own. He repeatedly grants a kind of subjectivity and agency to nonhuman

entities, especially cities and buildings, but also other environmental elements such as "mountains, rivers and lakes," one of the novel's incantatory refrains. In a moment of unconscious irony, Marcus refers to his house, a "living pulsing thing," as "flickering" with its own "ghost neurology" (150). His expansive and flexible understanding of identity is a diffracted one. According to Barad, "*Identity is a phenomenal matter; it is not an individual affair. Identity is multiple within itself, or rather, identify is diffracted through itself"* ("Queer" 32; italics in original). This shared and distributed model of subjectivity and agency is not simply or naively assuasive, but implies shared suffering, a significant moral element in the novel. As Barad observes, "The existence of indeterminacies does not mean that there are no facts, no histories, no bleeding—on the contrary, indeterminacies are constitutive of the very materiality of being, and some of us live with our pain, pleasure, and also political courage" ("Diffracting" 177). If health is traditionally associated with "wholeness," it is fitting that Marcus often uses metaphors of illness and suffering to articulate connection across phenomena, as when the house pulses in sympathy with its ailing inhabitant, and Marcus's thoughts drift to avian flu: "God's creatures bound together in common suffering, our aches and pains one and the same as those of the duck and the turkey and the chicken" (174-5). This entangled existence is messy and troublesome. Haraway refers to the need to "build attachment sites and tie sticky knots to bind intra-acting critters, including people, together in the kinds of response and regard that change the subject—and the object" (*Species* 287).

The intra-acting "critters" recognised in the novel, for good or ill, include viruses and parasites. Cryptosporidium is described sympathetically as "circl[ing] back to its source to find its proper home where it settled in for its evolutionary span , rising through every degree of refinement […] we would be host to this new life form" (125), an acknowledgement of the

uncanny multiplicity and dependency of human bodies.[2] The novel constantly returns to Mairéad's illness, to descriptions of the sweat, vomit, and diarrhoea that confront Marcus with the unstable contours and borders of the human body. Mairéad fills the sickroom "with a stench beyond what was human, as if her very soul was being drawn from her body, out through the pores of her skin" (122). Another bodily excretion undermining dangerous illusions of human singularity and separateness is deployed by Agnes in her first solo exhibition, transcriptions of court reports detailing violence, abuse, and crime from local newspapers, written in the artist's own blood. Marcus is unnerved by the experience, as his child's blood becomes

> a red mist that suffused the weak evening light […] a light so finely emulsified that we might take it into our very pores and swell on it, so that even if the crowd broke up the continuity of the space there was no doubting that the light served to make everyone a part of a unified whole […] Agnes's blood was now our common element, the medium in which we stood and breathed (46)

While Marcus is overcome to the point of having to leave the exhibition, he finds himself reflecting later on the sense of connection engendered by the event when listening to country music, relishing the melancholic knowledge "that we are all part of the world's heartache, its loss and disappointment mapped out in the songs" (75).

The series of revelations Marcus experiences over the course of the novel regarding phenomenal "entanglement" and commonality are in contrast to the "stable and unified" world of his "childish imagination" (23), first challenged, paradoxically, by an intended demonstration of his father's mastery. Brooding over images of collapse and decay—

[2] As James Gallagher recently revealed, "Human cells make up only 43% of the body's total cell count. The rest are microscopic colonists." My thanks to Jim Ryder for bringing this article to my attention.

domestic, economic, political, environmental—relayed by the headlines of the papers on the kitchen table, Marcus acknowledges "that smidgeon of chaos which brings the whole thing down around itself," and tips the balance of the "gravitational pull we feel in everything around us now, the instability which thrills everywhere like a fever" (16). Blaming his "engineer's mind" for a tendency to obsess about collapse (16), he nevertheless almost immediately reveals that "any image of collapse or things coming apart, always summons up memories of my father" (17), particularly his father's disassembling of large machines in order to put them back together. Marcus concludes that his father's impulse grew not out of doubt as to "any fault or redundancy in the constructs themselves, but because there was in him that need to know how these things held together so that he could be assured his faith in them was well placed" (17). Marcus has not inherited the faith of his father.

