

Broadcasting change: in empathic dialogue with Duffy and Jennings's graphic novel adaptation of Octavia Butler's *Parable of the Sower*

By [Heather Thaxter](#).

*Abstract: This article explores Octavia Butler's 1993 novel [Parable of the Sower](#) and its 2020 [graphic novel adaptation](#) by Damian Duffy and John Jennings. It analyzes the medium-specificity of the adaptation by applying a combined theoretical approach that incorporates cognitive narratology and narrative empathy. A discursive dialogue between the two media facilitates a critical evaluation of the potential for *Parable* to evoke character empathy leading to prosocial action. The prescient themes in *Parable*, and the timing of the adaptation's publication facilitates informed ongoing dialogue around change.*

-
- **Review:** This article underwent editorial review from two editors.
 - **License:** CC BY-NC-ND 4.0.
 - **Citation:** Thaxter, H. 2021. Broadcasting change: in empathic dialogue with Duffy and Jennings's graphic novel adaptation of Octavia Butler's *Parable of the Sower*. *Vector*. February 5, 2021. <https://vector-bsfa.com/2021/02/05/broadcasting-change-in-empathic-dialogue-with-duffy-and-jennings-graphic-novel-adaptation-of-octavia-butlers-parable-of-the-sower/>
 - **Keywords:** adaptation, Afrofuturism, dystopia, empathy, graphic novels, Octavia Butler
 - **DOI:** 10.5281/zenodo.6423258

“This book *lives*. It breathes, moves, feels, clamors for your attention, insists on bearing witness, insists on being heard,” declares Nalo Hopkinson in her introduction to Duffy and Jennings's (2020) graphic novel adaptation of Octavia Butler's *Parable of the Sower*. After decades hovering conspicuously on the periphery of literary acceptance, science fiction and graphic novels refute their much-maligned reputations, and produce an alternative canon by joining forces. Narratives of space exploration, time travel, aliens, and meta-human superheroes disturb the grand narratives because they employ such tropes to explore the notion of the ‘other.’ Challenging the presumptions of texts that

adhere to the model of white Western hierarchy, many contemporary speculative fiction narratives stage encounters between vastly different perspectives and cultures, and give agency to the ‘other.’

An early and powerful influence on Afrofuturism, award-winning author Octavia E. Butler (Womack 2013, 109) proposes a more diverse future through her palimpsestic style of rewriting narratives of race, gender, and disability, thereby challenging the status quo and repositioning previously sidelined characters center-stage. By defamiliarizing human experience, by blurring the lines of ideological expectation, and by broadcasting survival strategies that necessitate major, almost impossible change, Butler complicates the concept of ‘othering’ whilst evoking feelings of empathy for her characters. Suzanne Keen’s (2015) theoretical model of authorial strategic empathy, particularly “broadcast strategic empathy,” is the touchstone for demonstrating how Butler evokes empathic responses in her readers. Since reading is a cognitive action, I combine elements of David Herman’s inquiry into cognitive narratology and Suzanne Keen’s research into narrative empathy to shine light on Butler’s work and its enduring relevance. The remediation of this speculative fiction text into the graphic novel medium, with its metamorphic affordances, facilitates more explicit readings of the tropes of change in Butler’s *Parable of the Sower*, and opens up empathic dialogue about the medium-specificity of re-reading such a powerful narrative.

The plot of Butler’s 1993 novel *Parable of the Sower* (hereafter *Parable*) prophetically mirrors today’s global context: widespread socio-economic disintegration and isolationism. Hence, the timeliness of the recently released graphic novel adaptation by Damian Duffy and John Jennings (hereafter *Parable B*) demonstrates the way Butler’s narratives transcend contemporaneous contexts, and the reason her readership continues to expand and change. As a novel concerned with the founding of a religion, *Parable* itself is deeply interested in the theme of agency and responsibility, and how individuals may build long-term legacies through text. Duffy reasons that adapting Butler’s prescient narratives makes them more accessible to new audiences (Coleman and Due 2020, 26:20), while Jennings expands on this by defining *Parable* as having “very useful passages for living” (28:33). In the same way that Butler’s narratives resist classification (of genre or indeed of format), so increasingly, do the profiles of her readers.

Butler’s ability to evoke empathy for complex, seemingly flawed protagonists, helps readers attribute agency and humanity to the ‘other,’ and dismantles stereotypical perspectives. The differentiation between cognitive empathy and affective empathy is significant in the subsequent discussion; the former facilitates seeing the world as others do, whereas the latter is the ability to share another’s emotions (Stansfield and Bunce 2014, 9). Cognitive science research suggests that reading literary fiction can increase empathy (Kidd and Castano 2013); therefore, reading may have the potential to diminish bias, and Butler’s writing reveals an understanding of this power.

Parable is told through the personal journal entries of teenager Lauren Oya Olamina, a hyperempath wrestling with the formulation and articulation of God as a conceptual

agent for change. The first part of the novel is set within Lauren's gated community near Los Angeles, against the background of widespread social and economic disintegration, and growing violence. Following the destruction of Lauren's community, the novel follows her journey north, as she gathers followers, and eventually founds a religious community. Whilst Lauren's hyperempathy is the catalyst for change, a bridge forging invisible bonds with disparate groups of disenfranchised and dysfunctional characters floundering without hope or direction, it is the protagonist's journal entries that produce the blueprint for enacting that change. Interpreted as a survival narrative this text inspires the lived reality of intentional communities, social activist alliances imagining change as the key to a better world (Gant-Britton 2013; Womack 2013). Butler's use of a narrative that reflects on its own textuality, and its own role as a document and driver of political change in both fiction and reality, immerses the reader into the reflexive writing process to such a degree that transformation may, and does occur. Octavia Butler scholar and organizer adrienne maree brown models social activist projects on Butler's Earthseed narratives (Trinidad and May 2017), while others found new religions on the tenets of the fictional "Earthseed: The Books of the Living"; Godischange.org, Turingchurch.com, and Solseed.org are a few of these newly-formed religious communities based on Butler's fictional narrative. Interestingly, Butler didn't consider Earthseed comforting enough to work as a religion (Snider 2004, 215), but these actions demonstrate the level of reader engagement and identification with the narrative. The timing of the adaptation's publication, during a global health pandemic and resurgent nationalist and racist political movements, brings Butler's prescient narrative to the forefront of social action debate. At the time of writing, Afrofuturist writer Tananarive Due and womanist process theologian Monica E. Coleman are currently producing weekly webinars entitled, "Octavia Tried to Tell Us: Parable for Today's Pandemic," essentially building a digital space for community-based dialogue around the lived experience of *Parable's* themes. The success of these webinars also points out the potential for narratives to evoke sufficient empathy to engender change.

Initial drafts of *Parable* reveal Olamina as a middle-aged, callous, power-seeker, rather than the ambitious but lovable teenage Lauren readers are familiar with (Canavan 2016, 130). Butler's revisions resulted in a more sympathetic character, with Butler admitting "Olamina was her idealized self" (131). Canavan argues "you might say Butler cheated" by softening the character and giving her such a tragic backstory (131). But I consider it evidence of Butler's genius of knowing how to develop strong, credible characters, despite their flaws. By showing how Lauren gradually gathers political experience and power, while enduring enormous personal hardship, Butler presents a character that has the right balance of independence and vulnerability to evoke reader empathy. Traces of Butler seep from the narrative because "[y]ou've got to write yourself in" (Rose 2000, 2:04); Butler's own traits might be traced in Lauren's determination: her obsessive journalism, and her observations on human behavior.

