

## The Fungus among Us: Zoosemiotics and Fuzzy Bodily Boundaries in Science Fiction Horror Cinema

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The invasion and transformation of the human body by a hostile alien “other” is a salient theme in sci-fi horror cinema. The alien invaders in many films are readily identified as bipedal or insectoid; in several films from the mid-twentieth and the early twenty-first century, however, the invasive “other” begins as a microscopic spore and blooms into a horrifying and amorphous fungus. In films such as *Mutiny in Outer Space* (1965) and *The Green Slime* (1968), human beings land on the moon and an asteroid, respectively, and unwittingly bring foreign fungal spores back into the human environment where they multiply uncontrollably. *The Unknown Terror* (1957) and *Matango* (1963) feature earthly fungi modified by irresponsible scientists who have manipulated nature either through mycological experimentation or nuclear radiation. In the 2008 film, *Splinter*, the aggressive fungus is a product of the earth itself, a force of nature that counts humans among its favorite hosts. Whether extraterrestrial or terrestrial, the fungal entities in these films function by penetrating human bodies and buildings, using them both as loci for consumption and geometric reproduction, and transforming human structures into fungal “others” in the process.

Humble in size and origin, uncanny and ubiquitous, fungal invaders are nevertheless terrifying. Through the lenses of Thomas A. Sebeok’s zoosemiotics and Julia Kristeva’s theory of abjection, fungi appear as the ultimate inhuman “other.” According to Sebeok’s theory, fungus is the alien entity in the “plant, animal, fungus trichotomy.” Unlike animals and to a lesser extent plants, both of which facilitate the construction of the environment, fungi are decomposers whose growth signals death and decay. Collective and amorphous, fungal colonies respire anaerobically, reproduce asexually by digesting fetid matter and shooting invisible spores into the air. From the perspective of Kristevan abjection, fungal penetration and replication inspire a semiotic revulsion linked to the realization that our bodies are open to invasion and will one day be stinking and gelatinous, first a corpse-food for fungus, then a part of the fungus, one with nature after all. The infected and fungoid human body contests Cartesian constructions of embodiment, blurring the false boundaries between the

“rational” machine-body, the “hermetically-sealed” human-built environment, and “chaotic” nature, ultimately revealing layers of reciprocal penetration, colonization, and consumption. In each of the films above, fungal invasion likewise calls into question the role of humans as an infectious agent on the body of our own planet, consuming resources and laying waste to nature in the Anthropocene. While humans are able to limit the fungal outbreaks in twentieth-century Sci-Fi Horror films, *Splinter* (2008) gives the fungus the upper hand, suggesting that human hegemony is near its end, and the day of the eco-gothic “Slithersucker”—a sentient and carnivorous slime mold proposed in *The Future is Wild* (2003)—is creeping ever closer.

### The Fungal “Other”

Fungi are pervasive throughout the natural environment, existing in large numbers from the icy wastes of Antarctica, where they lurk beneath frozen rocks, to the humid tropics where they might bloom in the shade of rain forest canopies or grow on and within the moist human body. One study from 2011 suggests that fungi “outnumber plants 6 to 1;” many of the proposed 1.5-5.1 million species of fungi are microbial, and therefore invisible to the naked eye (Blackwell). Even the larger species of fungi typically emerge in liminal spaces such as arid deserts, shadowy deep forests, and abandoned buildings, areas not often frequented by humans. Unless they make themselves known through ostentatious fruiting bodies, the invasion of built environment, or the infection of the human body, fungi are often overlooked, pushed to the periphery of the human imagination.<sup>1</sup> Their sudden appearance, particularly in unexpected places, can be shocking, seemingly out of nowhere, a reminder of their cryptic presence. The mysterious nature of fungi extends to their fluid and amorphous life cycle, much of which is hidden from human view. Fungal flexibility is evident in their ability to respire both aerobically and anaerobically; many fungi, such as yeast, switch between forms of respiration based on environmental conditions. Their pH level is similarly flexible, with changes occurring across the lifecycle and in response to external stimuli. Their reproductive processes are also strangely fluid. In ideal conditions, fungi reproduce asexually by fragmentation, by budding, or by sending out hyphae to generate fleshy fruiting bodies that eject microscopic spores, allowing the process to begin again. When necessary, fungi have the capacity to reproduce sexually by joining hyphae to create diploid cells that generate fruiting bodies for sporulation. Through this frenzied sexual activity, fungi have the ability to reproduce rapidly and exponentially, shooting out hyphae, fungal bodies, and spores until all resources have been consumed.

