# "It's Turning You into ... Extensions of Itself": Consciousness and Connectivity in David Walton's *The Genius Plague*

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## Abstract

*The Genius Plague* by David Walton is a science fiction novel set against the backdrop of a fungal epidemic that threatens to take control of human beings and, ultimately, the entire world to attain its goals. To ensure its own survival, the fungus manipulates the behaviour of the infected humans, while simultaneously enhancing their capabilities and essentially turning them into posthumans. This article is a posthumanist analysis of the novel, focusing on the transformation of human beings and its implications for both human and fungal entities. Drawing on the insights of Gilles Deleuze, Félix Guattari, and Karen Barad, this study explores how the novel looks at the aspects of consciousness and agency by blurring the boundaries between human and nonhuman cognition. Employing Deleuze and Guattari's concepts of assemblage, deterritorialisation, and reterritorialisation, the analysis shows that the novel portrays consciousness as a transformative process. Building upon Barad's ideas on agency, intra-action and entanglement, the fungus can be seen as an active agent with its own intentionality. This combined analysis posits consciousness and agency as emergent phenomena. Moreover, the study highlights how the symbiotic relationship with the fungus prompts humans to reconsider their conventional ideas about technology and connectivity.

Keywords: agency, assemblage, consciousness, entanglement, posthumanism

## Introduction

David Walton's third novel, *The Genius Plague*, is a science fiction ecothriller/ horror story beginning in the Amazon rainforest, where a fungal epidemic threatens to take control of human minds to propagate itself, causing global instability. The fungus enhances the intelligence of the infected humans to genius levels while simultaneously manipulating their behaviour to act in ways that eschew individual subjectivity to ensure its own survival. Although the infection can be fatal in some cases, those who recover from it are transformed into "post-humans,"<sup>1</sup> with heightened cognitive abilities that extend their comprehension and innovation beyond the conventional boundaries of humanity. Revolving around two brothers, Paul and Neil Johns, who exist on opposite ends of the spectrum when it comes to their viewpoints on the outcome of the fungal invasion, the narrative investigates mycology, ecology, evolution, the intricacies of mind control, and the conundrum of free will, reflecting the intricate interplay between humanity and the natural world and offering a cautionary tale about environmental responsibility.

Post-humanity pertains to a phase in which the human body is no longer bound to its

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<sup>&</sup>lt;sup>1</sup> David Walton, The Genius Plague (New York: Pyr, 2017), p. 323.

natural state but is open to technological alterations.<sup>2</sup> It marks the dawn of "a new culture of transversalism" that questions the concept of human purity and embraces "new forms of creative evolution," blurring the lines between species, machines and humans.<sup>3</sup> The body becomes the critical point of analysis, enabling us to reimagine and potentially reconstruct both the concept and the physical form of what it means to be human.<sup>4</sup> Posthumanism challenges our beliefs about the separation between consciousness, body, and environment. It posits that these distinctions are arbitrary and invites us to recognise the dynamic interplay between these elements. This view of consciousness acknowledges that "thought may be distributed throughout the body"<sup>5</sup> influenced by various factors, presenting consciousness and human existence as "emergent properties,"<sup>6</sup> while rejecting the notion of isolating consciousness from the conditions that give rise to it. Posthumanism reimagines human existence as an integrated part of an interconnected universe, in contrast to traditional humanism, and questions the boundaries separating us from "nature, technology, and other beings"<sup>7</sup> while advocating a more holistic view of the human experience.