The emphasis on narration and first-person experience [in *Parable*] facilitates "the reader's perception and understanding of what the character's experience must be like" (Fernandez-Quintanilla 2020, 2). However, the graphic novel medium

foregrounds visuality, and implies a much more ambiguous and disembodied point of view. It also creates new opportunities for identification and empathy: for example, the medium accentuates the materiality of narration, with the visibility of the lined journal pages reducing the distance between reader and protagonist conceptually. Just as Butler repeatedly calls for the need to adapt, the graphic novel requires readers to adopt new tools to access the medium's specific narrative properties. Neil Cohn (2013) provides a taxonomy of visual language grammar that enables the reader to extract meaning from sequential illustrations that stand in place of the original literary text (see Appendix #1). While Cohn's decoding tools assist the reader in extracting meaning from the graphic medium, analyzing the cognitive process unlocks the link between reading, memory, and action.

Broadcasting change: Cognitive Narratology

Artificial Intelligence (AI) research expands the field of narratology; clearer understanding of memory's processing affordances provides intriguing new frameworks for storytelling, particularly stories or narratives as "instruments of mind" (Herman 2013a). David Herman is among those narratologists exploring how stories (such as *Parable* and *Parable B*) may function analogously to (or may even be counted among) technologies which expand our cognitive functioning. Narratives, in other words, are not just things which our minds encounter: they really can be part of what our minds *are*. Herman's model of analysis includes five sense-making activities that are useful in analyzing narrative: "[c]hunking' experience into workable segments, imputing causal relations between events, addressing problems with the typification of phenomena, sequencing actions, and distributing intelligence across time and space" (228). Of these five activities, the last is most resonant with my approach to Butler's work: the application of cognitive narratology and narrative empathy as a theoretical framework to analyze *Parable* through the lens of Afrofuturism. Key to this analysis is the consideration of how medium-specificity affects this activity of "distributing intelligence across time and space." Specifically, how does *Parable B* continue to broadcast strategies for survival and change in an alternative medium, while maintaining the power to evoke character empathy?

Readers interpret narratives through reference to stereotypical world knowledge, filling in the gaps with what they already believe to be true. At the same time, each instance of accessing narratives in various media also restocks the mind's storehouse of scenarios. This enables interpretation and engagement with fictional events or contexts, even if they are unfamiliar to the reader. Herman (2013) makes the point that narratives are therefore not singular "target[s] of interpretation" but serve as nodes in a "broader discourse environment" that attempts to make sense of what it means to be human. All human experience is expressed through emotion and interaction with each other. Our individual experience is framed by narratives of beliefs and ideologies, cultures and traditions, as we construct narratives of self. Such narratives both construct human lived experience, and may play a role in suppressing, erasing, or such experience. The emergence of Afrofuturism as one narrative capable of redressing

historic erasures of Black lived experience, and of reimagining more inclusive futures, is significant in mapping reality or, more fittingly, realities.

Our understanding of the cognitive processes that enable us to create, or indeed to re-create realities, has recently been transformed by developments within Artificial Intelligence (AI). AI researcher Ben Goertzel (2006) refers to the mind as “a set of patterns associated with an intelligent system” (20). Goertzel further defines mind as functioning as *tool-dependent* and *socially-dependent*, which supports Herman’s hypothesis that intelligence is distributed “across time and space” in ways that go far beyond the brain. The tool-dependent mind, “whose defining patterns span its body-center and a set of inanimate objects or physical instruments” (21), highlights the significance of contact with the written word as both referential artefact and as the provider of processing keys in a pattern of intelligence. Specific affordances of the written word, such as literary devices and paratext, are integral to constructing and deconstructing interpretations of a base narrative. Similarly, a socially-dependent mind, “whose defining patterns span its body-center and other significantly mind bearing systems,” or its interaction with others through language (21), also has a bearing on how we are able to create and interpret narrative. A Venn diagram might illustrate the scope of these patterns with the embodied mind being in the central intersection, narratives of prior knowledge within the secondary intersections, and new knowledge-making narratives in the extended circles or patterns interacting with the mind.

Herman draws the idea of narrative as an instrument of mind from Jerome Bruner’s (1991) thesis that narrative is a method of cognitively organizing and conceptualizing human experience and individual ‘reality’. In this approach, reality will always be subjective, even when drawing on widely shared narratives. As the embodied mind maps its external reality through sensory data, when the storehouse of scenarios is accessed it evokes emotions related to certain scenarios either previously experienced or imagined. When emotion is evoked, including empathy, through the act of reading, we are able to connect with others, even fictional characters, in ways that facilitate extending those patterns of intelligence. Helpful to this analysis is Bruner’s concept of “narrative accrual”: “cumulative narratives that are diachronically structured to formulate culture and tradition” (1991, 20).

As cultural paradigms are influencing factors in the interpretation of narratives, a breach of that canonicity will occur when the outcome differs from particular cultural paradigms an individual accepts, or the outcome fails to materialize (20). It is crucial to recognise that *Parable* both represents such processes, by telling stories about people whose worldviews and behaviours are challenged and transformed, and also participates in these processes, via the sustained legacy of Butler’s work. It is a storyworld which depicts the emergence of storyworlds. One potential example of such a breach, in which existing paradigms are unsettled, comes in Butler’s treatment of religion. In *Parable*, Lauren thoroughly reconstructs Christian traditions and institutions, rejecting Christian theism in favor of a materialist and ecologically-nuanced understanding of the universe and humanity’s place in it, and rejecting heavenly reward in favor of the ambition that humanity will one day truly explore the

heavens, through interstellar travel. The protagonist diverges from her community's traditional belief system, creating her own version to navigate the rapidly changing environment. Butler merges what may initially seem contrasting cultural narratives thus demonstrating narrative accrual, or the ways individuals and communities actually build traditions piecemeal to adapt to changing cultural contexts and geographies. The titular reference to the New Testament does more than reveal the premise on which this storyworld is built: change is dependent upon creating or discovering the right conditions for growth; it also serves as a way of drawing attention to the construction of narrative as an instrument of mind. Even when individual characters exist in the same spatio-temporal environment their mental and spiritual growth depends on a number of attributed cultural and psychological factors. This is evidenced through characterization: how each character negotiates the narrative storyworld in their own way to arrive at a predetermined outcome known only by the narrator. Drawing on the concept of theory of mind—how individuals in the real world acknowledge the existence of other minds, and access them to construct their own relational narratives of self and external world—Alan Palmer (2011) produces the model of attribution theory to achieve the same purpose when reading characters. An attributed consciousness to a literary construct, a character, can only be accessed through language. Since the storyworld is a textual construct, to understand it the reader relies on another literary construct, the narrator, to enter the storyworld. *Parable* is presented in the form of journal entries that convey the consciousness or the inner workings of the mind of the teenage autodiegetic narrator, Lauren Oya Olamina. Lauren's spiritual perspective is key to how she envisions her future and is recorded in the journal that becomes the blueprint for a survival narrative. This Janus-like narrative enables the reader to penetrate the layers of articulation presented by the narrator. The reader can look 'back' into Lauren's private thoughts recorded in her journal, and can also look 'forward' to the codified book of survival doctrine, *Earthseed: The Books of the Living*, interspersed throughout the journal. We might see this structural form mirroring the embodied mind using its senses to navigate external reality, thus connecting to other patterns of intelligence. This structure also reveals Butler's own palimpsestic style of writing and how she also attributes this to her protagonist, as four of the journal entries, "2027" (chapters 15 and 16) and "2028" (chapters 19 and 20), open with the caveat that the entries have been expanded upon from post-dated notes, suggesting Lauren's retrospective reworking of the recorded events of certain dates. Lauren's reworking indicates recorded events are always written looking back in time while temporally moving forward. "Twenty-five or thirty lumpy, incoherent rewrites" (*Parable* 24) eventually formulate a belief system that directs Lauren to her destination.