The fecundity, invisibility, and fluidity of fungi contribute to their construction as a ubiquitous and threatening alien “other.” Thomas Sebeok, a biological semiologist, argues that fungi are further “othered” from plants and humans because of their pattern of nutritional consumption. In “The Sign Science and the Life Science,” Sebeok constructs the “plant-animal-fungus trichotomy,” in which plants and fungi are oppositional, with humans mediating between them. He argues that plants derive nutrition from photosynthesis and are therefore producers; animals must “ingest other organisms, and are therefore *transformers*.” Fungi, however, break “their food down externally” and absorb “the resulting small molecules from solution” and are therefore “*decomposers*” (Sebeok 90-91). While

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<sup>1</sup> The cryptic nature of fungi extends to the fossil record, where they have left few traces, an area of inquiry now being considered by mycologists. See Taylor, Krings, and Taylor.

humans break down food internally—a process that is naturally made visible only through vomiting—fungi expose their digestive processes, creating puddles of fetid decay soon to be bubbling with new fungal life. The fungi that feed on decaying matter are at once multiple and singular, a collective of undifferentiated individuals with the power to communicate through non-verbal signs. The process by which fungi communicate within their own colonies, which Sebeok calls mycosemiosis, “is not yet well understood, although their modes of interaction with other life forms specially algae, green plants, insects, and warm-blooded animals (to which they are pathogenic) by such means as secretion, leakage, and other methods are basically known. One of the most fascinating forms of semiosis has been described in the cellular slime mold, where the sign carrier turns out to be the ubiquitous molecule cAMP” (Sebeok 92). Through the lens of Sebeok and biosemiotics, “all living systems from the inside of cells to the whole biosphere” are continually engaged in communication across reciprocal relationships mediated by signs (Brier 233). Such an argument suggests that human beings are not separate from but integrally connected to a biological web that includes a largely invisible and interconnected fungal network, eager to reproduce and hungry for matter to decompose.

The biosemiotic suggestion that humans are intimately connected to a pervasive and aggressively invasive fungal “other” contests the western cultural construction of the human body as a rational and tightly controlled mechanical structure that exists somehow separately from the natural world. According to the enlightenment philosopher, Rene Descartes, the body functions as a “lifeless” *bête-machine* much like an automaton, with myriad gears and mechanisms whirring together in “functional unity,” all in accordance with the laws of physics (Des Chene 2-4, 28-29). While many of Descartes’ physiological theories have long since been disproven, the fundamental belief that that human body is a machine with parts that can be replicated, augmented, and repaired through routine maintenance remains salient in bio-medicalized Western cultures. The penetration of the mechanical body by fungal pathogens born of an “externalized” environment ruptures this imaginary algorithmic continuum. If not regulated, these parasitic fungi make their otherwise-invisible presence known externally through fungal skin growths and festering sores, as well as the emission of blood, pus, vomit, and diarrhea, transforming the human machine into a transgressive, leaky, and ultimately *organic* mess. After death, fungi continue their work of assimilating the broken machine into the natural environment through decomposition, reducing tissue into fluid and a once-whole human body into a suppurated, organ-less corpse.

The human body thus invaded, corrupted, and consumed by fungus serves as a potent site for Kristevan abjection. According to Julia Kristeva’s *Power of Horror*, abjection is the place between the culturally constructed, concretized, and rational symbolic order and the fluid, emotive, and unspoken semiotic order where all “meaning collapses” (Kristeva 2, Goodnow 33-37). In fungal infection, the bounded and mechanical human body (symbolic order) loses its discrete construction and identity, which is collapsed with that of the collective and voracious fungal “other,” stimulating a sense of revulsion and horror in the subject (semiotic order). Unable to look away, the viewer is pulled between order and disorder, living mechanical self and decaying amorphous corpse, “as if dancing on a volcano” (Kristeva 210). The fetid fungal body “confounds the distinction between ‘me’ and ‘not me,’” between the mechanical body imagined and the natural body exposed (Dudenhoeffer 9). In abjection the subject is confronted with their own organic embodiment, vulnerable and open

to infection and consumption by invisible fungus that lurks both beyond and within the human body. At the moment of collapse, the fungus-ridden corpse resists the symbolic, dragging the viewer into dissolution.