One particular memory of a Massey Ferguson tractor that was burning oil has a lasting effect on Marcus. If the "fever" of social instability and the "glossy and hard" zeroes of the economic crash, "so given to viral increase" (9), anticipate Mairead's physical torments, the "ailing" tractor is similarly, in the frightened young Marcus's eyes, stricken with a

> viral malfunction likely to spread from the machine itself and infect the world's wider mechanism, […]
>
> my fear only deepened as I recoiled at the thought that something so complex and highly achieved as this tractor could prove so vulnerable, so easily collapsed and taken apart […]
>
> this may have been my first moment of anxious worry about the world, the first instance of my mind spiralling beyond the immediate environs of hearth, home and parish, towards
>
> the wider world beyond

> way beyond
>
> since looking at those engine parts spread across the floor my imagination
>
> took fright and soared to some wider, cataclysmic conclusion about how the
>
> universe itself was bolted and screwed together (21-2)

This anxious, frightened "spiralling" can be understood as an undoing of the self in a moment of apprehension of Marcus's entanglement with the cosmos, "the wider world beyond / way beyond."

As Deckard observes, Marcus goes on to be a "dismal" failure at "the strategic world-building game." Even though he works in a field that "concerned itself with scale and accuracy, mapping and surveying so that the grid of reason and progress could be laid across the earth," and lives a professional life "governed by calculation," he never comes to feel "so accurately placed as [his] father" (McCormack 105). In place of the grid of "reason and progress" the novel proposes relational, diffractive mappings, which "are not rationally made, because the production of diffraction comes from elsewhere" (van der Tuin 236). Marcus's loss of faith in the rational is first apparent when he moves from his contemplation of the association between Ireland's (and the world's) economic collapse and his father's dismantling of machines, to connect people's unwillingness to assume and anticipate disaster with the loss of "that brute instinct for catastrophe" that is "now buried too deep beneath reason and manners to register" (16). Marcus retains that instinct; his own attempts to find reassurance in the steady comforts of reason settle "instead into a giddy series of doubts, an unstable lattice of questions so far withholding any promise I might inherit / my father's ability to comprehend the whole picture" (105-6). Conceiving the universe as a homogenous, uninterrupted "whole picture" eludes Marcus. Though a source of anxiety and insecurity, his thinking emerges as more ethically responsive, more accepting of the partial and fragmented, than the patriarchal model of omniscience and control he fails to duplicate. Marcus is "seeing

and thinking diffractively […which] implies a self-accountable, critical, and responsible engagement with the world" (Geerts and van der Tuin). Marcus cannot confidently assume the self-satisfied role of "fearless, heroic" patriarch.

In Marcus, McCormack has created a largely unremarkable everyman who takes pride in his professional achievements while recognising his failures, who has betrayed and cherished those close to him, who has both regrets and joys to recall in looking over his life. How does such a character, such a novel, make any kind of difference in the world, persuade readers to reconsider their own life patterns and thereby inspire transformative change? For one thing, Marcus is capable of insights with far-reaching implications for those who read the novel and identify with his everyday strengths and weaknesses. In addition, what is "most powerful about the book," Deckard argues, is that the pain of Marcus's realisations "is always held in tension with his bright imagination of a world made and constructed for the better." Conceiving alternatives, imagining possible new worlds, the first step to achieving transformative change, is the vital, constructive work of literature, the essential counter to market-driven destruction. In arguing the need for stories, Haraway insists that "Another world is not only urgently needed, it is possible, but not if we are ensorcelled in despair, cynicism, or optimism, and the belief/disbelief discourse of Progress" ("Trouble" 54). Through its narrator's musings, *Solar Bones* draws painful, miraculous, comforting, disquieting connections amongst ostensibly unrelated phenomena, making the novel an example of what Haraway refers to as "the systemic stories of the linked metabolisms, articulations and coproductions […] of economies and ecologies, of histories and human and nonhuman critters" ("Trouble" 52). The novel exposes the fiction of "us" versus "them, the unworkable approach adopted by millennium development goals, finally unsustainable in promoting sustainable development.