References to other artefacts of writing such as notes, notebooks, textbooks, shopping lists, maps, newspapers, scriptures, and sermons likewise illuminate cultural narratives as well as performing a framing function within tool-dependent mind systems. Biblical quotations serving as cultural references in the narrative for the reader and characters alike are breached by oppositional epigraphs at the start of each year and chapter. The epigraphs at the start of each of the four years all contain references to the combination of intelligence and adaptability as the only survival

strategy, one that privileges the self as savior over divine intervention, a familiar trope to Butler's readership (Patternist series, Xenogenesis trilogy). The piecemeal form of the novel itself invites us to consider the piecemeal nature of the large narrative frames through which we experience reality. Religious ideology is often rigid and deep-rooted, and may have an 'all or nothing' character. By contrast, Butler shows how a religion can accrue piece by piece, through a process like bricolage. Although Lauren fixes some elements of Earthseed very early on, the way she develops the religion also depends on improvisation and chance. In this sense, *Parable* broadcasts change by reminding us that many features of reality that seem permanent and unchangeable could actually be changed after all. It invites us to continuously adapt the structures through which we filter and organize reality, guided by an orientation to individual and collective survival and flourishing.

The novel also dramatises the challenges of building trust and solidarity. The characters are not privy to important information which remains hidden in the protagonist's private journal, so they misread her. Indeed, Lauren's condition of being able to read others to the point of unintentionally mimicking their emotional and sensual responses to pleasure and pain may resemble what W.E.B. Du Bois describes as double consciousness. That is, Lauren is frequently forced to undergo unwanted empathetic connections, feeling the pain of those around her in ways that are sometimes debilitating, and indeed may prevent her from more effectively aiding and protecting them. Since Lauren's hyperempathy is also a vulnerability that can be exploited, she usually hides it. In much the same way that Kimberley Foster reports the contemporary African American experience of having to become a shape-shifter to successfully navigate white spaces and maintain cultural integrity ("How do black people navigate white worlds? Shape-shifting" 2018), Lauren hides her true self, initially at the behest of her father who expects her to be able to "shake [it] off" (*Parable* 11). Masking her true self is exhausting and injurious but Lauren feels it is necessary to prevent punitive responses, even from those closest to her. In true shape-shifting style, Lauren becomes what she needs to be depending on the situation, such as undergoing baptism to placate her father and the community (14). Later, when she is forced to live outside the perimeter, she crops her hair and dresses as a man as a means of protection. Without completely changing her physical form, I suggest this act of hiding her true self is a type of shape-shifting, a motif that Butler often incorporates in her work, thereby politicizing African mythology temporally resituated in future settings.

Although Lauren herself tends to view her hyperempathy almost exclusively as a hindrance, Butler invites readers to speculate on the positive role it might play in the evolution of Earthseed. Lauren's foresight of knowing the gated community where she lives as a teenager will ultimately fail to protect and prosper is related to her condition. The close connection to what is happening around her produces a pressing need to increase the scope of her ability to adapt. However, Lauren is cautious when deciding how and when to share her evolving belief system with those in her immediate circle, and rightly so, given that it contravenes the cultural narrative of the community in which she exists. Her account of a disturbing dream in the opening entry sets the scene

for this conflict, as she struggles to live up to her father's expectations (*Parable 3*). Notably, her father is a professor and Baptist minister who leads the congregation of neighbors within a walled community. Their hope is in the traditional Judeo-Christian concept of God, whereas Lauren believes "we can rig the game in our own favor if we understand God exists to be shaped, and will be shaped, with or without our forethought, with or without our intent" (24). There is resonance here with the encoded spirituals communicated in plain sight by slaves as a means of escape during the antebellum era of America's history. Indeed, references to slavery both explicit and implicit abound in *Parable* as the subtext motivating Lauren's flight to relative freedom, and the theme becomes central to the novel's sequel, *The Parable of the Talents*.

Broadcasting change: Neuroesthetics

Taking a particular narrative and exposing it to the reader from various perspectives (angles and media) and distances (spatially and temporally) extends the patterns of intelligence and may thereby produce an ideological shift in the mind of the reader. Afrofuturist works often seek to achieve this shift by repositioning historical traditions and events within present and future storyworlds. In the same way that moving between temporalities produces adjusted or even new meanings, the affordances of the graphic novel lead to changes compared with the original text, including the conflation of events that were originally separate into new composite events. Conflations are particularly evident in the adaptation of the introductory dream sequence (*Parable B 2*). The reference to Lauren trying to be her father's daughter is foregrounded by seven-year-old Lauren's memory of telling her stepmother Cory that she would "prefiero tener las estrellas" (rather have the stars) instead of the city lights, a clear reference to Lauren's destiny. The narration is written in Spanish, providing an authentic 'memory' scene, whereas in the original text the dialogue is narrated in English with Lauren explaining she had spoken in Cory's first language as an act of intimacy (*Parable 5*). In this way the medium captures the essence of Lauren's lived reality. Another significant example of how medium-specificity transforms ideas presented in the original text is the previous quotation highlighting Lauren's belief that God can be shaped, a quotation that is not in the adaptation. Instead, *Parable B* replicates half a page of Lauren's journal notes, outlining the essence of Lauren's perception of God, and incorporating key pieces of exposition from the original (*Parable B 21*). When listing God's qualities, Lauren includes the inversion of man's creation by stating that "God is pliable [...] Clay" and supports her logic with paraphrased scientific and scriptural annotations. Her references to the second law of thermodynamics, Darwinian evolution, and the Buddhist doctrine of impermanence, reveal her understanding that change is inevitable and natural. Although this is not a painting or a scene per se, the illustration of the journal entry with a hand at the bottom right-hand side does much to convey the constancy of a 'scene' we are all familiar with. This is the act of journalistic writing, and the way in which we create narratives of self. The question in the caption, "[i]s any of this real?" (*Parable B 21*), calls to the reader's attention a practice of human behavior we all identify with, self-reflection, but it also reminds the reader this is a fictional construct. At the end of the entry, Lauren