Taken together, the semiologic systems of Sebeok and Kristeva suggest that the human body is constantly open to communication and contact with pervasive and invisible fungi that might invade the body, use it for reproduction, and transform it into an object of abjection. These same theories of fungal invasion apply not only to human anatomy but also to the human-built environment—the carefully constructed architectural anatomy that serves as a projection and extension of the body. The correlations between body and building have long been a topic of inquiry in architectural theory, beginning with Vitruvius' second century CE treatise, *On Architecture*, which proposed human proportions as the foundation for harmonious architectural design. In 1958, Gaston Bachelard's *Poetics of Space* introduced a new perspective on the body-building relationship, focusing not on the design of structures but the ways in which humans occupy and experience them as extensions of self, in large part through memory. Bachelard's work inspired others, including Kent Bloomer and Charles Moore's *Body, Memory, and Architecture* (1977), which understands architecture as human embodiment. For example, they see the free-standing house with the façade acting as human face, the back door as rear orifice, the beams as sinews and bones, the attic as head, and the basement as lower abdomen (Bloomer and Moore 1-3). Drawing on Bachelard, Bloomer, and Moore, Juhani Pallasmaa argues that architecture has both a poetic and concrete-utilitarian existence, much like the human body. For Pallasmaa, architecture is a living projection of human experience that moves beyond "seeing" to incorporate all of the haptic senses (44-45). Architectural structures, then, can be read as psychic extensions of the human body. In the West, architectural anatomy is often mechanistic, much like the Cartesian construction of the body (Bloomer and Moore 29). The practical goal of these structures is to protect the indwelling soft-bodied human from invasion and contamination; philosophically, they serve as mechanistic body-husks within which the mind, imagined by Descartes as a "disembodied subject entirely outside of the world," might waft about freely (Pallasmaa 23). When the skin of the building-body is breached by a chaotic natural organism such as black mold, it becomes diseased and places human inhabitants at risk (Korody). Penetrated by the fungal other, the symbolic order of architectural anatomy—much like human anatomy—becomes leaky, slippery, and transgressive, and therefore a potential site for Kristevan horror and abjection.

### **Fungal Horrors at Mid-Century**

The fungal invasion of the human body-building and its power to both terrify and repulse makes it a locus for body horror in science fiction horror films. The term "body horror," coined by Philip Brophy, applies to films that exploit "the fear of one's own body and how one controls and relates to it" (Brophy 2-13). Witnessing the body infected, mutilated, tortured, and decomposed on the screen, the viewer is confronted with "the spectacle of the human body de-familiarized, rendered other" until all meaning collapses in abjection (Hurley 203). This semiotic experience is not only visual, but also haptic. The sudden appearance of glistening viscera, spurting blood, or shattered bones, all of which are usually hidden, reminds the viewer of his or her own inner workings—the gurgling of the stomach, peristalsis, the pounding of the heart (Dudenhoeffer 5). The fungal transformation of the infected body into a slippery mess likewise elicits physiological responses in the horrified

viewer, from increased heartrate and sweating to muscle tension and nausea (Brottman 9, Wilson). The penetration, evisceration, and consumption of architectural structures in horror films has a similar effect, particularly when those structures are designed to protect the human life within them from hostile or inhuman environments. Space ships and stations as well as those that travel along and under ocean waters function as mechanical extensions of the human body necessary for human survival; the breach of these structures signifies almost certain death for both the building and the life it was designed to protect. Cabins deep in the forest deep are likewise extensions of the human body, providing a wooden skin against the chaotic forces of the wilderness. When that skin is punctured, natural and supernatural forces transform both the cabin and its human occupants from within, destroying any vestiges of domesticity and civilization—an existential horror all its own.

Science fiction films featuring fungal invasion and colonization illicit emotional and haptic responses related to body horror.<sup>2</sup> They likewise highlight cultural concerns regarding the boundaries of human embodiment and the relationship between the individual self and the collective and external “other” at different points in human history. Fears of penetration and corruption from both beyond and within the social body were of particular concern in mid-twentieth century America (Gerachty 19-29). During the Cold War, communist ideologies and the amorphous quasi-fungal collective that clung to them were seen as dangerous and evil “others” seeking the destruction of the democratic, individualist, and capitalist American social body. While full-scale war and external invasion were frightening, more terrifying still was the idea that invisible and undetectable communists might have invaded the US from *within*, corrupting its families and children, destroying the very sinews of American life. This period of paranoia was likewise marked by the seemingly boundless growth of science and technology. The development of atomic energy and the bombing of Hiroshima and Nagasaki had destroyed the Japanese war effort and brought a swift end to the Second World War. It simultaneously catalyzed a frenetic race between America and her Soviet-allied enemies to develop more powerful atomic weapons and delivery systems, chief of which were missiles, as well as jet-propulsions systems for the exploration and colonization of outer space. While the boundless potential benefits of scientific endeavor were expounded on by governmental agencies, many people wondered at what horrors atomic energy and space exploration might hold. In response to this multi-factorial undercurrent of fear, the government sought to purge communists from within and seal the borders of the state, and families built subterranean bomb-shelters against nuclear attack and other forms of “alien” invasion.

