Makale Bilgisi: Ayva, S. (2025). Barnes'ın Tahta Kurdu ile Empati Kurmak: Nuh'un Gemisi Efsanesinin Yeniden Anlatımı. DEÜ Edebiyat Fakültesi Dergisi, Cilt:12, Sayı:1, ss.247-259	Article Info: Ayva, S. (2025). Empathizing with Barnes's Woodworm: a Retelling of Noah's Ark. DEU Journal of Humanities, Volume:12, Issue:1, pp.247-259
Kategori: Araştırma Makalesi	Category: Research Article
DOI: 10.69878/deuefad.1563775	DOI: 10.69878/deuefad.1563775
Gönderildiği Tarih: 08.10.2024	Date Submitted: 08.10.2024
Kabul Edildiği Tarih: 24.02.2025	Date Accepted: 24.02.2025

EMPATHIZING WITH BARNES'S WOODWORM: A RETELLING OF NOAH'S ARK

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ABSTRACT

By co-opting a cognitive neuroscientific approach, this article investigates how the theories of the embodied mind and embodied simulation shed light on the way readers empathize with nonhuman characters in narratives, and what narrative strategies authors employ to enable readers' empathic engagement with them. Challenging the Cartesian mind-body dualism, the embodied mind theory posits that the mind works in tandem with the body, and cognitive processes are shaped by the body's interactions with the world. Embodied simulation theory puts forward that when people witness others performing actions, experiencing emotions, encountering situations, the mirror neurons in their brains simulate those experiences as if they were performing or experiencing them themselves. That simulative experience also occurs while reading a narrative, or watching a theatrical performance or a film, or examining an artwork. The embodied simulation, in this sense, discloses how readers empathize with imaginary characters through the mirroring mechanism. Within this theoretical context, this article concentrates on the narrative techniques in Julian Barnes's A History of the World in 10 1/2 Chapters (1989) that promote or hinder empathy with the animal narrator, the Woodworm. Consequently, this study argues for the potential of narratives to evoke readers' trans-species empathic engagement.

Keywords: The embodied simulation theory, empathy, animal narrators, Julian Barnes, *A History of the World in 10 1/2 Chapters*.

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BARNES'IN TAHTA KURDU İLE EMPATİ KURMAK: NUH'UN GEMİSİ EFSANESİNİN YENİDEN ANLATIMI

ÖZ

Bu çalışma, bilişsel sinirbilim alanındaki son gelişmelerden yararlanarak, bedenlenmiş zihin ve bedenlenmiş simülasyon teorilerinin, okuyucuların anlatılardaki insan olmayan karakterlerle nasıl empati kurduklarını ve yazarların okuyucuların bu karakterlerle empatik bir bağ kurmalarını sağlamak için hangi anlatı stratejilerini kullandıklarını incelemektedir. Kartezyen zihin-beden ikiliğine meydan okuyan bedenlenmiş zihin teorisi, bilişsel süreçlerde zihnin sistemin tek ve ana merkezi olmadığını, bedenle birlikte çalıştığını ve bilişsel süreçlerin bedenin dünyayla olan etkileşimleriyle de şekillendiğini öne sürer. Beyindeki ayna nöronların keşfi ile ortaya atılan bedenlenmiş simülasyon teorisi ise, bir kişinin başkalarının eylemlerini, duygu ve düşüncelerini anlamak için aynı eylemleri gerçekleştirmek zorunda olmadığını; yalnızca onları gözlemlemenin, beyindeki ayna nöronlar sayesinde bu deneyimleri sanki kendisi yaşıyormuş gibi algılamasını sağladığını öne sürer. Bedenlenmiş simülasyonun, kitap okurken, bir tiyatro performansını veya film izlerken ya da bir sanat eserini inceleme sırasında da gerçekleştiği ortaya çıkmıştır. Bu açıdan bedenlenmiş simülasyon teorisi, ayna nöronlar vasıtasıyla okuyucuların kurgusal karakterlerle nasıl empati kurduklarına açıklık getirir. Yukarıda bahsedilen kuramsal çerçeve kapsamında, bu makale Julian Barnes'ın 10 1/2 Bölümde Dünya Tarihi (1989) adlı eserinde okuyucuyu eserin insan olmayan anlatıcısı Woodworm ile empati kurmaya teşvik eden veya buna engel oluşturabilecek anlatım tekniklerine odaklanmaktadır. Sonuç olarak, bu çalışma, anlatıların okuyucuların insan olmayan kurgusal karakterlerle empatik bir bağ kurmalarını sağlama potansiyeline sahip olduğunu savunmaktadır.