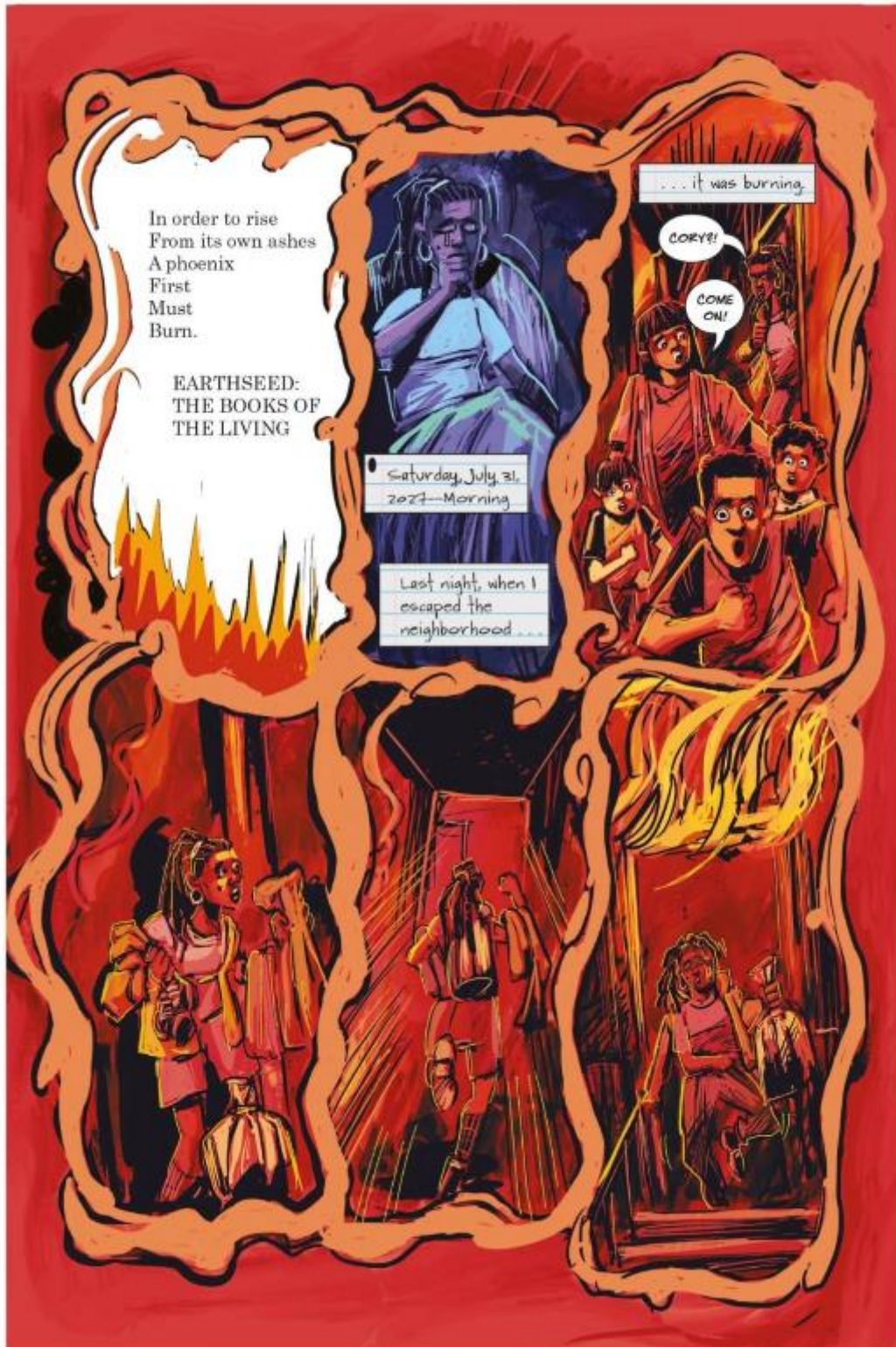
acknowledges that she will need to take action by eventually venturing outside her community, but states, “[t]hat reality scares me to death.” The fear of the unknown, and the reasonable expectation that she will encounter peril, is measured against fear of the rapidly deteriorating situation she is already in, again an implicit reference to the narrative of slavery. For a contemporary reading, brown sees a direct parallel with the dilemma facing #BlackLivesMatter activists increasing their risk of contracting the Covid-19 virus while protesting en masse for an end to racial injustice and inequality. Brown insightfully likens the period of containment enforced through quarantine measures as incubating survival instincts that have inevitably exploded into prosocial action (Coleman and Due 2020a, 10:17). Cultural artefacts, specifically statues, are currently the foci for visibly critiquing historical injustice whose effects continue in the present. Each statue’s materiality exposes racist, colonialist narratives and enables a rewriting, sometimes literally with graffiti, of absent or erased narratives.

The materiality of the culturally constructed artefacts referenced in *Parable B* takes on greater emphasis now as they visually frame the “narrative constancy” of this storyworld.¹ Duffy and Jennings have illustrated each annual division with a representational scene that signposts the chronological context for the reader. “2024” is the ‘scene’ of the north circumpolar constellation of stars which positions Earth in relation to the universe; for Lauren it is a scene of exploration, aspiration and destiny. “2025” covers two pages (double-page splash) of illustrations of desert plants representing Lauren’s reliance on nature to grow a fledgling community of like-minded survivors, whilst drawing attention to intratextual references to her study of her father’s books on flora and fauna. “2026” is a diagrammatical sketch of Lauren’s house representing civilization, and the image of a map of California for “2027” extends the concept with the addition of a stain from a coffee cup implying domesticity, while functioning as a directional tool. The reader interprets these basic scenes by identifying phenomena that represent familiar, meaningful scenarios.

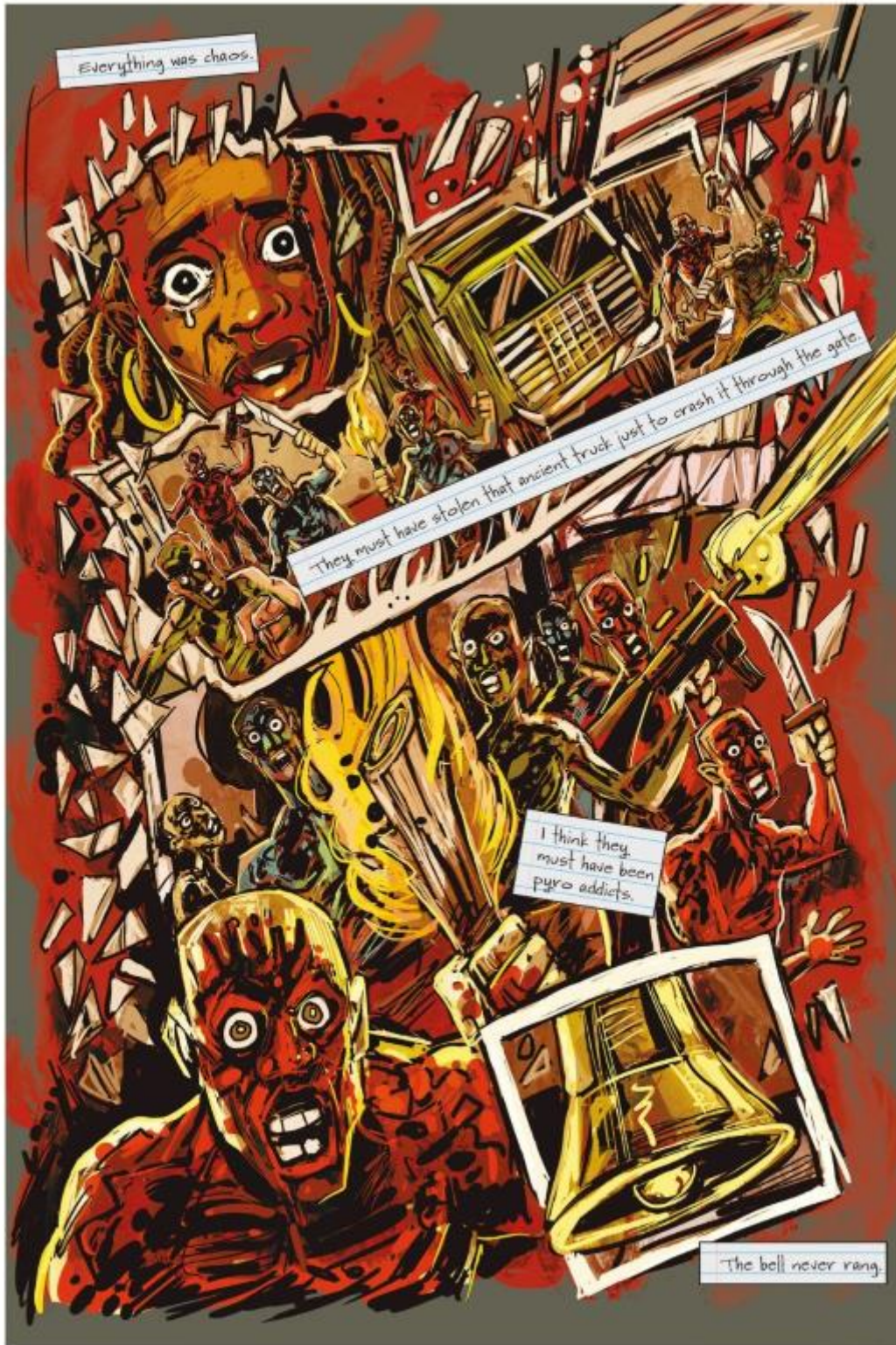


Octavia E. Butler, Damian Duffy, John Jennings, *Parable of the Sower: A Graphic Novel Adaptation* (Abrams ComicArts, 2020). With an introduction by Nalo Hopkinson.