Science-fiction horror films featuring invasions from space spoke to the worst fears of an American nation desperate to maintain its boundaries against alien entities and contamination by irradiated monsters (Booker).<sup>3</sup> Rare films such as *The Day the Earth Stood Still* (1951) use space aliens to warn humans about the danger of earthly warfare and hatred. Far more frequently, however, alien invaders are depicted as evil “others” seeking the assimilation and destruction of humankind. In many of these films, aliens assume a humanoid form, for example the stone-like beings in *The Man from Planet X* (1951) and

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<sup>2</sup> And thus the blurring of the boundaries between the science fiction and horror as genres. For a fuller discussion, see Creed.

<sup>3</sup> Susan Sontag’s “The Imagination of Disaster” argues that science fiction films simultaneously stimulate and allay fears about the horrors wrought by science rampant; in presenting a fantastic ending, these films become complicit with the scientific and social horrors they expose.

*Invaders from Mars* (1953)—both of which bear a striking resemblance to Soviet cubist sculptures. Still other films, such as the *Invasion of the Body Snatchers* (1956) and *The Day of the Triffids* (1962), feature aliens who invade the earth through plant spores and seeds that swirl through the air, land on fertile soil, and germinate rapidly without being detected. While anthropocentrism deems plants to be harmless and subject to human authority, their omnipresence and their ability to reproduce rapidly makes them a terrifying opponent should they develop an anti-human agenda. In *Invasion of the Body Snatchers*, plant pods generate human doppelgangers for individual human beings who are subsequently destroyed; the remaining pod-people are tied into a collective alien-plant hive mind (Grant, Telotte 57-58). The invasion in *Day of the Triffids* is less subtle. With a meteorite blinding most of the human population, the rapidly germinated plant monsters, highly mobile and armed with poisonous sap, quickly dominate their human adversaries, weeding them out of the landscape with little consideration. In their ability to “ensnare and consume” humans, “the monster plant challenges nothing if not zoocentrism” and the symbolic order of human hegemony (Miller 460-61). In both films, alien plant species behave in keeping with Sebeok’s zoosemiotic triad; acting as *producers*, plants colonize earth and use the environment to build a new world, albeit one devoid of human significance. Fungal invaders in sci-fi horror films function as *decomposers*. Whether born of space exploration, scientific experimentation, or nuclear radiation, these fungal “others” do not marginalize humans in an otherwise sustainable environment, but consume those environments necessary for human survival, including the human body itself, using it as fuel for replication. In its power to dissolve the human body, fungal invasion contests the Cartesian symbolic order, stimulating semiotic revulsion and abjection in the viewer far more effectively than humanoid or plant-based alien invaders.

### **Fungal Space Aliens**

An abject fear of bodily penetration and dissolution into an amorphous and collective “other” is central to several mid-century science fiction horror films starring alien space fungus. *Mutiny in Outer Space* (1965) and *The Green Slime* (1968), for example, both feature American astronauts battling extraterrestrial fungi that have made their way aboard space stations orbiting earth. Directed by Arthur Pierce and Hugo Grimaldi, *Mutiny in Outer Space* follows Major Towers (William Leslie) and Captain Webber (Carl Crow) on their journey from the moon, where they have harvested lunar-cave ice samples, to a space station orbiting earth. When a patch on Webber’s leg that started off as “just an itch” grows to twice its original size, the space station’s physician, Dr. Hoffman (James Dobson), warns the crew that the green fuzz “looks like some kind of fungus” and that “some types of fungi are capable of killing living animal cells if they get into the bloodstream” and can therefore cause “a lot of trouble.” Webber quickly succumbs to the fungal infection and dies; according to the doctor, “some unknown kind of fungus” has “literally eaten him up.” Peering through an isolation chamber window much like a microscope lens, the viewer witnesses what was once Webber’s body, now a large fungal mass, teeming with hair-like hyphae and glistening patches of moist decay. Only one lifeless eye, rolled upwards, serves as an indication that the thing beneath the blanket was once human. Major Towers takes action, claiming “we must sterilize the station immediately!” But of course, it is too late; the fungus, stimulated by human warmth and the ambient heat of the space station, has already produced invisible spores that are now growing geometrically, infecting and consuming both human bodies and the mechanical structure that serves as their life support. As the fungus multiplies, it sends

out fuzzy green tendrils that colonize the station. Terrified that this moon fungus will infect earth, the space station, now a slowly dying mechanical corpse drifting in space, is quarantined. Ultimately, the fungus is defeated through the use of icy-cold firefighting foam administered by agents both inside and outside of the space-station body. While the humans claim victory, however, the viewer is left to wonder if the fungus has been destroyed, or if spores linger, much as they did in the lunar caves, suspended in the frigid stasis of space until warmer conditions return.