The Genius Plague explores the concept of the posthuman from a biological perspective, specifically looking at the potential future of human evolution and how human consciousness and physiology could undergo significant transformations, possibly through a mutual evolution with other species. This article is a posthumanist analysis of the novel, focusing on the evolution of human beings through symbiosis with a fungus, and its implications for both humans and the fungus, primarily through Gilles Deleuze and Félix Guattari's theory of assemblage and Karen Barad's ideas on agency. As a result of being infected by the fungus, the human consciousness undergoes drastic changes which later also manifests as physical change. This aspect of the novel is analysed using Deleuze and Guattari's concept of assemblage, complex systems that are made up of heterogeneous elements. Within the context of the novel, the concept of the assemblage helps us understand consciousness as a dynamic and constantly evolving element that is shaped by the interaction with the fungus. In taking control of humans, the fungus demonstrates its own agency, implicating the posthumanist idea that agency is not indispensably human. This aspect of the novel is analysed using Barad's concept of agency. According to Barad, agency is not something that individuals or objects possess, but rather it is a relational phenomenon that emerges from the intra-actions between different entities. Using this notion, the paper posits that the agency of the fungus is a result of its interaction with humans. In the narrative, while the people are losing some aspects that are thought to be inherently human, they are also gaining knowledge of alternative forms of liveability that are entirely eco-friendly and help them re-think the idea of technology and connectivity. The application of the ideas of Deleuze, Guattari and Barad to the novel help us see how the narrative blurs the boundaries between the human and the nonhuman, opening a space for co-evolution. The novel also raises questions about whether this kind of transformation is the next step in human evolution or the end of humanity as we know it.

Existing scholarship on *The Genius Plague* is limited. Damien Broderick gives an overview of *The Genius Plague* and categorises the consciousness depicted in the novel as "an evolved biological consequence of neural complexity."<sup>8</sup> Ana S. Moura, João Barreiros, M. Natália D. S. Cordeiro analyse Walton's novel among other dystopian science fiction stories to

<sup>&</sup>lt;sup>2</sup> Nicholas Gane, "Posthuman," Theory, Culture & Society, vol. 23, no. 2-3 (2006), pp. 431-434.

<sup>&</sup>lt;sup>3</sup> Gane, "Posthuman," p. 432.

<sup>&</sup>lt;sup>4</sup> Gane, "Posthuman," pp. 432-434.

<sup>&</sup>lt;sup>5</sup> Robert Pepperell, The Posthuman Condition: Consciousness Beyond the Brain (Bristol: Intellect, 2003), p. 25.

<sup>&</sup>lt;sup>6</sup> Pepperell, *The Posthuman Condition*, p. 30.

<sup>&</sup>lt;sup>7</sup> Pepperell, *The Posthuman Condition*, p. 100.

<sup>&</sup>lt;sup>8</sup> Damien Broderick, *Consciousness and Science Fiction* (Cham: Springer, 2018), p. 178.

examine higher education student burnout by comparing the speculative and real-life scenarios and proposing a predictive model to prevent such burnouts.<sup>9</sup> The novel tackles significant ideas related to posthumanism, but this has been relatively overlooked in scholarly discussions to date. While touching on the concept of consciousness, Broderick's overview of the novel leaves many aspects of the narrative unaddressed, which will be developed more fully here.

#### **Assemblages and Altered States**

*The Genius Plague* opens with mycologist Paul Johns in the Amazon rainforest, where he and his fellow passengers are attacked during a riverboat journey. In the ensuing turmoil, Paul and a passenger named Maisie evade their assailants and seek refuge in the depths of the rainforest. While looking for an escape route, they stumble upon a bioluminescent fungus that appears to extend indefinitely, creating a mysterious pathway. They follow this luminous trail further into the heart of the forest, only for it to mysteriously vanish without warning. While surrounded by this fungus, both Paul and Maisie inadvertently inhale fungal spores, leading to an infection of fungal pneumonia. Tragically, Maisie succumbs to the infection, while Paul eventually seems to recover. However, the process of his convalescence profoundly transforms his consciousness.