As a visiting spirit, Marcus challenges every dichotomy, including those that distinguish here from there, now from then, and creating such a narrator is an ethical choice with environmental implications that the metaphor of diffraction can help elucidate:

> To address the past (and future), to speak with ghosts, is not to entertain or reconstruct some narrative of the way it was, but to respond, to be responsible, to take responsibility for that which we inherit (from the past and the future), for the entangled relationalities of inheritance that "we" are, to acknowledge and be responsive to the noncontemporaneity of the present, to put oneself at risk, to risk oneself (which is never one or self), to open oneself up to indeterminacy in moving towards what is to-come. (Barad, "Entanglements" 264)

The novel's present is noncontemporaneous with itself as the narration stitches back and forth in time. Marcus's final memory is of one of opening to indeterminacy, being "cast out beyond darkness into that vast unbroken commonage of space and time […] in which there are no markings or contours to steer by" (265).

Throughout the text, Marcus's ghostly embodiment is equivocal and flickering; he is, to himself, "the surprise, the interruption, by the stranger (within) re-turning unannounced" (Barad, "Diffracting" 178). His earthly life has been interrupted, as has his "afterlife"; neither is a frictionless, self-sustaining whole. Every ghost returns with a message, a warning. The purpose of Marcus's return has been to map out the patterns of "interference," creative and destructive, that world and re-world the cosmos, with or without him. In the novel's last pages, when Marcus is remembering the events leading up to his death and "relives" his final physical undoing, he continues to understand himself as entangled with fellow phenomena: "animal, mineral, vegetable / father, husband, citizen" (264-5). Even in the final moments, happening simultaneously in the past and in the present, Marcus retains a "capacity for

imagining and caring for other worlds, both those that exist precariously now […] and those we need to bring into being in alliance with other critters" (Haraway. "Trouble" 53). His memories pay detailed attention to "the interference patterns on the recording films of our lives and bodies" (Haraway, *Modest* 16). Marcus's focus has been largely on bodies other than his own, until the final pages, when he returns to the "here" of the first page, a recursive gesture that refuses progress, teleology:

> being here as
>
> this electrical interval held within its circumference of flesh and bone, the full sense of myself to myself as a kind of bounded harmonic, a bouquet of rhythms meshing into one over-emergent melody which homes me within the wider rhythms of the world, the horizontal melody of the cosmos, the celestial harmonic which inscribes me against the biggest magnitudes, the furthest edge of the universe (231)

The narrator, like every other element of creation, is not, finally constrained by its ostensible structure—in Marcus's case, "flesh and bone"—but is a kind of vibration, contributing to the melody that reaches to "the furthest edge of the universe."

McCormack has created a white, middle-class male narrator for this novel, not in order to ignore or erase alternative voices, but to address a particular audience that may choose to comfortably position itself as somehow not *as* responsible for counterimplicated social and environmental crises as either powerful world-stage actors or especially affected minority populations. In this, McCormack is practising what Karen Thiele argues is a "different ethicality" that aspires to responsibility, but is careful "not to either appropriate otherness or sameness or patronize others": "Affirming that there will never be an innocent starting point for any ethico-political quest, because 'we' are always/already entangled with-in everything; and yet that this primary implicatedness is not bound to melancholy or

