

Priscilla Jolly (Sub)Terranean
Intimacies:
Indeterminacies of
Flesh and Crystal in
The Crystal World

Abstract: This article argues that J. G. Ballard's 1966 novel, *The Crystal World*, with its crystalline apocalypse, unsettles binaries such as life/death and organic/inorganic. It traces similarities in Ballard's work to Joseph Conrad's novella, *Heart of Darkness*, while making the case that both Ballard and Conrad can be situated in a lineage of subterranean extraction and imperial mastery. Building on Kathryn Yusoff's work on geology, extraction, and the racialization of black and brown bodies, this study shows how both extractive processes in both Conrad and Ballard trouble the divisions between organic and inorganic. The crystalline apocalypse and the accompanying overabundance of crystals in Ballard's novel disrupt subterranean networks of value extraction. Emphasizing how Ballard's crystalline transformation petrifies bodies, this article suggests that crystallization in *The Crystal World* is an opportunity to rethink the categories of organic/inorganic and life/death. From this analytical perspective, *The Crystal World* offers opportunities to reimagine value networks under capitalism.

Key Words: Ballard, Conrad, organic, inorganic, capitalist extraction, Anthropocene, crystallisation

Subterranean Networks and the Anthropocene

Scholars have identified the current geological epoch as the age of the Anthropocene. This definition takes into account geological and ecological changes brought about by human activity (Crutzen 2006, 16). Similarly,

both the scale and temporality of changes brought about by humans have led scholars to conclude that the Anthropocene is a specific geological epoch different from the Holocene (Lewis and Maslin 2015, 171). One human activity that brings lasting changes to both the surface and interior of the earth is anthroturbation, which can range from surface level changes (such as in landscaping) to deeper level changes (as in petroleum extraction). Since no other species has penetrated the earth as much as humans making long lasting subterranean changes, anthroturbation, or burrowing into the earth, is an integral part of the Anthropocene (Zalasiewicz, Waters, and Williams 2014, 7). Kathryn Yusoff (2018) has criticized the Anthropocene by highlighting the links between geology, extractivism, materiality, and value. She draws attention to histories of racialization embedded in the Anthropocene, often erased from its universal narrative that foregrounds the figure of the human (2018, 2). Geology, according to her, produces both subjects and materials. The material world is divided into the human and inhuman, “and thus as inert or agentic matter” which makes possible “a set of extractions, from particular subject positions, from black and brown bodies” (4). In this article, I study the history of extraction with respect to two writers, Joseph Conrad and J. G. Ballard. While a comparison between Conrad and Ballard might seem counterintuitive, considering how they wrote in different contexts, I suggest that the representation of subterranean networks in both these writers merit a closer look. The focus of this paper is a subterranean “carbon imaginary” (Tondre 2020) and how a lineage of this subterranean network could be traced from Conrad’s work to Ballard’s. Carbon and its various forms, such as ivory and crystals, constitute elements of this subterranean carbon imaginary. As opposed to the nineteenth century drive to extract and conquer elements of the subterranean carbon imaginary, in this paper, I explore how Ballard’s novel, *The Crystal World* (1966) (hereafter *TCW*) unsettles the rhetoric of racial capitalism and imperial mastery by destabilizing the organic/inorganic, life/nonlife boundary. I study these binaries with respect to crystals and leprosy in *TCW*, while proposing that the crystalline apocalypse in Ballard creates conditions of ontological indeterminacy.

The case for Conrad’s influence over Ballard can be seen from how the latter has engaged with texts from Conrad. In his short story “A Question of Re-Entry,” which was published in 1963, Ballard takes the foundational elements of Conrad’s *Heart of Darkness* and fashions them into a story about searching for the remains of a space shuttle in the Amazonian jungle. The sci-fi revision of *Heart of Darkness* opens with a boat moving upstream, with specific attention to the landscape, which is described in

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terms of a jungle that is “endless”, marked by “darkness” (Ballard 2009a, 435). In addition, deep inside the Amazonian jungles, Ballard presents a Kurtzian figure, named Ryker, a white man who has vanished inside the jungles. Taking up residence with the Indigenous people of the region, Ryker himself has become “almost indistinguishable from the Indians” (439). The river in the short story serves as a link to civilization. Ballard writes how “the long voyage up-river” was like “a last tenuous thread” that linked the protagonist with “the order and sanity of civilization” (441). The foundational motif of journeying up a river and consequently journeying in time, which animates *Heart of Darkness* also appears in Ballard’s other work, namely the novel *TCW*. Jeanette Baxter, in her Surrealist study on J. G. Ballard, draws attention to how *TCW* invokes *Heart of Darkness*. She writes how the colonial periphery of Cameroonian Port Matarre in *TCW* is connected to the imperial centre in England, noting how “The tired, inert waters of London, the British Imperial Centre have leaked somehow into this African landscape.” Baxter further adds how the landscape of *TCW* evokes *Heart of Darkness* through “stylistic echoes and allusions” (Baxter 2009, 40).