Dr Mei-lin Chu, Paul's physician, explains that the fungus invades lung tissue, growing tiny mycelial threads, which trigger an immune response. This response can cause fluids and blood to interfere with the alveoli, affecting oxygen and carbon dioxide exchange. Eventually, there is a marked improvement in Paul's health. This resurgence was reflected in his heightened vitality: "He seemed full of energy, enjoying life to the fullest."<sup>10</sup> He also made great strides in his research. Concurrently, the fungal infection thrived in his lungs, infiltrating his cells. The fungus also spread to his brain, entwining with neural pathways. Paul undergoes a cognitive transformation, begetting enhanced intelligence due to the mycelia in his brain. He states, "There are certain portions of my brain they've remapped, keeping the same functionality with increased efficiency."<sup>11</sup> He can process complex data mentally, experience frequent "eureka moments,"<sup>12</sup> and requires less sleep. He intentionally exposes his Alzheimer's-afflicted father to the fungus, resulting in his father experiencing a resurgence of lucidity, and being able to recollect memories with exceptional clarity. The infection spread to different areas of the world. Neil's acquaintance Celso's father was the head of intelligence in Brazil and had been infected with the fungus; Celso characterises his transformation, remarking that he was using his newfound abilities for political manipulation through surveillance, blackmail, and other extreme measures. Suddenly, he had started passionately supporting environmental causes, advocating for heightened protection of the Amazon, the annulment of logging permits, and restrictions on foreign tourism in the region. His intellect had become extraordinary. Like Paul, he retained everything he read, performed complex calculations mentally, and abstained from sleep.

A notable surge in cases of fungal lung infections was observed in the Pará and Amazonas states, accompanied by a significant rise in mortality rates. Reports began to emerge of Indigenous individuals displaying exceptional intellectual provess, exemplified by an account

<sup>&</sup>lt;sup>9</sup> Ana S. Moura, João Barreiros, and M. Natália D. S. Cordeiro, "Drugs, Achievements and Educational Systems: Predictive Models for Society and Education through Speculative Data," *6th International Conference on Higher Education Advances (HEAd'20)* (2020), pp. 839-846.

<sup>&</sup>lt;sup>10</sup> Walton, *The Genius Plague*, p. 85.

<sup>&</sup>lt;sup>11</sup> Walton, The Genius Plague, p. 131.

<sup>&</sup>lt;sup>12</sup> Walton, *The Genius Plague*, p. 131.

of a Sateré-Mawé tribesman who, emerging from the Amazonian wilderness, exhibited prodigious mathematical aptitude, learned Portuguese quickly, and achieved an IQ score of 180, despite a life of hunting and guarana cultivation. As these indigenous populations migrated to cities, narratives surfaced detailing instances of violence, abductions, and escalation in guerrilla activities within Colombia and Peru. They called themselves the Ligados, a term Neil elucidates as Portuguese for "connected" or "plugged in" or colloquially, "in the know."<sup>13</sup> Employing the Johura whistle language, an exceedingly obscure means of communication, they facilitated communication among various factions. Concomitant with the Ligados' dispersion, the fungal infection began to propagate. They further engaged in isolating and packaging spores into an oral drug form referred to as Neuritol, subsequently disseminating it.

The infected populace became environmentally conscious, fiercely protecting the Amazon rainforest and growing hostile towards the United States. They also promoted antitourism ethos across northern Brazil, aiming to shield the Amazon from perceived "foreign despoilment."14 In a provocative tactical manoeuvre, the Ligados executed a suicidal attack to disperse fungal spores via crop dusters. The fungus eroded individual cognitive faculties, diminishing national loyalty and influencing decision-making processes, causing the infected soldiers to turn against their own compatriots. Intriguingly, the fungus's covert spread was aided by illicit drug trade networks, most likely utilising routes coinciding with Colombian cocaine exports. The fungus had a dual effect: it augmented cognitive faculties while exerting an influential sway over its hosts. It induced them to develop intense concern for matters they might not otherwise prioritise, such as protecting the Amazon, the ecosystem where the fungus thrived. Evidently deliberate in its objectives, the fungus orchestrated the intentional manipulation of a substantial human cohort to bolster its own survival prospects. Neil elucidated this behaviour as a common fungal strategy, whereby the fungi control various species to improve their own survival. In the case of humans, Neil suggests that the fungus could be altering the serotonin levels by optimising their neural pathways to direct the hosts towards behaviours aligned with its own interests, thereby manipulating their emotions and compromising their decision-making abilities. Neil expressed that while the fungus enhances intelligence, it diminishes essential human qualities like emotional connections, moral sense, and loyalty: "The kind of humanity it's producing is a shadow of what humanity truly is."<sup>15</sup>

The narrative describes a complex interplay between humans and the fungus, illustrating how the fungus weaves itself into the lives and minds of its hosts. This relationship can be construed as forming an assemblage in the Deleuzian and Guattarian sense. Deleuze and Guattari have defined an assemblage as "an intermingling of bodies reacting to one another."<sup>16</sup> This encompasses all the various forces and interactions, such as attractions, repulsions, affinities, aversions, changes, fusions, penetrations, and expansions that impact various types of bodies in their relationships with one another.<sup>17</sup> The process of forming an assemblage includes territorialisation, which can be described as the arrangement or organisation of the bodies that come together to form the assemblage.<sup>18</sup> Within the arrangement of these bodies, it is important

<sup>&</sup>lt;sup>13</sup> Walton, *The Genius Plague*, p. 94.