Anahtar Sözcükler: Bedenlenmiş simülasyon teorisi, empati, insan olmayan anlatıcılar, Julian Barnes, 10 ½ Bölümde Dünya Tarihi.

1. INTRODUCTION

Standing against the Cartesian mind-body dualism, the theory of the embodied mind posits that the body actively participates in cognitive processing because cognition is not limited within the borders of the head, but the body and its features also shape cognitive processing. According to the theory, cognition is not disembodied because it deeply relies upon the characteristics of the physical body and its interactions with the outside world, challenging the neurocentric view of the mind that sees the body as a passive and purely computational entity (Rowlands, 2010, p. 53). Simply put, the theory underscores that our bodily experiences, including our sensory and motor systems, shape our thoughts, emotions, and perceptions. During the study of how the embodied mind interacts with the world, neuroscientists, namely Giacamo Rizzolatti and Vittorio Gallese, discover a number of neurons that they call mirror neurons observing first in the brain of macaque monkeys and later in humans. The findings of their experiments show that mirror neurons

take action not just when the subjects perform an action, but also when the same action is performed by others. Mirror neurons, as Iacoboni (2009) puts it, are tiny neurons in our brain that "fire" (p. 4) both when we execute an action and when we observe someone else executing the very same action, thereby allowing us to understand the other person's action on a visceral level. They name this act "embodied simulation" (Rizzolatti and Sinigaglia, 2008, pp. 79-82; Gallese, 2011a, pp. 198-200). To put it another way, it is not necessary to perform the same actions with others to gain an insight into their actions on a visceral level because "[t]he mirroring mechanism for actions in humans is somatotopically organized; in other words, the same cortical regions that are normally active when we execute mouth-, hand-, and foot-related acts are also activated when we observe the same motor acts executed by others" (Wojciehowski and Gallese, 2011).

Moreover, the same neurons become active when watching an actor performing in a movie or theater or reading a novel about a character, or analyzing a piece of visual art. Gallese (2011) maintains that when we read or listen to a narrative, the reader/recipients "literally embody these characters by activating a substantial part of their sensorimotor system" (p.198). Instead of the embodied simulation, Wojciehowski and Gallese introduce the term liberated simulation while referring to readers/recipients' engagement with fictional worlds. The liberated simulation is a process which enables us to experience a more immediate and less cognitively mediated access to the imaginary worlds, enhancing our ability to comprehend and share the meaning behind the actions, motor intentions, feelings, and emotions of these imaginary characters (Wojciehowski and Gallese, 2011, para. 1). In this sense, the liberated simulation sheds light on the mechanics of the mind/body in understanding readers' empathic engagement with fictional others. The embodied mind theory unveils the parallel between the study of mirror neurons or liberated simulation and empathy by unraveling how readers empathize with characters. Empathy, as Gallese defines, is a form of simulation (2003, p. 519). As a complex psychological phenomenon, empathy involves neural mirroring processes and sharing the same mental states of others; thus, it is an embodied experience rather than a purely cognitive processing. Therefore, traveling into fictional worlds activates mirror neurons since empathic response does not require a direct sensory exposure to others' pain or anger (Preston and de Waal, 2002, p. 12). Reading about or witnessing others' emotions analogously culminates in empathy for others. Empathic engagement, therefore, does not depend upon a direct and physical contact between readers and fictitious characters.