Another example of narrative constancy is the double-page splash (*Parable B* 80 and 81) illustrating the house as a symbol of civilization. The arrangement of boxes on the page is suggestive of the panels of the graphic novel, and in this sense invokes the fundamental structuring of this universe; however, the rough diagrammatic way in which it is drawn, with words scribbled out, also frames the structure as contingent and potentially problematic. The reader does not need a scenic picture of civilization; rather there is an understanding that Lauren's family home is synecdochic thereby filling the gaps. The visual style also has the effect of making the house, and the security it represents, seem fragile. The caption makes the point that "when civilization fails to serve, it must disintegrate unless it is acted upon by unifying internal or external forces," thus foreshadowing how the outer widespread breakdown of society finally breaches the last remaining unifying familial units of the walled community. A later composite scene emphasizing the horror of the walled community's destruction (*Parable B* 123) is filled with crumbling fragments, indicating not only literal window-glass splintering, but also the shattering borders of the graphic novel's panels, and perhaps by association, the shattering of Lauren's world. The single-paneled splash is the start of a new narrative arc (see Appendix #2 Glossary of terms).



Octavia E. Butler, Damian Duffy, John Jennings, *Parable of the Sower: A Graphic Novel Adaptation* (Abrams ComicArts, 2020). With an introduction by Nalo Hopkinson.



Octavia E. Butler, Damian Duffy, John Jennings, *Parable of the Sower: A Graphic Novel Adaptation* (Abrams ComicArts, 2020). With an introduction by Nalo Hopkinson.

The neuroesthetic concept of “perceptual constancy” is evident because the reader can recognize Lauren’s face expressing horror and fear, despite it being framed within a composite scene of destruction. Its position at the top left-hand side of the page draws

the reader to Lauren and the same is true of the foregrounded ‘pyro addict’ (bottom left). Secondly, “situational constancy” is established through the color palette, the shards of glass, and the images of fire and weapons that provide sufficient visual cues for the reader to know it is a scene of chaos, an event that has been foregrounded in the previous example. Four strips of narration are strategically positioned above, in the center, and below the scene to incorporate Lauren’s thoughts and contextualize the chaos. Tellingly, the image of the warning bell is brought forward in a separate frame at the bottom of the page with the caption, “[t]he bell never rang.” The reader is already aware the community has a bell for the watchers to ring when the walls are breached, but the image of the bell with its motionless clanger emphasizes the swiftness with which the community/civilization was destroyed, illustrating Zeki’s “narrative constancy.” Significantly, the start of this arc consists of two separate splashes (123, 124) functioning as ‘orienters’, to use Neil Cohn’s (2013) terminology, thus framing the extreme savagery of the context. Moving forward to the next arc, Lauren has made a temporary retreat outside the scene of destruction but soon comes to the realization that to survive she must first return to the remains of her home to retrieve essential supplies. Her comment “and the idea scares me to death” (129) connects to an earlier arc (21), emphasizing her fragile psychological state. Lauren’s acknowledgement that the reality of life outside the community does not quite tally with the knowledge she garnered from books (129) supports the idea that narratives act as “instruments of mind that gauge the felt quality of *lived* [italics mine] experience” (Herman 2013, 2). Thrust into a perilous, alien environment, the act of writing is the only connection to Lauren’s former life. In a world where self-serving, brutal behavior replaces ethics, the compulsion to write raises Lauren to the role of prophet.

On another page, in the aftermath of the attack, Lauren’s divine status as the [re]creator of God is implied in the spatial positioning of the seated Lauren situated above and outside the carnage of the breached community (*Parable B* 130). Beneath it the slightly larger macro panel gives the impression of her having descended into the newly-formed hell which echoes with the onomatopoeic “CLANG KA-CLANG.” After a sequence of ‘initials’ the bell from which the sound is coming is finally revealed when looters are seen carrying it away (*Parable B* 132). The reverberating sound representing a death knell continues until Lauren reaches her vandalized home (132). A month into Lauren’s flight north, her small band of followers reach the ocean. The reader is alerted to this by a recognizable scene, albeit abstract, illustrated in blues, yellows, and browns (*Parable B* 169). The reader is able to identify the beach scene based on colors and brush strokes alone. Three figures facing the blue are standing on the brown foreground which the reader contextualizes as sand. However, the sequential panels show that survival, rather than the pleasure usually associated with the ocean, is still foremost in Lauren’s mind as she is seen considering how to filter water (*Parable B* 170).

Broadcasting change: Narrative Empathy

The relationship between cognitive processing of visual narratives and empathy can be further understood by a consideration of narrative empathy, particularly in light of

Suzanne Keen's observation that "fiction does disarm readers of some of the protective layers of cautious reasoning that may inhibit empathy in the real world" (2006, 213). Keen's research engages the debates around whether narrative strategies may evoke empathy in the reader towards fictional characters in constructed storyworlds. If narratives really can influence social change, then reading, now more than ever, has a key role to play in humanity's ability to adapt to new interactions with each other and the environment. In this respect, recent research has explored factors which may influence reader empathy, including the potential role of formal features of the narrative (e.g. the use of first person or third person, the use of free indirect discourse, the use of explicit or subtextual expressions of emotion). The empirical component of such research has typically involved creating an adaptation of a narrative which varies some feature, and then questioning readers about their emotional responses, to compare across the versions. Though the results of such research are far from conclusive, it does provide suggestive context for the way empathy functions across *Parable* and *Parable B*. Fernandez-Quintanilla (2020) advises caution in ascribing empathy to narrative cues as reader context influences outcomes, and points to the need for further empirical research (2020, 18). Findings from her qualitative study of non-fiction narratives of persecution and torture do reveal links between a reader's moral evaluation of a character's actions and experiences, and empathic responses (2020, 16). Although *Parable* is fiction, its protagonist's actions frequently elicit moral evaluation. For example, Lauren acts swiftly to use lethal force in defence of herself and her allies. Furthermore, calculating and filled with religious conviction, Lauren retains a faint trace of the callous power-seeker of Butler's earlier drafts, which invites judgment, even if her history and circumstances inclines the reader ultimately to judge her favorably.

While Keen differentiates between sympathy, feeling *for* others, and empathy, feeling *with* others (2015, 154), Fernandez-Quintanilla adds "forming a mental representation of the character's situation and mental state(s) while maintaining a self-other distinction" to the definition of narrative empathy (2020, 2). The self-other distinction more closely aligns with cognitive empathy indicating perceptual parameters; however, readers can mirror both fictional and non-fictional characters' mental states. The activation of mirror neurons can be clinically measured during fMRI scans, and studies show a correlation between increased levels of mirror neuron activity and high scores in empathy tests, posing the question of whether exposure to art and literature can alter this activity (Keen 2006, 207). Of note, is the assertion that fiction writers have high levels of empathy (207), and possibly their reactions to observing empathy-inducing behavior is projected onto their literary constructs in the expectation that the cycle will continue with reader empathy for the character. This is of course a highly speculative proposition which has not yet been empirically tested, and any further comment lies beyond the scope of this essay. However, such questions around how different forms of empathy might be generated, cultivated, inhibited, and/or manipulated, are crucial background for a narrative which centrally thematises the relationship of empathy to social change. That is, Butler extends the theme of empathy in *Parable* by attributing hyperempathy to the protagonist. Lauren explains her condition is the result of her mother's abuse of the prescription drug Paracetco: "I