Released three years after *Mutiny in Outer Space*, *The Green Slime*, directed by the Japanese Kinji Fukasaku and featuring an American cast, tells another tale of a space station infected with an aggressive space fungus. In this narrative, Commander Jack Rankin (Robert Horton) and his team are sent to destroy an asteroid named Flora that is headed for earth. As the men drill into Flora's dry and dusty surface to plant a bomb, they discover rubbery, glowing sheets of green slime that attach themselves to their spaceship and nearly prevent takeoff. Escaping from the asteroid, the team make their way to space station Gamma 3 to await further orders. Following protocol, the men are decontaminated; when their clothes are processed through an autoclave, a white foam emerges from labia-like folds of fabric and transforms into a pulsating blob of green slime. After rupturing the autoclave like an infected organ, the fungus electrocutes an attendant and escapes into the space station's hidden recesses. By the time the crew discovers the fungus, it has morphed into an army of identical multi-tentacled monsters, each with a single eye embedded in a reddish almond-shaped socket. They learn from the ship's doctor that "one cell, one microscopic speck" of the fungus "left on a space suit" could absorb energy and cause an outbreak, and that those cells "could be developing on any part of the station" and consuming it, much like cancer within the human body. Ultimately, the space station becomes so infested with angry fungus that the crew's only hope is to destroy the entire structure after transferring the vulnerable human life it once housed to a newer mechanical body, a sterilized space pod. The combustion of Gamma 3, however, does not completely destroy the space fungus; instead, microscopic fungal particles now float through the voids of space, waiting for an opportunity to colonize their next meal.

Released in the 1960s, *Mutiny in Outer Space* and *The Green Slime* reflect Cold War concerns in both the United States and Japan. In each film, scientific-minded military men are charged with penetrating heavenly bodies; Towers and Webber probe the caves of the female-coded moon in order to harvest ice samples for scientific research, while Rankin and his men thrust a bomb deep into Flora in order to protect the earth from destruction. Scientific advancement and military prowess, both of which are coded as masculine and rational, are not only hallmarks of Cold War ideology but also manifestations of the culturally-constructed symbolic order of the 1960s. Written onto the male bodies of these space explorers, embedded in their rigid hierarchal chains of authority, and projected onto the built environment of iconic spaceship and space station alike, the male symbolic order represents protection from external invasion (Sobchack 69-70). When those sent to penetrate and control are in turn dominated by an initially invisible and seemingly chaotic fungal collective with the power to penetrate human flesh and metal skin, decomposing both body and ship into fungal masses, the rational symbolic order is contested by semiotic revulsion—a tug-of-war that results in abjection.

In *Mutiny in Outer Space*, the viewer witnesses with abject horror the dissolution of Webber's rational and mechanical human body (the symbolic order) into a slimy fungal mass with the fuzziest of boundaries (semiotic revulsion), a reflection of American fears about a silent communist invasion from within and the dissolution of the individual American body into a collective "other." In *The Green Slime*, the mindless and amorphous fungal "other" becomes an aggressive and sentient entity whose purpose is the invasion of the Gamma 3's metal body, the consumption of its energy, and the concomitant destruction of human life. Born of a Japanese-American filmmaking collaboration, this sentient and persistent fungus speaks to Japanese fears as well those of their American colleagues. The electrocuted bodies of those attacked by the fungus-monsters bear a striking resemblance to victims of Hiroshima and Nagasaki. The fungal invasion and consumption of the space station parallels the post-WWII occupation of Japan by American "others" who used the island nation for its own growth and reproduction. Through a Japanese interpretive lens, the militarized American space team might in fact be fighting its own hungry and hateful fungal double (Jancovich). After presenting the abject horror of fungal invasion and infection, both *Mutiny in Outer Space* and *The Green Slime* attempt to reassure their viewers by restoring the symbolic order, affirming that scientific and military teamwork will contain and control any threat to the individual and social body. Nevertheless, the threat of fungal infection remains; invisible and indestructible, external fungal spores linger in the atmosphere, searching for a warm body in which to bloom (Grant 15-16).

### **The Fungal Human Heart**

When confronted with the alien fungus in *Mutiny in Outer Space*, Colonel Frank Cromwell (Richard Garland) laments that "Just when we think we have space under control, a new barrier looms up. There are things out there that we may never understand...or live with." Two mid-century sci-fi horror films, *The Unknown Terror* (1957) and *Matango* (1963) bring Cromwell's concerns to earth, suggesting that the greatest fungal threat to human life is not extraterrestrial at all, but proliferates here in the dark and greedy recesses of our own human hearts. Both films focus on once-harmless terrestrial fungi made monstrous through irresponsible scientific experimentation and the corruption of the natural environment by power-hungry humans who wrongly believe that they have things "under control" and that the symbolic order is unshakable.