Both *Heart of Darkness* and *TCW* present a tropical world that is prehistoric. The two novels describe their settings as places of darkness while being animated by a sense of wonder. In a letter to Sanders, the English leprosy specialist in *TCW*, Suzanne Clair, his colleague in a Cameroonian leprosarium, describes the crystal forest “as the most beautiful” adding that she cannot find words to describe “the wonder” she feels when she looks at this sight (Ballard 1966, 12). Marlow, Conrad’s narrator, speaks about “the general sense of vague and oppressive wonder” (Conrad 1988, 17). Both texts also render their settings as prehistoric through the images of darkness and animals. *TCW* opens with Sanders being impressed by the darkness of the river (Ballard 1966, 3). The first section of the novel titled ‘The Dark River’ emphasizes darkness through references to “the dark forest,” (12) Sanders’ “dark figure,” (17) and the darkness of Port Matarre itself (19). Speaking about how the setting in *Heart of Darkness* is “one of the dark places on earth” (Conrad 1988, 9), Marlow describes how it “has ceased to be a blank space of delightful mystery” and had become “a place of darkness” (12). These places of darkness are further linked by rivers that run through them, “deadly – like a snake” in Conrad (14) and “the black surface of the river below spangled like the back of a sleeping snake” in Ballard (1966, 39). Conrad equates travelling up the river as a journey into prehistoric times: “Going up that river was like travelling back to the earliest beginnings of the world [...] On silver sandbanks hippos and alligators sunned themselves side by side” (1988, 35). Ballard, similarly, creates

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a vision of “jeweled crocodiles” that “glitter like heraldic salamanders on the banks of the crystalline rivers” (1966, 203).

In addition to the similarities in the setting, both texts foreground transitional states, with a focus on binaries such as organic/inorganic, life/non-life and human/inhuman. The tension between organic/inorganic and life/nonlife is revealed through the commodities of ivory in *Heart of Darkness* and gemstones in *TCW*. These commodities, extracted from colonised territories, give rise to networks of value. In *Heart of Darkness*, ivory trade represents the networks of extraction. *TCW* presents extractive networks through both organic and inorganic entities. Set in a colony for leprosy sufferers in Cameroon, which also has mines for precious stones nearby, the novel brings together legacies of tropical medicine and extractivism. Edward Said, while drawing attention to “Kurtz’s ivory-trading empire” at the centre of Conrad’s novella, also points out how “Kurtz’s great looting adventure” and “Marlow’s journey up the river” are connected by a shared theme: “Europeans performing acts of imperial mastery and will in (or about) Africa” (1994, 23). A part of this mastery is the attempt to mitigate the darkness by the *mission civilisatrice*. As Said explains further, despite references to the *mission civilisatrice* in *Heart of Darkness*, Kurtz and Marlow understand the “darkness” has “an autonomy of its own, and can reinvade and reclaim what imperialism had taken for *its own*” (30). Said further qualifies this darkness when he adds that Kurtz and Marlow are unable to recognize the fact that the “non-European ‘darkness’ was in fact a non-European world *resisting* imperialism” (30). *TCW* with its imperial subtext, plays on the contrast between ‘light’ and ‘dark,’ with Port Matarre being characterised in terms of a similar division (Ballard 1966, 36).

While *Heart of Darkness* functions around extractions’ narratives in the imperial periphery, *TCW* utilises what Roger Luckhurst refers to as “an imperial subtext” (Luckhurst 1997, 45). The *mission civilisatrice* makes its presence felt through the figure of Dr. Sanders and the leprosarium staffed by Max and Suzanne Clair. However, instead of tropical medicine or Christianity which is expected to dispel the proverbial ‘darkness,’ *TCW* turns to an apocalyptic phenomenon of crystallization, which renders bodies full of light. As Suzanne writes in her letter to Sanders, “[t]he light touches everything with diamonds and sapphires” (Ballard 1966, 12). In contrast to operations of mastery, this phenomenon decentres anthropocentrism, offering the Cameroonian people an opportunity to take control of their own destiny, with crystallization being offered as a cure for leprosy, as opposed to western medicine brought by figures from the imperial centre. As a result of the crystalline transformations, the bodies of Cameroonian people are transformed into precious stones, rendering them into

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inorganic commodities. Drawing from Kathryn Yusoff's work (2018; 2020) on extractivism and racial hierarchies of value, this paper demonstrates how speculative narrative in *TCW* disrupt colonial networks of value creation. This disruption is made possible by a subversion of the trope of tropical overabundance and by the creation of a liminal state of being between the organic and inorganic.

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Subterranean Resource Networks: From Conrad to Ballard

In addition to *Heart of Darkness*, which revolves around ivory trade, Conrad's work is organized around the question of resource extraction. As Micheal Tondre notes, the "raw materials of empire" constitute an organizing block for Conrad's major work, exemplified by how his fiction centers "a distinct mineral resource" such as ivory in *Heart of Darkness*, guano in *Lord Jim* and silver in *Nostromo* (Tondre 2020, 71). These fictions, Tondre writes, "recoil against the excesses of modern resource removal" (57). If Conrad's fictions can be read as critiques against excessive resource removal, Ballard in *TCW* presents an opportunity to study a crisis in imperial resource networks provoked as a result of an excess.