<sup>&</sup>lt;sup>14</sup> Walton, The Genius Plague, p. 175.

<sup>&</sup>lt;sup>15</sup> Walton, *The Genius Plague*, p. 258.

<sup>&</sup>lt;sup>16</sup> Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), p. 88.

<sup>&</sup>lt;sup>17</sup> Deleuze and Guattari, A Thousand Plateaus, p. 90.

<sup>&</sup>lt;sup>18</sup> Daniel Smith, John Protevi, and Daniela Voss, "Gilles Deleuze," *The Stanford Encyclopedia of Philosophy* (2022). At: https://plato.stanford.edu/entries/deleuze/#ThoPla.

to note that assemblages are not fixed or unchanging. Instead, they exhibit an ongoing process of transformation: what Deleuze and Guattari refer to as the actions of deterritorialisation and reterritorialisation.<sup>19</sup> Deterritorialisation refers to "the process by which an assemblage changes when certain articulations are disarticulated, disconnected, unhinged so to speak."<sup>20</sup> Reterritorialisation, on the other hand, signifies "the process by which new articulations are forged, thus constituting a new assemblage or territory."<sup>21</sup>

In the human-fungal assemblage depicted in the narrative, the fungus and the humans represent heterogeneous bodies intermingling and reacting to each other. The fungal infection is a central component that influences and shapes the behaviours and cognition of the human hosts. Here we can think of territorialisation in terms of how the fungal infection sets up camp in the bodies and minds of humans. The fungus establishes its presence and orchestrates the cognitive and emotional processes of humans. The notion that assemblages are not static but undergo continuous transformation aligns with the evolving nature of the relationship between the fungus and the hosts, as the fungus exerts its influence and the hosts adapt and change, over time. The interaction between the fungus and its human hosts can be understood as a dynamic process involving both deterritorialisation and Reterritorialisation. Through infection, the fungus initiates a deterritorialisation of the cognitive and emotional processes of the hosts. It dismantles their thought patterns and emotional responses, effectively unhinging their usual modes of thinking and behaving. The fungus steers their decision-making processes by depriving them of morality, subjectivity, and loyalty, disrupting the established territory of human cognition and emotion.

Reterritorialisation occurs when the fungus makes new connections within the minds of its hosts. It forges links that align with its own interests. By increasing their intelligence, memory, and worldly knowledge, the fungus creates new connections, forming a transformed cognitive and emotional territory within the hosts. This constitutes a new assemblage where the fungus exerts control and shapes the behaviours of its hosts. The influence of the fungus prompts changes in the attitudes and behaviours of the hosts, leading to a collective shift in environmental consciousness, animosity towards foreigners, and anti-tourism sentiment in certain areas. Examining consciousness within this context reiterates the notion that it is "an epiphenomenon,"<sup>22</sup> meaning that it is shaped and determined by the activities of the brain and body, rather than being a fundamental or self-contained aspect of human existence. The alteration of human consciousness in the narrative also aligns with the critical posthumanist idea that a supposed uniquely human trait like consciousness evolves "in conjunction with other life forms."<sup>23</sup> Therefore making consciousness is "an emergent condition."<sup>24</sup>

This dynamic interaction between the fungus and the hosts is a basic characteristic of an assemblage, where diverse elements come together and exert mutual influence on each other. The formation of this assemblage results in a profound alteration of individuals, communities, and ecosystems, ultimately challenging traditional notions of agency and autonomy.

<sup>&</sup>lt;sup>19</sup> Jennifer Daryl Slack and J. Macgregor Wise, *Culture and Technology: A Primer* (New York: Peter Lang, 2015), p. 158.