Directed by Charles Marquis Warren, *The Unknown Terror* follows Gina (Mala Powers), her husband Dan (John Howard), and her former lover Peter (Paul Richards) as they travel to a small village in Mexico in search of a Gina's brother, Jim, who has disappeared while spelunking in the "cave of the dead." Upon arrival, the white American adventurers discover a hostile local population terrified of outsiders and protective of the cave's location. Dr. Ramsey (Gerald Milton), an American scientist experimenting with thallophytic plants, fungi, and slime molds as part of his medical research, invites the Americans to stay with him and his abused Mexican wife, Concha (May Wynn). Just as Gina is attacked by a man covered with billowing fungal growths, the men locate the entrance to the secret cave; pushing deep inside the earth, they discover a dank chamber filled with a foaming fungus that drips down walls and bubbles in large puddles. Humans, half-consumed by the fungus, emerge from the dark corners of the cave, moaning in pain as they dissolve into the abject fungal "other." The true nature of his experiments exposed, Dr. Ramsey confesses that when he first discovered the fungus, which "reproduces by binary fission so rapidly" that "you can actually see it

grow,” he determined to use it in the development of antibiotics.<sup>4</sup> His noble intentions were soon warped by greed, which drove him to conduct fungal experiments on the local people who had come to see him as a beneficent man of western medicine. Claiming to have “defeated the god of death” and assuming the role of a local deity, Ramsey began sacrificing local inhabitants to the fungus under the guise of an appropriated religious ritual. Wrongly believing that he could control both the villagers and the swiftly reproducing fungus, Ramsey failed to predict that his human subjects-cum-victims and the mutated fungus—no longer content to hide in the shadows—would become hybrid creatures with the will to escape the cave and exact their revenge.

*The Unknown Terror* is a horrifying narrative of reciprocal penetration, consumption, and dissolution. The Mexican village and its most sacred space, the cave of the dead, are effectively infected by Jim, the American team that comes in search of him, and Dr. Ramsey, all of whom are privileged white outsiders. Behaving like fungal decomposers, they colonize the village and demand that its inhabitants surrender their cultural history, their labor, and their bodies to them for their own personal consumption and reproduction. In fashioning himself as an ancient deity, the conceited Ramsey appropriates indigenous culture to gain power and to satiate his own hungry ego. In feeding local inhabitants to the fungal colony that he has similarly attempted to dominate, the autonomous identities of both human and fungus are dissolved into an amorphous and hybrid mass. Invaded and infected by an aggressive colonial “other,” the native fungus-human hybrid resists the symbolic order of white hegemony and subjects it to reciprocal fungal decomposition. The body-caves of the white outsiders are forced open by the fungus and transformed into hideous fuzzy masses, then into a collective fetid soup that collapses the boundaries between human and fungus, insider and outsider, self and other. Outwitted by his own horrifying creation, Ramsey cries in anguish, “If even a little bit of this stuff gets out, nothing will stop it—nothing!” Should it escape into the wild, the angry fungus, as a decomposer, would not stop at the consumption of human life, but would extend its hyphae across the natural world, thereby initiating fungal colonization—an apt revenge for western imperialism—on a global scale.

In *The Unknown Terror*, a greedy American scientist’s disrespect for humanity and nature leads him to create a horrifying monster beyond his control that threatens lives across the globe. Released in 1963 and directed by Ishirō Honda, the Japanese film *Matango* uses an aggressive fungus born of a nuclear blast as a means of highlighting the dangers not only of misappropriated science but also of western capitalist culture, greedy and narcissistic, whose destructive influence moves beyond atomic invasion to corrupt young Japanese minds as it spreads like a fungal infection. *Matango* follows a group of young Japanese elites as they vacation on a yacht owned by capitalist tycoon, Masafumi Kasai, and skippered by Naoyuki Sakuta. A member of the working class, Sakuta expresses disdain for his privileged passengers who “have more money than brains” and consume massive resources without ever contributing to their production, like a “bunch of parasites sponging off people.” While the elites discuss how “everything in Tokyo is perfect” and how they are “different from the ordinary run of people,” a storm rises at sea, threatening their voyage. Faced with having his plans disrupted, Kasai refuses to turn back, wrongly believing that he can dominate nature.

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<sup>4</sup> See also *The Fungus* by Harry Adam Knight, in which scientists create a fungus to solve world hunger but humans get consumed instead.