TCW (1966) tells the story of an English physician, Dr. Edward Sanders, who arrives in Port Matarre in Cameroon, looking for two of his colleagues, Max and Suzanne Clair, who work in a leprosarium. As Sanders embarks on his quest, he encounters an apocalyptic phenomenon in the jungle which crystallizes everything in its path. This phenomenon transforms everything into crystal, including living bodies. In this way, *TCW* showcases excess which brings the subterranean to the surface. In this process of crystallization, the novel blurs the distinctions subterranean/surface, man/nature and organic/inorganic. Readings of Conrad's work also highlight similar themes. For instance, Aaron Clayton, in his ecocritical reading of Conrad's *Victory*, notes how Conrad "erodes the distinction between man and nature by establishing conditions for the possibility of a radically different ontology" (Clayton 2010, 121). In this article, I argue that in *TCW*, Ballard undertakes a similar project through his crystalline apocalypse; he creates conditions for a new ontology that belies distinctions between organic/inorganic and life/nonlife.

The focus of this article is a subterranean "carbon imaginary" (Tondre 2020) and how a lineage of this subterranean network could be traced from Conrad's work to Ballard's. Conrad's work presents the problem of excessive extraction in/from the imperial periphery. Cannon Schmitt, in

his study of *Heart of Darkness* comments on how the figure of Kurtz in the novella is an “all-consuming mouth” with respect to ivory (Schmitt 2012, 25). *Heart of Darkness* is driven by the quest for ivory, called “fossil ivory” since explorers dig it out from the earth (Conrad 1988, 49). On the one hand, the novel focuses on Kurtz’s drive to extract buried ivory. On the other hand, as Elizabeth Miller has shown, Kurtz himself becomes a person to be extracted by Marlow (2021, 135), with the novel signaling that Kurtz has transformed into ivory. For instance, Kurtz’s face is described as “an ivory face” (Conrad 1988, 68). This transformation complicates “the living/nonliving binary in reference to colonial commodities” (Miller 2021, 135). Ivory, which was once part of a living elephant, becomes a lifeless commodity in extractive networks for resources that thrived under colonialism. Kurtz and his organic flesh are transformed into the same lifeless ivory, placing them in the realm of the inorganic.

The lineage of imperial extraction that propels towards anthroturbation, and eventually the extractionist, unequal histories of the Anthropocene connect Conrad and Ballard. Leonard Orr notes that it is common to associate Ballard’s fictional work with *Heart of Darkness* because of two factors: the desolate landscapes in Ballard’s work and the isolation of the protagonists. However, the difference, for Orr, between Conrad and Ballard comes in the way in which the characters react to catastrophe. Ballard’s characters do not seek to flee from the catastrophe; instead, they submit and view the act of submission as a sort of freedom (Orr 2000, 480–481). Orr refers to Ballard’s catastrophes as “utopian disasters” (493). While I concede that catastrophe in Ballard offers certain possibilities for the development of protagonists, I am hesitant to characterize *TCW* as utopian. Yes, Sanders goes back into the crystal forest to embrace crystallization, which could be read as a moment of growth, but such a reading does not take into account the stature of Cameroonian bodies embracing crystallization and their relationship to racialized logics of extraction. In this study, I focus on how Cameroonians leverage the crystallization to resist imperial acts of mastery, while showing how the excess of crystallization stresses imperial extraction networks. I follow observations that have been made regarding Ballard’s catastrophic narratives. As Roger Luckhurst writes: “They take place *between catastrophes*, in the space after the initial catastrophe and the ‘catastrophe’ which follows: death” (Luckhurst 1997, 38). However, I show that in *TCW*, death is neither a catastrophe, nor an end point.

Diamond mines in *The Crystal World* and the crystalline transformations in the novel speak to the lasting effects of anthroturbation, colonial extractivism, and the transformational effects on the Cameroonians

caught in the process. The life/nonlife tension in *Crystal World* is not just a problem of materiality, but it also points to the racial order of extraction, with Cameroonian bodies transforming into crystal. Matter divided into life and nonlife “pertains [...] to the racial organization of life” with the “biopolitical category of nonbeing” established through “slaves being exchanged for and as gold” (Yusoff 2018, 5). The Cameroonians in *TCW* embody the subterranean, as their flesh is caught between life and nonlife. They embrace crystallization, willingly undertaking a process that transforms their flesh into precious gemstones. As opposed to the geological way of seeing, which emphasizes the verticality of territory (Braun 2000, 13) and focuses on the interior of the earth, in the world of the novel, such a penetrating gaze is rendered inutile. The crystalline transformations become superficial as opposed to being subterranean. Furthermore, the phenomenon described by Ballard creates a proliferation of subterranean minerals and crystals which renders them valueless in the marketplace. The crystalline transformations, thus, trouble divisions between organic/inorganic and life/nonlife while also impacting capitalist networks of value creation.