<sup>&</sup>lt;sup>20</sup> Slack and Wise, *Culture and Technology*, p. 158.

<sup>&</sup>lt;sup>21</sup> Slack and Wise, *Culture and Technology*, p. 158.

<sup>&</sup>lt;sup>22</sup> Pramod K. Nayar, *Posthumanism* (Cambridge: Polity, 2014), p. 12.

<sup>&</sup>lt;sup>23</sup> Nayar, *Posthumanism*, p. 14.

<sup>&</sup>lt;sup>24</sup> Nayar, Posthumanism, p. 53.

## **Fungal Agency**

Later in the novel, the fungus is named *Aspergillus ligados* and its modus operandi is explained. It deceives host cells by emitting chemical signals akin to neighbouring cells and seamlessly blending into the cell community. It adapts to mimic various cell types, like skin or thyroid gland cells, while maintaining its fungal mycelia genetics and connection to the larger mycelial network. It works in sync with the original cells by boosting their efficiency, while also using a portion of the brain composed of fungal mycelia to pursue its own goals which occasionally coincides with the interests of its hosts. The fungus is a single organism spread among various hosts. Unlike humans, it lacks centralisation or labour division. A single fungus can divide into pieces while retaining its original essence. It functions like a network, with nodes sensing and transmitting information. Although it lacks consciousness, its structure resembles a neural network, allowing it to independently make sophisticated decisions that affect its surroundings. Its identity relies more on genetic instructions than the material it occupies.

The fungus displays a kind of agency that aligns with Karen Barad's concept of agency as a nonhuman aspect. According to Barad, agency is "a matter of intra-acting; it is an enactment, not something that someone or something has. It cannot be designated as an attribute of subjects or objects . . . Agency is 'doing' or 'being' in its intra-activity."<sup>25</sup> The fungus exhibits agency through ongoing intra-actions with other cells in the human body and influencing their behaviour. It achieves this by hacking into cell interfaces and sending chemical messages that mimic normal cellular interactions. Also, its ability to adapt to different cell types underscores its agency as it does not conform to a fixed identity but dynamically adjusts to environmental cues by changing possibilities for interaction. The fungal network's capacity to coordinate information and make collective decisions regarding the environment, like influencing tree survival in a forest, showcases its agency by shaping its surroundings. This coordination does not involve conscious thought but rather an intricate, iterative process of intra-activity among its components. The fungus operates as a single organism across different hosts, highlighting an agency that transcends individuality and focuses on a collective purpose. Despite being dispersed among various hosts, it acts cohesively, changing the possibilities of interaction and response within these host bodies.

Agency exists in assemblages, diffused across multiple entities, rather than being confined to individual subjects.<sup>26</sup> The power or agency of the fungus is enhanced through its assemblage with human hosts. This perspective challenges the traditional notion of agency, which typically focuses on individual or human-centred capacity. Assemblages challenge the traditional idea of a clear division between subjects and objects.<sup>27</sup> By creating an assemblage of fungus and humans and demonstrating the fungus's agency over the humans, the narrative challenges the hierarchical view of seeing humans as dominant subjects and the fungus (a nonhuman entity) as a passive object, suggesting a more dynamic and interconnected relationship between them.

## **Becoming-fungus**

Through deterritorialisation and Reterritorialisation, the human-fungal assemblage created a

<sup>&</sup>lt;sup>25</sup> Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007), p. 178.

<sup>&</sup>lt;sup>26</sup> Nancy Carranza, "Agency," *Critical Posthumanism*, April 24 (2018). At: https://criticalposthumanism.net/agency/.