Suzanne Keen names the theory of liberated simulation as "narrative empathy," which is a "vicarious, spontaneous sharing of affect" (2007, p. 4, p. xii). Readers make sense of and simulate the experiences, anger, pain, sorrow and happiness of the inhabitants of imaginary worlds. However, in defining narrative empathy, it is pivotal to distinguish it from sympathy and personal distress. Sympathy or empathic concern, refers to the emotion experienced for others that is related to, however does not correspond to their feelings (Keen, 2006, p. 209). In other words, empathy involves sharing the same emotions as another person, such as pain or joy, by deeply understanding their perspective. In contrast, sympathy refers to expressing support or concern for someone else's feelings without necessarily sharing those emotions. What is needed in empathy, Coplan contends, is perspective taking (2011, p. 9). Empathic response entails an affective encounter recognizing the emotions of others, rather than a mere transmission of the emotional states of others. In situations of personal distress, subjects respond to other people's distress by becoming distressed themselves, culminating in emotional overarousal or "aversive arousal." This heightened affective state predisposes them to concentrate more on their own discomfort rather than the other person's suffering. As a result, the subjects help the distressed for the sake of mitigating their own distress (Eisenberg and Fabes, 1998, p. 73). Extreme personal distress usually disrupts the affective connection between the empathizer and the target, building a barrier between them. In this context, the question of what narrative strategies promote or hinder readers' empathic engagement with characters surfaces.

Keen argues that identification with a fictional character, whether human or nonhuman, plays a crucial role in eliciting empathy from readers. She further states that species difference does not act as a barrier to empathic response because readers can feel empathy with nonhuman characters just as they do with humans (2011a, p. 137). This suggests that empathy, both as a cognitive and affective process, shapes how readers understand and experience these realms. Authors, therefore, often make use of nonhuman narrators, or introduce focalizing characters to project other-than-human consciousness, bodies, and emotional states. As Genette notes in Narrative Discourse that in narratives "nothing prevents us from entrusting that role [of the narrative agent] to an animal" (1980, p. 244) since it offers an insider perspective on uncharted nonhuman worlds. Based upon the "dialectic of defamiliarization and empathy," more-than-human narrators entail a blending of human and nonhuman features, and prompting readers to recognize nonhuman minds, and empathize with them (Bernearts et al., 2014, p. 73). To put it differently, animal narration operates within the realms of distance and proximity, similarity and otherness, breaking down the barriers between human and nonhuman worlds, bodies, and identities.

On the other hand, in an attempt to project the emotions, desires, experiences, and needs of nonhumans, anthropomorphism runs the risk of seeing nonhuman attitudes as mirroring our own interests, desires, and needs (Gruen, 2015). Nonhuman narration, hence, carries the peril of resulting in, what Keen calls, "false empathy," which denotes readers' delusion that they

understand the feeling of others from a different culture, race, gender, (2007, p. 159) and species. Anthropomorphism, therefore, may lead to a self-delusional identification on the grounds that it creates a transparent gap that destroys the affective interaction between the readers and nonhuman characters. However, what is needed in generating readers' empathic engagement with nonhuman characters is what Coplan calls "affective matching," which is a form of other-oriented perspective-taking rather than solely mimicking others' facial expressions and emotions (2011, pp. 6-7). Accordingly, to bridge the gap between human and nonhuman minds/bodies, an other-oriented perspective-taking is essential as this immersive experience also involves the sharing of emotions.