Cameroonian people in the novel leverage the apocalyptic phenomenon of crystallization to unsettle networks of capital that stretch from the colony to the imperial centre. In the novel, when the Cameroonians understand that they could leave things in the forest to be transformed into precious stones, they apply the same technique to manufacture diamonds. Captain Radek explains to Sanders that mines in Mont Royal did not produce gemstones. As the forest begins to vitrify, however, big diamonds appear in the market outside. As a result, the “share prices on the Paris Bourse climbed to fantastic heights” (Ballard 1966, 71). However, the diamonds and crystals produced by this phenomenon of crystallization also have a tendency to dissolve. With an abundance of diamonds, emeralds, and sapphires produced in the forest, the market-oriented value networks are disrupted. Max Clair speaks about how “the natives are hanging around in the bush, hoping to reap themselves a harvest of diamonds” (Ballard 1966, 152). Furthermore, the ‘natives,’ Radek notes, have used crystallization to produce objects of art and jewellery that fuelled trade in the region (71). Not only do they use the phenomenon to their advantage, but the miners also place themselves in a wider network of capital that stretches beyond Cameroon. As Micheal Tondre observes regarding resource extraction in Conrad’s fiction: “foreign extraction sites are tied to a transoceanic network of ships, trains, refinement facilities, banks” producing a “panoramic perspective” (Tondre 2020, 71). In *TCW*,

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readers are met with a global phenomenon that radiates from the imperial periphery.

However, as is the case with Kurtz in *Heart of Darkness*, who becomes ivory, the Cameroonians in the novel place themselves into the same networks for material transformations in an attempt to control their fate. Max Clair draws attention to this fact when he points out that the incurably sick, suffering from leprosy, left behind in the forest are being transformed by the forest. The Cameroonians in the narrative thus embrace the prospect of being rendered inhuman by the vitrifying forest. Sufferers of leprosy, particularly those who are incurable, are shown to wait outside the mission hospital run by Max and Suzanne Clair. Louise Peret, the French journalist in the narrative, wonders whether the Cameroonians waiting near the forest are human, while Sanders reassures her of their humanity (Ballard 1966, 158). Thus, *TCW* highlights the subterranean racial hierarchy of life, as Louise questions the humanity of coloured bodies. Attracted by the light from the crystal forest, the Cameroonians enter the forest willingly to be crystallised. The narrative characterizes this response to light as a response to “the possibilities of life itself” (160). The Cameroonians, however, decide to embrace the process of subterranean mineralization, in an inhuman embrace with the earth, in “a perilous tender of mineral amity” (Cohen 2015, 5). They choose a different possibility of life which, in part, contradictorily makes them commodities.

Louise’s question about whether the diseased Cameroonians are, in fact, human brings to fore the racialized bias on which the notion of human has been constructed in the first place. The European subject, embodied/represented by Louise, is defined and placed in contrast with “fossil nature (indigeneity) and fossil energy (the enslaved)” (Yusoff 2020, 664). *TCW* presents a literal fossilization through vitrification. This crystallization brings into human dimension the subterranean process of extraction, and thereby transforms flesh into nonlife, the inhuman. Kathryn Yusoff writes about how the category of the inhuman functions as “the racialized understrata to the white surfaces of capital accumulation” (664). However, *TCW* with its abundance of crystals resists capital accumulation, while affording racialised bodies an opportunity to participate in processes that mineralise them, making them ‘living dead.’ The designation of ‘living dead’ associated with the affliction of leprosy adds a further layer to the struggles of these bodies, which through their mineralized transformations are caught between the realms of life and nonlife. Ballard’s novel therefore brings into forefront a transitional state of being.

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Crystals, Leprosy and Mastery

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While *Heart of Darkness* blurs the lines between life and non-life through the commodity of ivory and the figure of Kurtz, *TCW* approaches similar themes through crystals and the disease of leprosy. Several studies have highlighted the role of crystals in the narrative and how they animate the organic/inorganic boundary. For instance, Aidan Tynan, in his study of *TCW* influenced by French biophilosophy, writes about how Ballard's ecological apocalypse of crystallization erodes distinctions between nature and culture (2018, 400). For Moritz Ingwersen, the crystalline form blurs "the dialectic between life and nonlife" (2016, 75). I follow in the wake of these studies while I track the organic/inorganic as well as the life/nonlife binaries with respect to crystals; however, I also connect these binaries to leprosy and the question of a *mission civilisatrice*. I further suggest that Cameroonians turn away from the colonial impulse to 'save' the local population; furthermore, in choosing to embrace the crystalline apocalypse, they have an opportunity to disrupt both imperial value networks and racial capitalism.

The traffic between organic and inorganic is reflected in the early discourse around crystallography. Seventeenth- and eighteenth-century debates about the nature of matter were reflected in the literature about artificially produced crystals (Burke 1966, 10). While crystals and stones are now located in the realm of the inorganic, seventeenth century theories placed crystals in the realm of the organic. An example can be found in the work of Nehemiah Grew, who in 1672, proposed that:

all plants were composed of four differently shaped crystals of mineral salts; these entered through pores in the roots and combined to form circles or lines which became extended through the additions of ever more such ultramicroscopic crystals in regular patterns (Ritterbush 1968, 8).