 <sup>&</sup>lt;sup>27</sup> Carranza, "Agency".

posthuman entity that grew "organically from interaction with its environment,"<sup>28</sup> representing the next stage in human evolution. Those infected by the fungus developed hyphae in their hair, through which the fungus shares knowledge with them. Neil saw the community of people living in the forest not solely as a group of humans but as a manifestation of the fungus, with "its tendrils reaching for miles underground, up into all the trees, and through the minds and bodies of all the people" around him.<sup>29</sup> They seemed to be part of a single organism, manipulated like puppets. He wondered, "Was I really talking to my brother right now? Or was I talking to *it*?"<sup>30</sup> He told Paul, "You're not human anymore . . . You can call it a 'composite organism' if you like, but you're not the one in control. Can't you see what's happening? It's turning you into its arms and feet and fingers, just extensions of itself."<sup>31</sup>

Neil struggles to grasp the benefit of this transmutation. Paul explains to him that this symbiosis with the fungus is a driving force behind evolution. While survival of the fittest has a role in evolution, our relationship with other species does not have to be a constant battle; symbiosis is a more potent and successful force for change. It is all around us; most creatures in the forest depend on other species for survival. We rely on countless bacteria inside us for digestion, vitamin production, and disease resistance. Paul states, "This fungus isn't a disease. It's the next stage of human evolution. It'll make us stronger, smarter, more efficient, better able to adapt and survive ... To be connected to everything and everyone around you, to know and be known more than you've ever experienced—it's everything we dream of. What we're accomplishing here, we're doing together, all two million of us, and it's glorious."<sup>32</sup>

The symbiotic relationship that develops between the fungus and the humans depicts Barad's idea of entanglement, "To be entangled is not simply to be intertwined with another, as in the joining of separate entities, but to lack an independent, self-contained existence. Existence is not an individual affair. Individuals do not preexist their interactions; rather, individuals emerge through and as part of their entangled intra-relating."<sup>33</sup> This transformative relationship between the humans and the fungus also aligns with Deleuze and Guattari's concept of becoming, which they say "concerns alliance."<sup>34</sup> Becoming is seen as a contagion that involves heterogeneous combinations of "unnatural participations" of creatures from different kingdoms.<sup>35</sup> In the narrative, the idea of becoming helps us break free from the constraints of fixed categories that define humans and embrace the potentiality of the unknown through a symbiosis with the fungus.

#### **Re-thinking Technology**

The infected individuals relocated to the forest, forsaking modern technology. When Neil visits Paul, Paul tells him that approximately forty percent of the Earth's solar energy reaches the tropics, signifying the planet's reliance on solar power. The sun delivers ample energy, surpassing our global civilisation's annual consumption within an hour. The limitation lies in technology's inability to harness it effectively. These infected individuals had a plan to power the world with solar energy. They constructed organic shelters. They cultivated lichens on their skin to capture

<sup>&</sup>lt;sup>28</sup> Walton, *The Genius Plague*, p. 273.

<sup>&</sup>lt;sup>29</sup> Walton, *The Genius Plague*, p. 315.

<sup>&</sup>lt;sup>30</sup> Walton, *The Genius Plague*, p. 315.

<sup>&</sup>lt;sup>31</sup> Walton, *The Genius Plague*, p. 315.

<sup>&</sup>lt;sup>32</sup> Walton, *The Genius Plague*, pp. 316-317.

<sup>&</sup>lt;sup>33</sup> Barad, Meeting the Universe Halfway, p. ix.

<sup>&</sup>lt;sup>34</sup> Deleuze and Guattari, A Thousand Plateaus, p. 238.

<sup>&</sup>lt;sup>35</sup> Deleuze and Guattari, A Thousand Plateaus, p. 242.

energy through photosynthesis substantially reducing their dietary requirements while relying heavily on solar energy. Additionally, they improved agricultural techniques to enhance the yield of various crops. They developed new, more nutritious strains of grains which, combined with photosynthetic lichen, could sustain a larger population in completely renewable environments.

They were not reverting to a life without technology but rather developing sustainable and eco-friendly technologies. Neil realised that all living entities in this ecosystem were interconnected, with the fungal mycelial network serving as a potent, organic conduit for information. He says, "That the network was organic and chemical made it no less powerful, any more than a brain was less powerful than a computer. And the people were part of it, woven into its whole. *I* suddenly seemed a less important part of my vocabulary than *we*."<sup>36</sup> Deep in the rainforest, Paul operated a fully equipped organic laboratory for studying local lifeforms. It was devoid of conventional scientific instruments like spectrometers, test tubes, Bunsen burners, or computers. Instead, it relied on the organic processes of nature. Neil was amazed by the ability of the mycelium to discern the chemical composition of substances, emphasising the superior sensing and analytical capabilities of nature over human-made technology.