resignation, which for too long has been preventing us to think-practice difference(s) that really might make a difference" (213). Diffraction, in this context allows us to read insights by "attending to and responding to the details and specificities of relations of difference and how they matter" (Barad, *Meeting* 71). McCormack's protagonist lives in the same place where the author himself grew up and where he continues to live, a narrative choice that is emphatically local and intimate, so that the text in more ways than one "spoken by a friend across the table," rendering immediate the message of the need for transformative change. Marcus Conroy is ostensibly blandly indistinguishable from any other Western, middle-class professional and family man, and he suffers the ordinary fate of all phenomena, death, though even that "ending" is not a conclusive, melancholy transformation. It is both terrifying and invigorating, like the collapse of a star. All entities, from an infectious parasite to "mountains, rivers and lakes" to suffering metropolises, are at once enmeshed in each other and deserving of respectful recognition in their difference, and that important case is persuasively argued through the memories and observations of a resolutely ordinary "father, husband, citizen" in a novel that recognises no such thing as a full stop.

WORKS CITED

Barad, Karen. "Diffracting Diffraction: Cutting Together-Apart". *Parallax* vol. 20, no. 3, 2014, pp. 168-187.

---. Interview. *New Materialism: Interviews and Cartographies*, edited by Rick Dolphijn and Iris van der Tuin, Open Humanities Press, 2012, pp. 48-70.

---. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning.* Duke University Press 2007.

---. "Nature's Queer Performativity". *Kvinder Køn og Forskning* vol. 1, no. 2, 2012, pp. 25-53.

"Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come." *Derrida Today*, vol. 3, no. 2, 2010, pp. 240-68.

Deckard, Sharae "S*olar Bones* Is That Extraordinary Thing, an Accessible Experiment,

Virtuosic yet Humane" *Irish Times* (21 October 2016). https://www.irishtimes.com/culture/books/solar-bones-is-that-extraordinary-thing-an-accessible-experiment-virtuosic-yet-humane-1.2838095

Duszenko, Andrzej, "The Joyce of Science: Quantum Physics in *Finnegans Wake."* *Irish University Review,* vol. 24, no. 2, Autumn-Winter 1994, pp. 272-82.

Gallagher, James. "More Than Half Your Body Is Not Human." BBC News (10 April 2018). http://www.bbc.com/news/health-43674270

Geerts, Evelien and Iris van der Tuin, "Diffractions & Reading Diffractively." *New Materialism: How Matter Comes to Matter, Almanac.* 26 July 2016. http://newmaterialism.eu/almanac/d/diffraction

Haraway, Donna J. *Modest_Witness@Second_Millenium.FemaleMan©_Meets OncoMouse™: Feminism and Technoscience.* Routledge, 1997.

---. *Promises of Monsters: A Regenerative Politics for Inappropriate/d Others*. Routledge, 1992.

---. "Staying with the Trouble: Anthropocene, Capitalocene, Cthulucene." *Anthropocene or Capitalocene?: Nature, History, and the Crisis of Capitalism*, edited by James W Moore., PM Press, 2016, pp. 34-77.

---. *When Species Meet.* University of Minnesota Press, 2007.

Kaiser, Birgit Mara and Kathrin Thiele. "Diffraction: Onto-Epistemology, Quantum Physics, and the Critical Humanities" *Parallax,* vol. 20, no. 3, 2014, pp. 165-67.

McCormack, Mike. *Solar Bones.* Canongate, 2017.

Moore, James W. "The Rise of Cheap Nature" *Anthropocene or Capitalocene?: Nature, History, and the Crisis of Capitalism*, edited by James W Moore, PM Press, 2016, pp. 78-115

Ryker, Martin "A Stylistically Daring Novel Considers Fundamental Questions" *New York Times* (5 Jan 2018) https://www.nytimes.com/2018/01/05/books/review/solar-bones-mike-mccormack.html

Thiele, Karen. "Ethos of Diffraction: New Paradigms for a (Post)humanist Ethics." *Parallax,* vol. 20, no. 3, 2014, pp. 202-16

Van der Tuin, Iris. "Diffraction as a Methodology for Feminist Onto-Epistemology: On Encountering Chantal Chawaf and Posthuman Interpellation." *Parallax,* vol. 20, no. 3, 2014, pp. 231-44.