While these theories were criticised in the in the eighteenth century, the history of crystals being grown in solutions and being exhibited as "stone plants" (14) further attests to the indeterminacy of categories such as 'organic' and 'inorganic' and how crystals occupied a medial position. Crystals were part of the debate surrounding "organic form," which originated as "a literary esthetic principle but [...] became a primary guiding idea in biology" (26), with symmetry becoming an indicator of transcendence. The principle of symmetry was also used to distinguish between the living and the non-living, as evidenced by Louis Pasteur's experiments on tartaric

acid (54). Crystals can ‘grow’ as shown by them being grown in solutions in laboratories, but whether ‘growth’ is to be taken as an index of life is a question that remains. A textbook on crystals characterises the growth of crystals as something “characteristic of ‘dead’ matter: they represent the most primitive kind of internal organization, a monotonous repetition of the same pattern unit in all directions in space” (Bunn 1964, 281).

Ballard further builds on this ambiguity between living and dead matter when at the beginning of the narrative, Sanders compares the apocalyptic crystallization to the tobacco mosaic virus. Sanders is informed that there is “a new kind of plant disease beginning in the forest near Mont Royal” and he immediately responds, “[a] virus disease, like tobacco mosaic?” (Ballard 1966, 24). The choice of a viral disease is significant, since a virus, similar to crystalline growth in the text, reproduces rapidly, and in that process jeopardizes its host. The tobacco mosaic virus has “long rod-shaped particles” packed together “in crystalline array” (Bunn 1964, 279). Whether viruses are living or non-living has been debated, particularly with reference to the characteristic of ‘growth.’ For example, “[i]f capacity for self-reproduction is regarded as the criterion for life, then viruses can be said to be living, and virus crystals can fairly be described as living crystals” (279). Through references to a viral infection being the source of the crystalline apocalypse, Ballard adds another layer to the operation of organic/inorganic, life/non-life binaries in the narrative.

In addition to the viral in the narrative, the same tension is also reflected in Ballard’s rendering of bodies ridden with leprosy which have crystallised. In medieval times, sufferers of leprosy occupied a transitional space between the living and the dead. In addition to this tension between organic/inorganic and living/non-living, *Crystal World* also highlights the links between Christianity and leprosy, which have a long history. As Meghan Vaughn explains:

In medieval Europe lepers occupied a strange ground as the ‘living dead[.]’[...] In early medieval France a priest performed the ritual of separation in which the leper stood in a grave whilst the priest threw three spadefuls of earth on her or his head, announcing that they were ‘dead to the world’, but would be ‘reborn in God’ (1992, 79).

Those afflicted by leprosy are forced into a different space, separate from the everyday world. The church propagated the idea that leprosy was a gift from God and that people suffering from leprosy were “specially chosen by God for salvation” (Brody 1974, 61). The notion of saving people is yet another link that connects *TCW* and *Heart of Darkness*.

Notions of ‘progress’ and the *mission civilisatrice* connect *Heart of Darkness* and *TCW*. In *Heart of Darkness*, Kurtz is described as “an emissary of pity, science and progress” (Conrad 1988, 28). As Said argues in *Culture and Imperialism*, emissaries from the imperial center are tasked with dispelling ‘darkness’ from the periphery. Mitigation of diseases, the discipline of tropical medicine, in particular, was a part of this imperial mandate. Tropical medicine texts on leprosy treat it as a tropical disease that is attributed to a lack of civilizational progress in non-European societies. For instance, a 1946 text claims that countries from which leprosy has disappeared belong to the temperate zones of Europe (Rogers and Muir 1946, 9). Tropical countries, inhabited by people “in a low stage of civilization,” have a “hot damp climate” which, it was widely believed, created conditions for leprosy transmission (11). The introduction of ‘civilization’ was one motivation for colonial rule in tropical regions. Imperial tropical medicine in the colonies during the period of 1900–1950 revolved around two impulses. The first was the mission to spread Christianity and introduce “modern (‘scientific’) rationality” and the second was the mandate to consolidate colonial rule (Worboys 2000, 208). The debate about saving bodies and saving souls recurs in this context. Biblical associations of leprosy made the disease significant for Christians and for missionary work since “the perceived risks of caring for lepers offered opportunities to show dedication to the cause, if not martyrdom” (Worboys 2000, 214). Sanders fits the mould of the white doctor in Africa who is “an enduring hero-figure of Western culture,” (Vaughan 1992, 155) whose heroism is produced via what has been referred to as “jungle doctor memoirs” which were published during 1950s and 60s by British and American Doctors (156). Sanders suspects that “his reasons for serving at the leper hospital were not altogether humanitarian, and that he might be more attracted by the idea of leprosy” (Ballard 1966, 13). Tropical medicine and Christianity represent two facets of the colonial impulse to “save” Cameroonians and bring them into “progress.” Sanders, Max and Suzanne Clair represent institutionalized tropical medicine, while Father Balthus represents Christianity. The bejewelled cross from Father Balthus, a Swiss priest who manages the church in Mont Royal, reverses crystallization. The second chapter presents Father Balthus holding “a large native carving of a crucifix,” and “brandishing it like a sword over his head” (Ballard 1966, 33).