Lost at sea in a damaged boat with dwindling resources, the group arrives at a strange island, shrouded in fog; there they discover an abandoned shipwreck, thick with a slimy green fungus, to use as shelter. Finding evidence that their ship played a role in nuclear testing and experimental mutation, the group determines that the island's plentiful fungus—the only obvious food source—is dangerous, causing some sort of “nerve damage.” With only a small stockpile of tinned food, the spoiled capitalists rapidly turn on one another, despite the warning that “everyone's going to have to do their fair share if we are going to get out of this.” Kasai, the wealthiest of the bunch, steals canned goods and refuses to help cultivate or gather food, Yoshida the writer steals Kasai's girlfriend, and Sakuta steals the yacht, abandoning them all. As capitalist impulses give way to anarchy, Yoshida determines to eat the forbidden fungus, despite having encountered a mushroom-man and witnessing fungus-monsters in the forest. Soon, each succumbs to the delicious fungus that satiates their hunger and causes them to hallucinate. As they dream, the fungus penetrates their bloodstream, transforming them first into sodden fungal hybrids, and later into mushroom creatures that have lost any trace of humanity. Absorbed into a slimy, rotting “other,” the once-privileged group is now linked to a collective fungal network, doomed to the island forever, much like the fungus-covered ship cast upon its shores.

Like *The Unknown Terror*, *Matango* is a tale of reciprocal invasion, contamination, and consumption. In *Matango*, the naturally-reclusive fungal “other” does not become aggressive until its island is contaminated by western atomic bombs and manipulated by a scientific team composed of westerners and communists. Sent to experiment in the neutral Pacific, the scientists discover that they have no way to control the mutated fungus that rapidly dominates the island's ecosystem, greedily engulfing all non-vegetative life. Arriving on the island, the privileged westernized Japanese elites penetrate the fungus' natural environment and colonize the moldering corpse of one of the fungus' first victims—the rotting ship in which they take up residence. The failed structure with its spongy beams and fetid green fuzz functions as a manifestation of bodily dissolution, presaging the decomposition of the characters in the film. In abject horror, the viewer witnesses as the human body (symbolic order) loses its firm boundaries, becoming a leaky mess (semiotic revulsion)—a fungal colonization that awaits all humans postmortem. As the characters are consumed by the fungus, their human individuality and autonomy are subsumed into a hyper-collective mycosemiotic network whose sole function is consumption and reproduction.<sup>5</sup> In highlighting this rampant consumption, *Matango* uses the fungal “other” as a mirror; infected by Western capitalism, consumed by the promise of wealth and status, the young Japanese elites are transformed into insatiable consumers, feeding on the lower classes as well as on each other. On the island, this reciprocal consumption becomes cannibalism. As humans eating the seductive fungus, they are consuming humans in fungal form; in becoming the fungus, they are eating their own fungal flesh, digesting each other's fruiting bodies, excreting a shared waste in which they will reproduce so that they cycle might continue. In abjection, the viewer witnesses the total collapse of the symbolic order and experiences semiotic revulsion; in this moment, the semiotic replaces the fiction of the symbolic order with the reality of fungal horror. The film's conclusion drives this horror

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<sup>5</sup> Themes likewise evident in William Hope Hodgson's 1907 short story, “The Voice in the Night,” upon which *Matango* is based, as well as Brian Aldiss' 1962 science-fiction novel, *Hot House*, which features a sentient fungus called a Morel that binds humans into singular symbiotic fungal-neural network.

home. The only person rescued for the island, Yoshida, stares out from his hospital room window into the night of a bustling modern Tokyo, glowing with electric light. “Tokyo,” he muses, “is not very different from that island,” a place of cruelty and the meaningless competition for resources, a place of endless consumption and fungal decay.

### **Fungal Revenge in the Anthropocene**

The Cold War and its concerns with rampant science and the tensions between individualist capitalism and collectivist communism seem distant and dated, yet the fear of invasion and dissolution by an unstoppable “other” remains salient in the twenty-first century. Steffen Hantke has drawn parallels between post-War trauma in mid-century America and post-9/11 trauma, both of which influenced the production of fear in popular culture. Post-9/11 science fiction and horror films feature not only invasion by hostile “others” from space (*Signs*, 2002), the labs of bioterrorists (*Contagion*, 2011), and the ocean (*Cloverfield*, 2008), but also a fetishistic obsession with the pornographic penetration and rupture of human anatomy. The violent penetration depicted in this new form of torture porn speaks to the destruction of the American cultural and social body, the invasive actions of the American military on foreign soil, and in films like *Splinter* (2008), the brutality of human beings towards one another and the natural environment (Kerner, Middleton).