feel what I see others feeling or what I believe they feel” (*Parable* 12). Intriguingly, Butler includes an alternative diegetic name for Paracetco, “Einstein powder,” which, I feel, reveals a direct link between the effects of Lauren’s prenatal exposure to chemical substances and the application of narrative empathy. Einstein’s theory of special relativity has profound implications for what different observers of the universe do and do not share. In particular, since time and space are woven together as spacetime, the passage of time may be different for different observers (depending on their relative motion). On the other hand, the speed of light remains constant for all observers. Likewise, light is a privileged medium in *Parable*, insofar as Lauren’s hyperempathy operates almost exclusively through the visual channel. The sight of what others are doing is processed within the cortical retina, and involves an interpretative perspective based on cultural and ideological narratives already constructed in the mind on past occasions. So, the degree of empathy seems to be determined by how closely the observer (or reader) identifies with the experience or event they see. In Lauren’s case her “neurotransmitters are scrambled and they’re going to stay scrambled” (*Parable B* 11), so the reader is being directed by a vulnerable, and potentially unreliable narrator; Lauren’s cultural and ideological narratives are based on trauma, suspicion, and survival instincts, and her cognitive process is out of sync. Notably, Lauren’s statement that she feels what she *believes* [italics mine] others feel is pertinent to this analysis of whether narrative can evoke empathy for fictional characters in distressing situations. At times, Lauren’s perception of what others are feeling is skewed, and she is fooled into believing what she is seeing: “[m]y brother Keith used to trick me into feeling his pain” (*Parable B* 10). In the same sense, the graphic novel’s explicit illustrations ‘trick’ the reader into feeling empathy for characters that are constructs. Certainly, Butler explores her lifelong interest in anthropology and ethnography through the themes and characterization in her novels thereby facilitating emotional engagement, at least on the level of cognitive empathy, for characters who are at odds with their environment.

Keen’s (2015) analytical variable model of authorial strategic empathy includes “bounded”, “ambassadorial,” and “broadcast” narrative strategies, and I contend the last is most applicable to Butler’s method of strategic narrative empathy in *Parable*. The first strategy relies on in-group familiarity of identity in readers, while the second attracts targeted audiences to appeal for recognition or justice for a particular group or cause, so often has a limited time-scale (157). While both can be applied to Butler’s work, the scope of her readership, and the continued currency of the themes and issues her work addresses place her strategies in the category of “broadcast strategic empathy.” This particular strategy enables the text to broadcast beyond contemporaneous contexts, to connect “distant others,” both culturally and temporally, and have enduring relevance (157). Etymologically, the word *broadcast* has even greater resonance with the theme and premise of this novel. Although the modern definition generally relates to a radio or television program transmission, or sharing information with an audience, the word broadcast originally defined the scattering of seed by hand. *Parable* is still as salient now as at its time of publication; Butler’s indictment of conservative authoritarian political leadership veering towards fascism, and the politicizing of ecological issues when writing *Parable* (Gonzalez and Goodman

2005, 225), still resonates today. The agents may have changed over the past three decades, unfortunately the discourse has not. Butler's themes reverberate long after they are first broadcast, and resonate with the original definition as they continue to grow in popularity and significance.

Butler's dystopian survival narrative achieves the goal of broadcast strategic empathy because it employs narrative techniques that invoke a sense of sharing in common struggles experienced by humanity, but from the point of view of a vulnerable yet courageous and determined individual who faces added debilitating challenges. By employing first-person narration, Butler places the reader in the position of the protagonist to share in her struggles in the same way Lauren is a 'sharer' of the other characters' struggles. Tentatively, research shows that the degree of transportation into the storyworld relates to the degree of affective empathy induced in the reader (Stansfield and Bunce 2014, 14). Significantly, Stansfield and Bunce's research supports previous theories that individuals who habitually read fiction and engage with the psychology of fictional characters are more likely to exercise the process of cognitive empathy in real-world interactions (15). So, the more we read, the more likely we are to see others' points of view. Rather than experiencing isolated events of affective empathy for characters in a particular closed storyworld, readers need to engage on a cognitive empathetic level for their individual mindset to alter, or for prosocial actions for change to occur. Butler's reworking of specific themes and characterization throughout her body of work reinforces the potential for empathetic reader engagement. At the same time, while Butler recognises the centrality of empathy to broadcasting change, she does not present a simplistic or straightforward understanding of empathy. Butler's use of broadly epistolary and palimpsestuous narrative forms — Lauren's diary, interspersed with fragments of religious poetry — may often act to push the reader away, even while other techniques pull the reader closer. Empathy can also sometimes be a liability in broadcasting change, as dramatised by Lauren's hyperempathy. To some degree, Butler is also interested in exposing how empathy can be generated and manipulated, across the distributed patterns of the socially-dependent and tool-using mind. In this sense, sometimes Butler does not want her readers to *feel* empathy, so much as to *examine* it.

This complex mobilisation of empathy poses a challenge for adaptation. At the same time, *Parable* is certainly a narrative that invites adaptation, which is prefigured in the way it imagines Earthseed spreading and evolving. One way in which *Parable B*, as a visual medium, differs from *Parable* is in its constant reminder of how Lauren is embodied. That is, the protagonist's increased vulnerability is due not only to her hyperempathy, but also due to her youth, race and gender, all of which may evoke empathy in the reader who can identify with the character in some way. Before she reaches adulthood, Lauren experiences extreme physical and psychological trauma, and loss. Left to fend for herself in a chaotic, lawless society, Lauren's situation is the stimulus for evoking reader empathy. The protagonist's youth may engender feelings of parental responsibility in mature readers, and empathic character identification with younger readers. Duffy and Jennings illustrate Lauren's visceral experience on a double-page splash (*Parable B* 8, 9) showing her double-aspect face positioned in the

centerfold. The three panels forming the tier on page 8 are illustrated in muted browns, rust, yellow, and pink representing the moribundity of the city, “a carcass covered with maggots” as Lauren’s father has previously described Los Angeles (7). Individuals resembling the living dead are foregrounded: deformed and depraved humans succumbing to the desperate and decaying conditions sucking all life and hope from them. Lauren’s expressionless face on this side of the centerfold is facing back as though she were observing the conditions around her; however, on closer inspection, her eyes are looking past the people into the distance. Lauren’s internal thoughts are exposed on the lined journal page captions recounting her father’s memories of the city before walls were built to protect small communities. Lauren’s profile is smooth, clean, and strong, in stark contrast to the bodies foregrounded in the panels. Likewise, positioning Lauren’s face on top of the panels shows she is separate and distinct from these street poor. Only half of Lauren’s face appears on the right of the centerfold, and is front-facing. Lauren’s gaze focuses on the reader, and the size of her face in relation to the other characters lessens the distance between her and the reader. Interestingly, the captions are now placed on top of Lauren’s head alluding to her being behind the narration, as she is being pushed farther back into the conditions of the storyworld. These captions read, “[...] they often have things wrong with them” (1), and “I tried not to look at them as we rode, but I couldn’t help seeing– collecting– some misery” (2). So, while Lauren is clearly not in direct physical contact with the street poor her hyperempathy reduces the distance between her and them. A visceral connection is evident by the ragged edges of the mono panels in contrast with the smooth lines of the panels on the page opposite. Representing blood, deep red ink is smeared over the each panel, and in the gutters, literally and metaphorically filling in the space providing further evidence of Lauren’s hyperempathic relationship with strangers. The boils in panel 1, and the missing limbs in the other two panels visually represent psychological and physiological responses Lauren feels when she is in the proximity of intense suffering. Applying the neurobiological operations discussed earlier to this scene reflects the cortical retina operation. The passive eye relays what is in its scope of vision (suffering individuals and, at times, animals) to the processing cells interpreting the phenomena then triggering an emotional response. Although, in Lauren’s case the emotional response generates a psychosomatic reaction emphasized in the visual representations of suffering: “experiential emotional sharing helps calibrate emotion” thereby facilitating mutual understanding (Hogan 2015, 279). Despite Lauren’s emotional calibration being offset, her ability to emotionally read people actually works in her favor when deciding who can join her as traveling companions. In the same sense that Lauren discerns other characters’ inner feelings, the reader is also engaged in mind reading when in close proximity to Lauren’s condition through the consonant narration and the visual illustration of the graphic novel. The intimacy of the diary written in first person “creates an illusion of reality” (Lodge 2002 cited in Keen 2006, 220), facilitating the potential for empathic identification with the protagonist.