Human drive for mastery is evident in the choice of leprosy as a disease in the text. To treat leprosy, sufferers were often isolated and placed in leprosaria. In this way, leprosy creates a “colony within a colony” (Ballard 1966, 79) where the sufferers live in an indeterminate space in the hopes of being “ceremoniously released as ‘cleansed’” at the end of their

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stay (Vaughan 1992, 84). This indeterminate status of leprosy sufferers appears in *TCW* as well. While Sanders is on the steamer, no one wishes to share a cabin with him since he works in a leprosarium. Remarking on the conduct of their fellow passengers, Ventress says that those people have failed to realize that outside Sanders' leper colony, "there is merely another larger one" (Ballard 1966, 9). In addition to leprosy, the invasive crystallization also encompasses the inhabitants of Mont Royal, thus creating another colony.

However, instead of being saved by western medicine or Christianity, the inhabitants of the crystalline forest choose to embrace the apocalyptic phenomenon of crystallisation that petrifies both organic and inorganic matter. As Sanders looks at carvings of teak and ivory made from materials scavenged from refuse heaps of the mines in Mont Royal, he notices how "the sculptors had abandoned all pretense to Christian imagery and produced squatting idols with pendulous abdomens and grimacing faces" (Ballard 1966, 31). Sidestepping the Christian association between leprosy and living death, inhabitants of Cameroon choose to embrace a different state between life and death, one that transforms them into crystal. As opposed to the Christian rebirth, Cameroonians choose to be reborn as crystallised bodies by venturing into the forest, thus, again, troubling the divisions between organic and inorganic. Matter is caught between being flesh and crystal, as evidenced by a dead body in the river and a crocodile that is half crystal. Sanders finds a drowned man in the river, who has a bejewelled arm while the rest of his body remains flesh (53). He also comes across a crocodile caught in the middle of transformation; its eyes have changed into rubies; its snout is a collection of jewels (89). In *TCW*, the state of being crystallized is not static; transformations can be reversed with water and religious symbols such as crosses. Crystalline transformations help the body to merge into the surrounding landscape, whereas the scouring action of water strips the crystal away, exposing bodily tissue. Thus, Ballard's crystalline landscape is not frozen; instead, it moves between the organic and inorganic as well as life and non-life.

If ivory represents colonial commodities and materials extracted out of the earth in *Heart of Darkness*, then the diamond mines in Mont Royal serve the same function in *Crystal World*. However, the relationship between commodities and the earth from which they are extracted differs in both texts. Fossil ivory in *Heart of Darkness* is an inorganic material that is buried; it is a rare subterranean commodity. While mines and diamonds in *Crystal World* present a similar subterranean picture, their value is troubled by the proliferation and overabundance of crystals. With bodies transforming into valuable crystals, what is subterranean becomes

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superficial. This change unsettles the colonial modes of extraction which valued commodities over people in colonised regions such as Cameroon. As opposed to imperial mastery that Said refers to in connection with the *Heart of Darkness*, the narrative in *TCW* provides an opportunity to manipulate commodity and capital networks. This is evident in the beginning of the novel, when it is revealed that ten years ago, there was an attempt at a coup by ‘rebels’ who had taken control of the emerald and diamond mines in Mont Royal (Ballard 1966, 4). The narrative voice observes that “this isolated corner of the Cameroonian Republic was *still recovering* from an abortive coup” (4, emphasis added). This observation is followed by one about the presence of a French military mission to train the local troops. The aftermath of the coup, the seizure of the mine from the ‘rebels’ and the continued military presence from the imperial centre are now placed in contrast with the inhuman force of the crystalline apocalypse, which topples imperial power structures.

The Anthropocene, as the name signifies, puts the Anthropos in the driving seat. As explained before, in Conrad’s fiction, the drive for imperial mastery and the drive for extraction are driven by figures from the imperial centre. Whether it be ivory or silver or crystals or diamonds, the drive for mastery is also a drive for control over a subterranean carbon imaginary. However, *TCW*, by bringing crystals on to the surface and through their excess, disrupts any fantasies of human control and mastery.

Life and Non-life: Petrification and the Transitional

Through a crystalline apocalypse that unsettles binaries such as life/non-life and organic/inorganic, Ballard moves towards a transitional ontology that is reflected in the ecological setting of *TCW*. Wetlands and marshes, where Ballard sets his apocalyptic phenomenon, are transitional spaces between land and water, with characteristics that belong to both terrestrial and aquatic ecosystems (Coughanowr 1998, 5). Similarly, the setting of *TCW*, Port Matarre, is an estuary, a transitional zone with convergences of brackish water, fresh water, and land. The port is described as a purgatory, which in Catholicism is a transitional space where souls atone for their sins before ascending into heaven. The process of crystallization is also transitional, leaving its victims in a living-dead state, similar to the characterisations of sufferers of leprosy. Ventress remarks to Sanders that the inhabitants of Mont Royal will soon become something similar to viruses “with their crystalline structure, neither animate nor inanimate [...] Neither

living nor dead” (Ballard 1966, 101). With sufferers of leprosy being characterized as “the living-dead,” and crystals which were once between the organic and inorganic, *TCW* provides an opportunity to rethink the divisions between life and nonlife.