Also, Mossner (2017) argues that readers' empathic engagement with imaginary nonhuman others may result in imaginative resistance, possibly leading to empathy inhibition, which is "the cognitive suppression of empathic distress for egoistical, economic, practical, ideological, or cultural reasons" (p.82). Drawing from Hume, Gendler describes imaginative resistance as the "the puzzle of explaining our comparative difficulty in imagining fictional worlds that we take to be morally deviant" (2000, p. 56). To put it another way, it denotes the obstructions that readers experience in entering into nonhuman imaginary environments, and that hinder the readers in following the instructions offered in narratives. Gendler negates Hume's idea of readers' inability to imagine morally deviant situations on the grounds that the principal reason for the readers' resistance lies in their "unwillingness" (2000, p. 56). She maintains that when readers encounter facts of the fictional worlds that their factual world knowledge fails to process, they rely on their imagination to make sense of them. Nonetheless, it is not their cognitive inability but rather their reluctance to imagine "alternative moralities" that leads to imaginative resistance (Gendler, 2000, p. 57). Readers' imaginative resistance possibly causes the destruction of the empathic linkage with imaginary characters because narratives often present belief systems that conflict with the readers' established values and existing notions, making them reluctant to violate or challenge these boundaries (Gendler, 2000, pp. 57-59). Authors deploy strategies to help readers overcome their resistance and clear the obstruction on the way to unknown nonhuman minds and identities.

Jonathan M. Weinberg and Aaron Meskin provide an alternative explanation for the readers' imaginative resistance by drawing on an empirical study on a cognitive model of imagination introduced by Shaun Nichols and Stephen Stich. Their model suggests that imaginative resistance stems from a conflict between distinct cognitive systems. They pinpoint a "belief-box," which includes someone's current beliefs, and an "imagination-box," which includes someone's current imaginings. The consistency between them is regulated by a mechanism called "updater," which updates one's beliefs when confronted with new information. The "inputter," another mechanism, performs the task of adding any content to one's imagination box upon one's demand, and the domain-specific processes such as moral judgements that influence both the belief-box and the imagination-box. The imaginative resistance occurs when a conflict arises between the inputter and the moral judgment system (Weinberg and Meskin, pp. 182-200). Accordingly, when readers are transported into nonhuman fictional worlds, the "inputter" mechanism becomes active, adding new content to the "imagination-box" since readers engage with these worlds through liberated simulation and empathic engagement. Readers transfer imaginary world knowledge, that is to say, what they experience in narrative worlds, to the real world by incorporating this knowledge into their belief systems. Writers utilize various narrative strategies to generate a balanced interaction between the inputter and the moral judgment system, aiming to hinder readers' empathic inhibition and false empathic engagement. As a solution-oriented technique for readers' imaginative resistance, Keen proposes "strategic narrative empathy," which involves the authors' "manipulation of target audiences through intentional, though not invariably efficacious, representations designed to sway the feelings and even influence the beliefs of their readers" (2011b, p. 366). Writers present representations that target the emotions and belief or their readers, though the success of such efforts is not always guaranteed.

To evoke empathy towards out-groups, Keen introduces the narrative technique of "ambassadorial strategic empathy," which intends to address "distant others on behalf of those represented empathetically, often but not exclusively other human beings" (Keen, 2011b, p. 365). Hence, evoking empathic response in readers with out-groups requires narrative techniques that prompts readers to move beyond their familiar environment and enter into the different minds/bodies, and recognize different identities from the empathizers' through focalization. Yet, in the case of trans-species empathy, readers' potential to enter into unexplored territories such as nonhuman imaginary worlds relies on the narrative strategies that boost readers' capacity to overcome their resistance to imagine these unfamiliar worlds and to empathize with them. Readers' entrance into an unknown mind/body necessitates the erasure of the perspectival gap between the two parties, that is, the empathizer and nonhuman characters. Situational empathy, as a remedy, prompts readers to understand and connect with the specific circumstances, thoughts, and emotions of individuals within a given context. Situational empathy, as Hogan (2016) states, requires a shift in readers' perspective whereby the empathizers draw on memories and feelings that do not differ from the targets (pp. 140-44). This shift helps readers to reduce the distance between the readers and nonhuman others encouraging their empathic engagement with these other-than-human characters. The narrative technique of focalization enables authors to achieve readers' perspectival shift