Within their organic metropolis, specialised roles and infrastructures facilitated the distribution of energy, food, and waste. This ecological city contrasted starkly with modern urban cities, which consumed massive amounts of energy for their operation and left extensive environmental footprints. Remarkably, their city was invisible to infrared satellite imaging due to its minimal energy consumption. Neil envisioned a future where humans would coexist symbiotically with the fungus. He imagined a world where transcontinental travel no longer relied on fossil fuels but instead involved "giant winged composite creatures, a symbiotic mix of animal and plant and fungus, powered by photosynthesis, impelled by animal musculature, and controlled by a network of fungal hyphae. The humans of the future—or the post-humans who would be our descendants—would travel the globe on such phantasms."<sup>37</sup>

This concept of technology views it as "an autonomous, seemingly evolutionary force that affects and even moulds human/cultural behaviours." It posits technology in a non-humanist and non-instrumentalist context,<sup>38</sup> echoing Martin Heidegger's views on technology. Heidegger contends that the prevailing definition of technology, which regards it as a tool and a human endeavour, can be described as the instrumental and anthropological definition of technology.<sup>39</sup> He argues that considering technology merely as a means to an end, or a human activity fails to capture its essence. According to Heidegger, "Technology is a way of revealing."<sup>40</sup> Technology unveils the world "as raw material, available for production and manipulation."<sup>41</sup> The fungus reveals worldly knowledge to humans and makes them realise that nature itself is technology. The narrative underscores our reliance on natural mechanisms and the superior sensing of the natural world, echoing Heidegger's perspective that technology is not just instrumental but can also exist organically. This idea reveals the potential for sustainable and eco-friendly technology.

<sup>40</sup> Heidegger, "The Question concerning Technology," p. 12.

<sup>&</sup>lt;sup>36</sup> Walton, *The Genius Plague*, p. 320.

<sup>&</sup>lt;sup>37</sup> Walton, *The Genius Plague*, p. 323.

<sup>&</sup>lt;sup>38</sup> R. L. Rutsky, "Technological and Posthuman Zones," *Critical Posthumanism*, November 19 (2018). At: https://criticalposthumanism.net/technological-and-posthuman-zones/.

<sup>&</sup>lt;sup>39</sup> Martin Heidegger, "The Question concerning Technology," in *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Garland Publishing, 1977), pp. 3-35.

<sup>&</sup>lt;sup>41</sup> "The Technological View of the World of Martin Heidegger," *Future Learn*, September 10 (2023). At: https://www.futurelearn.com/info/courses/philosophy-of-technology/0/steps/26314.

Walton's idea of posthuman describes a future of humanity that transcends limitations and dependencies. He envisions a future where humans have evolved to become more integrated with nature. This posthuman future embraces symbiosis in which all kinds of creatures evolve or merge together to form new composite life forms that are controlled by a network of fungal hyphae, indicating a deep integration with fungi. This future promotes sustainable and ecofriendly energy sources and reimagines technology existing in harmony with the natural world. It challenges the conventional boundaries of humanity to suggest a more interconnected and environmentally conscious future for the descendants of present-day humans.

#### Loss of Sense of Self

After being infected by the fungus, Neil recognises that the fungus was working towards the good of the planet's ecosystem and that humans need the fungus to reach their "true potential"<sup>42</sup> and live harmoniously with each other by overcoming their prejudices. Although initially hesitant to relinquish his individuality and independence for the perceived greater good of the fungus, Neil later embraces a collective identity, realising his insignificance in being isolated: "There was no need for me anymore. By myself, what could I accomplish? Nothing. There was no me. There was only *us*."<sup>43</sup> He experiences a sense of fusion with nature, similar to the experiences of users of hallucinogenic mushrooms. Upon leaving the rainforest towards the end of the story, he yearns for the direct connection with the fungal network and feels disconnected from the rest of the Ligados family. Even after taking antifungals and eradicating the fungus, he regrets that the "glorious future as symbiotes with the fungus"<sup>44</sup> could not materialise.