In their study of the commercialization of Piedmontese bull semen, Annalisa Colombino and Paolo Giaccaria (2016) make a case for understanding death “as a spatial and relational process, as opposed to an event ending life” (1044). They draw attention to the current focus on how capitalism manipulates life, illustrated by the proliferation of terms such as biocapital, biovalue and bioeconomy. In contrast to this focus on life, the authors emphasize that death is not a caesura of life. They claim that “liveness and deadness are not two distinct realms, separated by a knowledgeable border—the event of death” (1046). The crystalline transformations in *TCW* address the same concerns, while foregrounding the question of value. As it can be seen from the remark Ventress makes to Sanders about viruses, transformed organic and inorganic bodies trapped in the crystalline re-worlding exist between realms of life and death. Even though they have been transformed into crystal, the effects of the transformation can be reversed with water or with religious iconography. The transitional existence of various bodies is further signalled by Ballard’s descriptions and similes that capture the extent of transformation.

In “The Illuminated Man” (1964), Ballard’s short story which explores the phenomenon of crystallisation, when the narrator sees crystallized trees for the first time, he highlights how those trees are alive, yet embedded in a crystal sheath. Each tree “was still alive, its leaves and boughs filled with sap, and yet at the same time each was encased in a mass of crystalline tissue” (Ballard 2009, 610). Tissue, the organic material of life, has become inorganic and crystalline, but is still nevertheless alive. The indeterminacy of liveness and death is also reflected in the similes Ballard uses to describe objects that are transformed. For instance, a helicopter, inorganic and not alive, is described as a stricken animal post-crystallization. The windshield of a police car is described as blossoming into “a thousand fleur-de-lis crystals;” rocks loom like “huge marine plants” (Ballard 2009b, 615). In *TCW*, the first transformed dead body that Sanders sees is described as “a jeweled gauntlet,” with “the coronation armour of a Spanish conquistador” (Ballard 1966, 53). Post-transformation, inorganic entities are compared to organic entities and vice versa. In this way, these transformations trouble the categories of liveness and deadness. A windshield can blossom into flowers, while living tissue can become inorganic armour.

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Ballard's explanation for the phenomenon centres upon time. He writes that "as a super-saturated solution will discharge itself into a crystalline mass," the super-saturation of matter results in time leaking away with molecules producing spatial replicas (Ballard 1966, 96). As the phenomenon produces petrified crystalline beings, death becomes not an event, but a spatial process. It is not the void of nothingness, a barrier into which things are condemned to disappear. The word "spectral" appears frequently as an adjective in *TCW*: spectral crown, spectral brightness, spectral gallery, spectral gloom, spectral garden and spectral trees. The mining town of Mont Royal is described as a necropolis. *TCW* is thus a text of haunting, where the past is not really past, and the present becomes an eternal present once petrification happens. The sufferers of leprosy seek to escape the reality of the disease by going into the forest. However, while crystallization erases disease, it also immortalizes any disfigurements of the body. The crystals are not entirely dead or inorganic since the process can be reversed, with either water or a crucifix. The hauntings and the transformational processes in *TCW* speak to an ontological indeterminacy. This indeterminacy creates a situation wherein "the dying is within the living within the dying" (Barad 2017, 112). Through its phenomenon of crystallization, *TCW* illustrates a larger debate about what it means to be organic/inorganic or alive/dead, and consequently what it means to occupy transitional spaces between these binaries.

Conclusion: Value and Speculation

Both *Heart of Darkness* and *TCW* engage with the paradigms of extraction and tension between organic/inorganic. Both texts show how specific commodities, such as fossil ivory and diamonds, circulate in extractive networks. Like *TCW*, which transforms black bodies into crystal, thus rendering them as objects meant for further extraction, *Heart of Darkness* also conceives of black bodies as extractive material, "reminding us that all colonial commodities, whether human or mineral, must first be extracted from the web of life [...]" (Miller 2021, 133). In Conrad's narrative, ivory, which was once part of an organic body, is still valuable, tying the novel "to the buried treasure plot at the heart of the adventure genre, and to the dynamics of extractive exhaustion that drive that plot" (134). *TCW*, through its speculative narrative has a different relationship to subterranean "treasures" and their value. The trope of tropical overabundance is pushed to such an extreme in the novel that materials once considered to be precious become devoid of any value.