from human to nonhuman. Focalization, as Genette points out, is related to the question of "who perceives?" (1980, p. 186). It suggests the addition of the psychological facet - including both cognitive processes and affective states - and the ideological facet to the perceptual one (Rimmon-Kenan, 2002, pp. 81-87). To overcome imaginative resistance, false empathy and empathy inhibition in narratives, focalization as an inclusive outlook addresses the dissimilarities and distinctness in readers' and nonhuman perception - notably of the non-linguistic nonhumans such as rivers and mountains. Hence, the next part of the essay is extensively focused on Barnes's use of the nonhuman focalization in *A History of the World in 10 1/2 Chapters*, in particular, the animal narrator and focalizing character to canalize readers into the other-than-human minds/bodies.

2. Narrative Techniques that Boost Readers' Empathic Response in A *History of the World in 10 1/2 Chapters*

A History of the World in 10 1/2 Chapters opens with a retelling of the biblical story, Noah's Ark, by Barnes's unconventional narrator, the Woodworm. The nonhuman focalization offers a subversive reimagining of the biblical story by narrating the same story from the woodworm's eye view, or from the perspective of animals on the ark. Barnes's choice of the woodworm as animal narrator differs from those of other authors, namely, Anna Sewell's Black Beauty, Art Spiegelman's Maus, Virginia Woolf's Flush, George Orwell's Animal Farm, Paul Auster's Timbuktu. Keen maintains that household pets, farm animals, birds, and aquatic creatures are already rooted in a literary tradition that shapes readers' perception of which character the reader feels sympathy for and with which one the reader avoids empathic engagement. Therefore, any anthropomorphized depiction of an animal either aligns with or challenges established cultural presumptions (Keen, 2011a, p. 138). In this respect, Barnes's preference of a woodworm as the narrator in A History of the World in 10 1/2 Chapters is against the literary tradition that invites readers to empathize with the other-than-human. Additionally, the woodworm as an unconventional narrator underscores the anthropocentric division of nonhumans as the clean and unclean species. However, Barnes's choice is intentional and to the purpose in that the Woodworm is a chosen onlooker renarrating the story of Noah's Ark and the Flood from the point of a doubly marginalized character as a nonhuman and an unclean species. In fact, Barnes's aim is not to predispose readers to empathize with the Woodworm and nonhuman inhabitants of the Ark. Instead, Barnes aims to urge the readers to rethink their reliance on the accepted version of the story, rather than accepting the Woodworm's account, as the woodworm claims that "[its] account you can trust" (Barnes, 2009, p. 4). Its account of the known story from a totally different perspective encourages readers to explore the boundaries of the representation of truth and perspective. Nonhuman narration augments the potential of

acknowledg[ing] the similarity and otherness at the same time, to recognize the ratness of the rat, the monkeyness of the monkey and the humanness of the rat and the monkey as well as the ratness and the monkeyness of humans. In that way, stories narrated by non-human animals can destabilize anthropocentric ideologies. By giving a voice to non-human animals and facilitating empathy, these narratives can place them on a continuum with humans, rather than constructing them as opposites. (Bernaerts et al., 2014, pp. 73-74)

Reimagining the story from the point of view of animals in the ark engenders a distance from anthropocentric perspective by challenging the biblical narratives.

The Woodworm alerts the readers that there exists a different version of the well-known story of Noah and invites them to trust his account. The animal narrator predisposes readers to reimagine the voyage from the point of animals on the ark and to deconstructs the sacred portrayal of Noah:

Noah was not a nice man. I realize this idea is embarrassing, since you are all descended from him; still, there it is. He was a monster, a puffed-up patriarch who spent half his day grovelling to his God and the other half taking it out on us. He had a gopher-wood stave with which ... well, some of the animals carry the stripes to this day. It's amazing what fear can do. I'm told that among your species a severe shock may cause the hair to turn white in a matter of hours; on the Ark the effects of fear were even more dramatic ... There were times when Noah and his sons got quite hysterical. That doesn't tally with your account of things? You've always been led to believe that Noah was sage, righteous and God-fearing, and I've already described him as a hysterical rogue with a drink problem? The two views aren't entirely incompatible. (Barnes, 2009, pp. 8,12)