In the graphic novel medium, design choices are made to maintain the illusion of reality. Temporal alteration of events and narration that Duffy and Jennings employ in adapting Butler’s novel may be artistic license, but I suggest there is a more plausible

rationale supporting Samir Zeki's (1995) argument that artists filter superfluous detail to capture the essence of the object they are painting [illustrating]. Duffy and Jennings conflate events to graphically capture the parallel between the suffering of the street poor and Lauren's hyperempathic reaction, even though these events are in a different chronological order in the original novel. The graphic novel also employs such achronological presentation to emphasize a parallel in depicting the maggots. In *Parable*, references to the city being a carcass of maggots is introduced when Lauren's narration conveys her brother Keith's ambition to move to the city to make money. Lauren proceeds to describe the human maggots that they ride past on their bicycles, including an encounter with a young woman, and then continues to recount her father's youthful venture to the city, subsequent disillusionment, and his return to Robledo after the murder of his parents (*Parable* 10). In the adaptation, however, the encounter with the woman takes place before the visual exposition of the human maggots and Lauren's condition. Had this woman been included in the scene with those characters she would have been facing Lauren, and the reader. This is significant from the point of perspective, and focalization. Lauren tells us in the original version that "I got a look at her slack expression and realized that she was dazed or drunk or something. Maybe she had been raped so much she was crazy" (*Parable* 9). In the adaptation, the naked woman is presented in sequential panels (*Parable B* 6). Panel 1 shows Lauren with two of the boys in her group riding in front of her. Her thought bubble reads, "Dazed or drunk or something," but the object of her thoughts is not evident in the panel. The captions provide no clues since they refer to the [unseen] adults' sentimentality of the good old days. In the next panel, the three characters now face a naked woman in the foreground so the reader only has a rear view of her. Lauren's thought bubble now reveals the sequential link from the previous thought bubble, as she surmises the woman has been repeatedly raped, one of the constant dangers for those living outside the relative protection of a walled community. At this juncture, we rely on Lauren's perspective. Panel 3 highlights the boys' (male gaze) reaction, before the last panel of the page shows the reader the woman's haunted expression as Lauren looks back at her, dismayed that she is unable to offer assistance.

Whilst Duffy and Jennings have altered temporality in order to conflate certain events that drive the plot, Butler's original text merges historical writings and memories with future discourses thereby hinting at the relativity of time. By concluding the novel with the biblical scripture from which the title is taken, there is a sense that Lauren is looking behind for the last time knowing the way forward calls for a rewriting of an old narrative. The emphasis is always on artefacts of writing and the dissemination of knowledge. Marshall McLuhan's (1964) oft-used idiom that the "medium is the message" is certainly true when considering metanarration in this graphic adaptation. Duffy and Jennings have succeeded in accentuating Butler's attention to the materiality of writing artefacts, and the importance of sharing in the process of writing through psycho-narration and authorial broadcast strategy. The significance of the materiality of writing artefacts extends to the promotional information enveloping the text, or paratext, thus bringing me to the final element of Keen's theory of narrative empathy.

Broadcasting change: Paratext

The function of paratext in the distribution of intelligence and cognitive empathy across time and space is to produce intimacy with the characters' creator, in order to further increase the potential to evoke empathy. The adaptation naturally invites a paratextual consideration due to the function of paratext as legitimizer of what is a transmedial interpretation of one of Butler's most engaging narratives. As a zone of transaction between reader and text (Genette and Maclean 1991, 261), the paratextual phenomena on the cover of the adaptation, and in the internal pages surrounding the text serves to validate and promote Duffy and Jennings's interpretation by incorporating it into a wider network of tool-dependent and socially-dependent minds. The brightly-colored dust jacket is aesthetically appealing with warm oranges, reds, and yellows, and text clearly identifying it as a graphic novel adaptation of one of Butler's most well-known novels. Duffy and Jennings's credentials as the "award-winning #1 *New York Times* bestselling team of *Kindred: A Graphic Novel Adaptation*" shows that the team already successfully adapted another of Butler's novels. This detail, along with Tananarive Due's oversight of the venture, a jacket blurb from science fiction writer Daniel José Older ("this glorious rendering [...] whose rich storytelling adds a stunning visual layer"), and celebrated science fiction writer Nalo Hopkinson's introduction provides assurance that Duffy and Jennings can do Butler's work justice. Hopkinson's personal and professional relationship with Butler guarantees the veracity of the adaptation: "This book *lives*. It breathes, moves, feels, clamors for your attention, insists on bearing witness, insists on being heard" (*Parable B v*). Hopkinson's articulation of the narrative's power to broadcast is supported by peritextual biographical details of the author, adaptor, and artist thus resonating with the concept of connecting distant others culturally and temporally. The accompanying illustrated portraits provide a link to the bright dust jacket through the small colorful circles representing cosmic dust that frames each face, including the protagonist's on the cover. Just as space envelops Earth, the dust jacket covers the blue, graffiti-covered, hardback book representing Earth.

The illustration of a barbed-wire topped wall is a clear reference to the diegetic walled community of Robledo, but also mirrors the boundness of a written artefact. The graffiti adds a sense of writing over, an epigraphic indictment of the end of civilization. The reader can decipher "KILLS," "BURN," and "HELL," a modern-day revision of the 'writing on the wall' recording God's ancient judgment of the Babylonians. There are other intertextual references to Daniel 5 in the Bible: a kingdom (society) is divided, and a death sentence is passed. The reference to society being fragmented is eerily prophetic as Lauren's lover Bankole's intratextual supposition that America would break up into little states or be absorbed by other countries (*Parable* 310), echoes what is currently happening today. Jennings's 'tagging' of "DORO" in graffiti on the wall on the front cover is a tacit reference to Butler's first shape-shifting character (Duffy 2020). This implicit reference to *Patternmaster* (1979) reinforces the dynamicity and patternistic nature of Butler's writing. Just as she wrote and rewrote the trope of change, her work now undergoes shape-shifting of another kind: adaptation.

The graphic novel, emerging in scholarly discourse and as a teaching tool in curricula across educational levels, is a long-overdue, worthy contender for literary acceptance. Visual narratives can mirror cognitive processes and offer insight into the way in which we construct narratives of self and our reality. Combining visual phenomena with concise accompanying narration, graphic novels waive superfluous detail; the medium functions like the cortical retina that filters for narrative constancy to interpret phenomena. The reader retrieves scenarios from memory to augment the visible narratives. The exposure to various perspectives this medium affords is significant. Narrative empathy can still be evoked through the illustrative focalization of characters, the style of illustration, and the sequential tension between panels. Duffy and Jennings's adaptation is a fitting vehicle for demonstrating how combining 'outsider' genres results in more explicit readings of narratives that dismantle hierarchy, and inspire change. Even though Butler's oeuvre straddles numerous genres, she is still most closely associated with science fiction; although a self-confessed "outsider" (*Parable B* 263), Butler's exceptional personal introspection and insightful observation of human behavior has been the creative [Earth]seed for a body of work that has unequivocally moved her center-stage, along with her protagonists. The adaptation of Butler's prescient narratives extends the range and reception of her broadcast, scattering seeds of change: "[A]nd others fell on good ground, and sprang up, and bore fruit an hundredfold" (*Parable B* 262).