TCW builds on the trope of tropical overabundance and can be read as an adventure narrative about a doctor who ventures into the ‘exotic’ tropics. The narrative has several parallels with “the jungle doctor memoirs” which appear in Megan Vaughan’s (1992) landmark study on African illness. Battle with the African wilderness is a frequent motif in these narratives, often used as a trope to situate the inhabitants of Africa in prehistoric times. *TCW* relies on these tropes, which can also be found in *Heart of Darkness*. One of the characters describes the landscape in the novel as one “without time” (Ballard 1966, 10). Similarly, one finds descriptions of “primeval mud” (Conrad 1988, 29) and “primeval forest” (29) in *Heart of Darkness*. The inhabitants of the Congo belong to “the beginnings of time” (42) with the vegetation signalling the prehistoric nature of landscape. The vegetation is a “great wall” that is “exuberant” and is “a rioting invasion,” “a rolling wave” (32). Furthermore, vegetation represents a threat to the existence of man since it is portrayed as something “ready to [...] sweep every little man of us out of his little existence” (32). Similarly, Matarre forests in *TCW* are landscapes without time (Ballard 1966, 11). Paralleling descriptions in *Heart of Darkness*, the image of the wave appears in Ballard’s novel as well: “The dark tiers of the forest canopy rose high into the air like an immense wave ready to fall across the empty town” (23). The novel presents the spectacle of a tropical forest threatening to swallow everything it comes across. Sanders is the doctor/adventure hero who must brave the vagaries of the ‘tropical’ crystal forest; however, there is no treasure waiting as a reward at the end of this journey. On the contrary, the narrative of *TCW*, leverages tropes associated with tropical regions of the world to unsettle the narrative of finding treasure in ‘exotic’ locales.

TCW builds on tropes associated with tropical worldmaking which can, in turn, be connected to the question of value. Conceived as both ‘conceptual’ and ‘cartographic’ spaces, the term tropical “denotes a particular kind of experience [...] which may or may not be tied very specifically to a particular geographical zone or location” (Driver 2004, 2). This experience, which constitutes tropicality, was “the experience of northern whites moving into an alien world—alien in climate, vegetation, people and disease” (Arnold 1996, 143). To convey the features of such an alien world, writers relied on tropes. The main tropes associated with tropical nature were “fertility and superabundance” (Stepan 2001, 36). *TCW* capitalizes on this trope of superabundance to disrupt value networks.

TCW shows the links between speculative fiction and capital with the transformed diamonds skyrocketing price of shares in the Paris Bourse. In fact, investigation into the vitrifying phenomenon begins because of the stock prices. As unusually large gemstones were smuggled out, someone

was sent to investigate (Ballard 1966, 71). The text actively employs images of unchecked or “riotous” growth to explain the apocalyptic phenomenon which also produced giant diamonds. Crystallizing is described as a cancer, a disease caused by an uncontrolled division of cells, and as “an actual proliferation of the sub-atomic identity of all matter” (73). In this way, the trope of “tropical superabundance” becomes key in the novel. Pushed to its limits, the trope enters the realm of speculation.

Ballard leverages speculation, characterised as a “technology of imagination” (Bear 2020, 2, 8) to push back against the imagination of the tropics and tropes associated with the region. Furthermore, the fact that Cameroonians utilize crystallization to their advantage by creating diamonds and by employing it as a ‘cure’ speaks to how an apocalyptic phenomenon is leveraged to redress a process of accumulation that is unequal. As such, speculation and “the ability to accumulate capital from speculation is unevenly distributed in relation to intersecting inequalities of class, race, ethnicity and gender” (Bear 2020, 7). As Kathryn Yusoff has shown, life/nonlife distinction of matter maps on to racialization. Acts of extraction and imperial mastery privileges a distinct class of the human. While the mines in *TCW* have been seized back from the ‘rebels,’ extractionist operations come to a halt because of the spreading crystallization. Despite diamonds being produced as a result of the phenomenon, there is no capital to be accumulated, since they tend to dissolve. In this way, the apocalyptic crystallization disrupts the workings of speculation and capital accumulation, since it operates beyond the logic of human mastery. “Speculation [...] aims to reveal a hidden order of human and non-human powers that explain[s] the past, present and the future, making it possible to act” (Bear 2020, 8). Under Ballard’s altered conditions of apocalypse, the only course of action is to embrace the apocalypse, reflected in how Cameroonians and Sanders react, and not speculate on future turns of capital.

Writing about the valences of the term ‘speculative,’ Steven Shaviro (2019) comments on the impossibility of disconnecting fictional speculation from financial and philosophical speculation, both of which is borne out in the narrative of *TCW*. Philosophically, Ballard’s narrative posits an ontological indeterminacy while the proliferation of crystals speaks to financial speculation. While speculative finance relies on a temporal dimension by betting on futurity (Shaviro 2019), in *TCW*, the temporal dimension is affected as crystallization turns time into an eternal present. Not only does crystallization disrupt value creation through proliferation, but it also destroys the futurity with which speculative networks can function. Blurring boundaries between organic/inorganic, life/nonlife,

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the novel brings to the forefront nonhuman forces that operate beyond registers of anthropocentric control.

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