In the novel, the feeling of the loss of a clearly defined sense of self mirrors the effects of psychedelics like psilocybin, which soften "the categories that organize human experience" and "open up new cognitive possibilities."<sup>45</sup> Merlin Sheldrake states, "The well-defended 'I' that humans depend on for so much can vanish entirely, or just dwindle, shading off into otherness gradually. The result? Feelings of merging with something greater, and a reimagined sense of one's relationship to the world."<sup>46</sup> This is exactly what Neil experiences. The fungus prompts questions about identity and individuality and reiterates the idea that "human is a congeries, a moment in a network."<sup>47</sup> It had selected the human species as its hosts because they gave it the best opportunity to manipulate the world. The sense of self depicted in this narrative is "an impure, human-nonhuman assemblage."<sup>48</sup>

#### Conclusion

In the novel, Walton has given the fungus both negative and positive attributes. In an interview,<sup>49</sup> he expresses his intent to create a novel that, beyond being a thrilling adventure, would encourage

<sup>&</sup>lt;sup>42</sup> Walton, *The Genius Plague*, p. 321.

<sup>&</sup>lt;sup>43</sup> Walton, *The Genius Plague*, p. 321.

<sup>&</sup>lt;sup>44</sup> Walton, *The Genius Plague*, p. 362.

<sup>&</sup>lt;sup>45</sup> Merlin Sheldrake, *Entangled Life: How Fungi Make Our Worlds, Change Our Minds, and Shape Our Futures* (London: Vintage, 2020), p. 124.

<sup>&</sup>lt;sup>46</sup> Sheldrake, *Entangled Life*, p. 124.

<sup>&</sup>lt;sup>47</sup> Nayar, *Posthumanism*, p. 53.

<sup>&</sup>lt;sup>48</sup> Jane Bennett, Vibrant Matter: A Political Ecology of Things (Durham: Duke University Press, 2010), p. xvii.

<sup>&</sup>lt;sup>49</sup> David Walton, "*The Genius Plague*, interview by Rob Wolf," *New Books Network*, January 8 (2018). At: https://newbooksnetwork.com/david-walton-the-genius-plague-pyr-2017.

readers to contemplate the factors that define them and influences their decisions. He prompts readers to question the extent to which external factors, such as people, substances, or illnesses, shape their choices. He wants to engage readers in a debate about whether the effects of the fungus were genuinely negative or if there are potential positive aspects. The narrative explores the complexities of influencing people to do good while considering the associated costs and striking a balance. It leaves behind the question of whether humans should choose to be a part of such an assemblage that has noble objectives but also involves sacrificing a part of their humanity.

Critical posthumanism challenges anthropocentrism by portraying humans as one element within a vast network of life. In The Genius Plague, a nonhuman entity like the fungus significantly influences the events and outcomes of the narrative. The symbiotic human-fungal assemblage blurs the boundaries between human and nonhuman cognition. It challenges conventional ideas about agency and consciousness by suggesting that cognition can be shaped by interactions with nonhuman forces. In this narrative, they are the results of interconnections. The assemblage underscores the idea that agency and consciousness are distributed across a complex web of interactions involving both human and nonhuman elements. It challenges the idea that a single, autonomous subject is the sole bearer of agency, and that consciousness is an isolated or self-contained phenomenon. Instead, it suggests that they are dynamic and interconnected concepts that emerge from the interactions and relationships between various entities within complex networks or assemblages. This symbiotic assemblage undergoes continuous transformation through deterritorialisation and Reterritorialisation, further breaking down fixed human-nonhuman boundaries by creating a composite organism in which individuals become extensions of the fungus. This transformation erases human individuality, integrating them into a collective, networked consciousness shaped by the fungus. The interactions between humans and the fungus challenge traditional notions of agency, individuality, and technology, highlighting the transformative power of symbiosis.

The symbiotic utopia envisioned in the novel drives home the importance of being interconnected with the world. It recognises that humans are not isolated entities but are deeply intertwined with the world around them. This perspective encourages a more holistic and inclusive understanding of life and existence, where the boundaries between human and nonhuman, culture and nature, are blurred.