Endnotes

(1) *Narrative constancy* is a neuroesthetic term which refers to the identification of a particular scene within a painting regardless of stylistic variation. Samir Zeki's (1995, p.74) theory of neuroesthetics also includes *situational constancy* (the capacity to categorise an event as, for example, sad or festive, regardless of the event) and *perceptual constancy* (the brain's capacity to transform the flux of sensory data into stable forms, for example recognising faces when viewed from different angles, and regardless of facial expression).

Works Cited

Bruner, J. 1991. "The Narrative Construction of Reality" *Critical Enquiry* 18 no.1 (Autumn): 1-21

Butler, O. E. 1978. *Patternmaster* London: Sphere Books.

Butler, O. E. 1993. *Parable of the Sower* London: Hardline.

Canavan, G. 2016. *Octavia E. Butler* Urbana: University of Illinois Press

Cohn, N. 2013. *The Visual Language of Comics Introduction to the Structure and Cognition of Sequential Images* London: Bloomsbury Academic.

Coleman, M., and Due, T. 2020. "Octavia Tried to Tell Us III: Parable for a Pandemic." Uploaded 19 May, 2020. Youtube video 1:23:07 mins. <https://www.youtube.com/watch?v=I-xTfp3g5mM&t=357s>

Coleman, M., and Due, T. 2020a. "Octavia Tried to Tell Us V: Parable for a Pandemic." Uploaded 18 June, 2020. Youtube video 1:09:01mins. <https://www.youtube.com/watch?v=7IYFRIo-VWg&t=3192s> Duffy, Damian (@DamianD2Duffy). 2020. "Direct message to @HdtHeather." Twitter, May 8, 2020, 7:13pm. <https://twitter.com/DamianD2Duffy>.

Duffy, D., and Jennings, J. 2020. *Parable of the Sower A Graphic Novel Adaptation* New York: Abrams Comicarts.

Fernandez-Quintanilla, C. 2020. "Textual and reader factors in narrative empathy: An empirical reader response study using focus groups." *Language and Literature: International Journal of Stylistics* 0, no.0 Online (June): 1-23 <https://journals.sagepub.com/doi/full/10.1177/0963947020927134>

Foster, K. 2018. "How do black people navigate white worlds? Shape-shifting." *The Guardian* Thursday 7 June, 2018. <https://www.theguardian.com/commentisfree/2018/jun/07/how-do-black-people-navigate-white-worlds-shape-shifting>

Gant-Britton, L. 2013. "'A New Fashion in Faith': The Parable Novels in Conversations with Actual Intentional Communities" In *Strange Matings: Science Fiction, Feminism, African American Voices, and Octavia E. Butler* edited by Rebecca J. Holden and Nisi Shawl. 186-207 Seattle: Aqueduct Press. Genette, G., and Maclean, M. 1991. "Introduction to the Paratext." *New Literary History* 22, no. 2 Probing: Art, Criticism, Genre (Spring): 261-272

Goertzel, B. 2006. *The Hidden Pattern: A Patternist Philosophy of Mind* Boca Raton: Brown Walker Press.

Gonzalez, J., and Goodman, A. 2005. "Science Fiction Writer Octavia Butler on Race, Global Warming, and Religion." In Consuela Francis, 222-225. Jackson: University Press of Mississippi.

Herman, D. 2013. "Cognitive Narratology (revised version; uploaded 22 September 2013)." In *The Living Handbook of Narratology*, edited by Hühn, Peter et al. Hamburg: Hamburg University Press <http://www.lhn.uni-hamburg.de/article/cognitive-narratology-revised-version-uploaded-22-september-2013>

Herman, D. 2013a. *Storytelling and the Sciences of Mind*. London: MIT Press.

Hogan, P.C. 2015. "What Literature Teaches Us about Emotion: Synthesizing Affective Science and Literary Study." In *The Oxford Handbook of Cognitive Literary Studies* edited by Lisa Zunshine, 273-290. New York: Oxford University Press.

Keen, S. 2006. "A Theory of Narrative Empathy" *Narrative* 14, no.3. (October): 207-236

Keen, S. 2015. *Narrative Form Revised and Expanded Second Edition*. Basingstoke: Palgrave Macmillan.

Kidd, D., and Castano, E. 2013. "Reading Literary Fiction Improves Theory of Mind." *Scienceexpress* (October): 1-6
McLuhan, M. 1964. *Understanding Media: The Extensions of Man*. New York: Signet Books

Palmer, A. 2011. "1945- : Ontologies of Consciousness." In *The Emergence of Mind Representations of Consciousness in Narrative Discourse in English* edited by David Herman, 273-297. London: University of Nebraska Press.

Rose, C. 2000. "Octavia Butler on Charlie Rose." Uploaded 13 November, 2008. YouTube video, 9:00 mins. <https://www.youtube.com/watch?v=66pu-Miq4tk>

Snider, J.C 2004. "Interview: Octavia E. Butler" In *Conversations with Octavia Butler* edited by Conseula Francis, 213-218. Jackson: University Press of Mississippi.

Stanfield, J., and Bunce, L. 2014. "The Relationship between Empathy and Reading Fiction: Separate Roles for Cognitive and Affective Components." *Journal of European Psychology Students* 5, no. 3 (July): 9-18

Trinidad, M., and May, P. 2017 "Episode 32: the Earthseed Series with adrienne maree brown" *The Lit Review Podcast* November 6, 2017 Podcast, website, 1:32:22 <https://podcasts.apple.com/us/podcast/the-lit-review-podcast/id1242370205?i=1000394481097&mt=2>

Womack, Y. L. 2013 *Afrofuturism The World of Black Sci-Fi and Fantasy Culture* Chicago: Lawrence Hill Books.

Zeki, S. 1998. "Art and the Brain" *Daedalus* 127, no.2 The Brain (Spring): 71-103

Zeki, S. 2001. "Artistic Creativity and the Brain" *Science*, New Series 293, no.5527 (July):51-52

Appendix #1

Glossary from Neil Cohn. 2013. *The Visual Language of Comics Introduction to the Structure and Cognition of Sequential Images* London: Bloomsbury Academic 70.

Visual Narrative Grammar consists of several core categories:

- *Orienter* (O)—provides superordinate information, such as a setting
- *Establisher* (E)—sets up an interaction without acting upon it
- *Initial* (I)—initiates the tension of the narrative arc

- *Prolongation* (L)—marks a medial state of extension, often the trajectory of a path
- *Peak* (P)—marks the height of narrative tension and point of maximal event structure
- *Release* (R)—releases the tension of the interaction

Together, these categories form **phases**, which are coherent pieces of a constituent structure. Just as phrases make up a sentence in syntax, phases make up an **Arc** in narrative. Each Arc can be considered as a “visual sentence” meaning that a longer comic book or graphic novel may contain many Arcs throughout the whole story. But unlike sentences, Arcs do not overtly mark their beginnings (such as with capital letters) or endings (such as with periods).

Appendix #2 Glossary of Graphic Novel Terms

- Gutter – the gap between panels that plays a key role in constructing meaning
- Panel – a self-contained unit that function like a sentence
- Mono-panel – one character or object in a panel
- Macro-panel – more than one character, object or event in a panel
- Narrative arc – chronological construction of a plot
- Speech bubble – indicates dialogue
- Splash – illustrations covering a full page (double-splash covers two pages)
- Tier – unites ideas and functions like a paragraph



This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/). Images from the graphic novel are reproduced here under fair use for purposes of criticism or review.