The Woodworm's depiction of the ark invites the readers to reconsider the anthropocentric assumptions embedded in traditional narratives, offering a critique of their immediate trust in these ancient stories. The nonhuman narrator, by this way, deconstructs the biblical version by "filling in the deliberate gaps in the official narrative and, on the other hand, openly contradicting several factual aspects of the authorised discourse" (Guignery, 2006, p. 69). Guignery contends that Barnes's retelling of the story from the Woodworm's eye view is "still a very partial truth" since the author aims not to replace the so-called authorized version (2006, p. 70). The Woodworm's insistence on that accounts differ and that it is recounting what the birds said discloses the partiality and constructedness of Noah's story rather than urging the readers to believe in its account.

In A History of the World in 10 1/2 Chapters, Barnes uses the focalizing character either to break readers' imaginative resistance against anthropomorphic narrators or to validate what these nonhuman narrators convey. Barnes, in the chapter entitled "The Survivor," introduces Kathleen Ferris as a focalizing character. Ferris survives a nuclear disaster by escaping on a raft off the coast of Australia with her cats, Paul and Linda. "The Survivor," in this sense, is obviously an allusion to effects of the atomic radiation due to the nuclear disaster at Chernobyl on 25 April 1986 (Guignery, 2006, p. 61). Readers immediately remember the catastrophe causing irreversible damage including the release of up to 30 percent of Chernobyl's 190 metric tons of uranium into the atmosphere, the evacuation of 335,000 nearby inhabitants, and the establishment of 19-mile-wide "exclusion zone" around the reactor, which the scientists estimate that the zone will be uninhabitable up to 20,000 years (Blakemore, 2019, para. 1,6). The narration oscillates between the first-person and third-person narrations, yet still presenting how Ferris perceives the nuclear accident along with the responses of the media and people to the catastrophe, who claim that "[i]t wasn't a very serious accident, they said, not really, not like a bomb going off. And anyway it was a long way away, in Russia" (Barnes, 2009, p. 84). Though the gradual spreading of the radioactive cloud initially engenders panic and fear among the townspeople, their anxieties are eventually replaced by indifference. Nevertheless, narration that is focused through Ferris's point of view does not allow the readers to turn a blind eye to the effects of the calamity on the natural world. As "[e]verything's connected" (Barnes, 2009, p. 84), the poisonous cloud travels to the town and through rain, it comes down on the grass that the reindeer feed on, poisoning the reindeer as well. People decided to feed the meat of the reindeer not to the humans but to the mink to protect the humans. The scene directs the reader to visualize how the human and nonhuman worlds are not separable from one another as these supposedly separate bodies are interrelated, to borrow Alaimo's words, in "trans-corporeal" ways (2018, p. 436). Barnes, concentrating closely on the perception of Ferris, fights against the imaginative resistance and empathy inhibition that some readers potentially experience because just like the townspeople in the narrative, some of the readers possibly disregard the interrelatedness of the human and otherthan-human bodies.

Barnes's double projection of the opposing responses - Ferris's empathic response and people's empathy inhibition act against these barriers encouraging the readers to acknowledge the mutual interchange between the human and other-than human bodies. The narrative predisposes the readers to leave their anthropocentric lens and rethink the repercussions of their actions by asking why people always punish animals, and also by stating that "[n]owadays even fish are exploited ... Exploited, and then poisoned;" and people are "turning all the whales into soap," (Barnes, 2009, p. 88) therefore,

it is the time to acknowledge the fact that the human and nonhuman bodies are inseparably interconnected. The doctor diagnoses Ferris with "persistent victim syndrome," (Barnes, 2009, p.108) which suggests that she is externalizing what she is experiencing in her inner world, projecting her struggles, traumatic experiences, anxieties onto the external world. His diagnosis casts doubt on Ferris's account of the catastrophe which culminates in empathy inhibition in the readers. However, Barnes already anticipates and tries to eliminate that potential barrier by drawing readers' attention to the Chernobyl accident and its repercussions, thereby hindering the cut of their empathic engagement.

The theory of "empathy-altruism hypothesis," as Hoffman puts it, asserts that novel reading, by fostering empathy, promotes prosocial action and good world citizenship (2011, p.128). On the other hand, Keen draws attention to the difficulties in measuring the long-term reactions of reading. Instead, Keen argues that readers' awareness of a text's fictionality influences their subsequent empathetic response by "releasing readers from the obligations of self-protection through skepticism and suspicion" culminating in the potential of ensuing greater empathy to a non-factual character and situation as due to "the protective fictionality" (2007, pp. xiii-xiv). In other words, far from the suspicion and prudence of the actual worlds, imaginary worlds provide "safe zones" (Keen, 2007, p. 4) for readers, which enables readers to empathize with characters. However, in A History of the World in 10 1/2 Chapters, the narrative alternates between fact and fiction, the familiar and unfamiliar. The readers, therefore, sometimes rely on facts, at times find refuge in, what Keen calls, protective fictionality, thereby, deconstructing and reconstructing facts from another perspective, more precisely, from the nonhuman perspective. Moreover, Barnes's dual use of fact and fiction, of familiar and unfamiliar updates both the imaginative-box and belief-box of the readers, which allows them to cognize nonhuman worlds from a nondualistic perspective.

3. CONCLUSION

The capacity of narratives, Keen claims, to evoke readers' simulatory and empathic responses may evolve over time or because of their reference to certain historical, socio-cultural and economic contexts. While some novels may trigger the empathic engagement of their immediate audience, others must wait for a "chance relevance" in order to address later generations (2007, p. xii). The ecological crisis, for instance, unravels and re-energizes the empathic potential with respect to nonhumans in some narratives because the global environmental destruction underscores the fact that human and nonhuman minds/bodies are interrelated with one another, in Alaimo's words, in "transcorporeal" ways, which underscores the fact that "all creatures, as embodied beings, are intermeshed with the dynamic, material world, which crosses through them, transforms them, and is transformed by them" (2018, p. 436). Under the influence of environmental degradation, which operates as a form of focalization, readers may gravitate to some narratives about pandemics such as apocalyptic or post-apocalyptic narratives, or read narratives with no overt ecocritical claim in the light of these concerns. The "chance relevance," at this point, functions as an unpredictable and non-authoritative variance that has an impact on the empathic charge or load of narratives.

Likewise, the Anthropocene - the current geological age characterized by the accelerating impact of human activities on the planet and the irreversible damage they cause- adds to the empathic load of *A History of the World in 10 1/2 Chapters*. Barnes's retelling of the familiar story of Noah's Ark from the Woodworm's point of view engenders a shift in readers' perspective by disposing them to reconsider the notion of human supremacy over all living things and also evoking trans-species empathy for other-thanhumans. The embodied simulation theory unravels how readers understand and simulate the experiences and emotions of nonhuman characters in the narrative and how Barnes's narrative strategies such as the use of an animal narrator or focalizing characters, the narration that oscillates between fact and fiction promote readers' empathic engagement with other-than-human characters. Consequently, this study underscores the potential of narratives to evoke readers' empathic engagement with nonhuman characters and transcend species boundaries.

CONFLICT OF INTEREST

None.

ETHICS COMMITTEE APPROVAL / PARTICIPANT CONSENT

Ethics committee approval is not required for this study. There are no

participants in this study.

FINANCIAL SUPPORT

This research did not receive any specific grant from the public, commercial, or not-for-profit sector funding agencies.

AUTHOR CONTRIBUTIONS

This research and all its stages were conducted by one author.

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