The themes of reciprocal invasion and the rupturing of the body are evident in Toby Watkins’ horror film, *Splinter*, which follows a medical student and his self-sufficient wife who are carjacked by a fugitive couple while on a camping trip in a climax forest. When their truck overheats, they pull into a rural gas station to discover a suppurated and blackened body penetrated by quivering spikes, which turn out to be the fruiting bodies of an aggressive fungus. Eager to colonize another warm body, the fungus uses the leaking corpse like a puppet, shambling toward the carjacker’s girlfriend, ripping into her flesh, and planting its spikes for further reproduction. Terrified, the three remaining humans barricade themselves in the brightly lit gas station, wrongly believing that the body-building will protect them from fungal rape. Animated by the fungus, corpses bludgeon themselves against the building’s glass, leaving it splattered with viscera and blood, while two severed human hands ultimately penetrate the gas station’s skin to seek the warm living blood inside. Faced with the abject horror of both the human body and the built environment invaded and transformed into a transgressive mess, the hijacker determines that the best way to regain control is by burning down the ancient forest that surrounds the station, thereby signaling for help. The medical student argues, however, that the destruction of nature is wrong, and that they must defeat the fungus by understanding its metabolic processes—by “being smarter” than nature. This latter plan, in combination with the hijacker’s self-sacrifice, allows the couple to escape. As they stumble through the forest down an umbilical road that will return them to civilization, it would seem that intelligence has won out against both human aggression, represented by the resource-hungry hijackers, and non-human colonization, embodied in the resource-hungry fungus. In the shadows of the ancient forest, however, lie countless mammalian corpses ruptured with fungal spikes, quivering in anticipation of future victims, eager for warm blood.

Like *Matango*, *Splinter* suggests that human civilization operates much like an opportunistic fungus feeding that feeds on other human beings as well as the body of the planet. A collection of destructive colonizers who reproduce at geometric rates, humans

have been successful because of their willingness to consume natural resources at the expense of other human beings as well as countless species and habitats—behaviors predicated on what Hannah Arendt terms “the human artifice,” the human belief that our bodies and buildings are somehow singular and autonomous entities separate from the natural world (2). In *Splinter*, a wild fungus violently penetrates and gruesomely ruptures the human body and, by extension, the gas station, thereby contesting the symbolic order of human autonomy and hegemony over nature. The film is set in a climax forest, previously “untouched,” that has been encroached upon by a retailer of petroleum products—a significant example of humans raping the earth for profit and convenience—as well as individual human parasites who threaten to burn it down. Faced with human invasion, the primal forest produces the fungus as a sort of antibody against parasitic infection, much like the fungus produced by the asteroid Flora in *The Green Slime*. Unlike the green slime, however, the indestructible fungus in *Splinter* is not floating in outer space, but lurking in an earthly forest. In *Matango*, humans are subsumed into a fungal “other” on a distant island; in *Splinter*, however, they are utterly destroyed by a rapacious fungus in the heart of post 9/11 America. Should humans insist on penetrating the forest, the terrestrial fungus will spread quickly, absorbing all of humanity into a single organism as it creates a new world devoid of mammalian life.

Here in the Anthropocene, when human violence against humanity and the environment continue to escalate, *Splinter* serves as a warning against “the human artifice” by presaging the rebirth of a natural world free from human infection—a world in which the binary flips, and the human symbolic order is replaced by the fungal, the semiotic, the abject. In Sebeok’s zoosemiotic triad, humans are *transformers* who are in continual communication with and dependent upon a natural network *of which we are but a small part*. In the natural world, fungi consume and reproduce at rapid rates but contract when resources are scarce, for the benefit of their own colony and the world around them. Humans must learn to do the same. *The Future is Wild* (2003), a BBC documentary that imagines life on earth millions of years from now, features a Slithersucker, a creature that has evolved from slime molds, that hunts fleshy prey in the forests of the future; humans, however, are not on the menu. All of the organs and sinews of human bodies and buildings have long-since been consumed, a process catalyzed by human rapacity and completed by the fungus among us who purified the soil from the corrupting and parasitic human “other.”

### Works Cited

Aldiss, Brian. *Hot House*. Signet, 1962.

Arendt, Hannah. *The Human Condition*. University of Chicago Press, 1958.

Bachelard, Gaston. *The Poetics of Space*. Beacon Press, 1994.

Blackwell, M. “The Fungi: 1, 2, 3...5.1 Million Species?” *American Journal of Botany*, vol. 98, no. 3, 2011, 426-38.

Bloomer, Kent and Charles Moore. *Body, Memory, and Architecture*. Yale University Press, 1977.

- Booker, M Keith. *Monsters, Mushroom Clouds, and the Cold War: American Science Fiction and the Roots of Postmodernism*. Greenwood Press, 2001.
- Brier, Søren. "Cybersemiotics: A New Foundation for Transdisciplinary Theory of Information, Cognition, Meaningful Communication and the Interaction Between Nature and Culture." *Integral Review*, vol. 9, no. 2, 2013, 220-63.
- Brophy, Philip. "Horrority—the Textuality of Contemporary Horror Films," *Screen 27*, 1986, 2-13.
- Brottman, Mikita. *Offensive Films: Towards Anthropology of a Cinema Vomitif*. Vanderbilt University Press, 2005.
- Creed, Barbara. *The Monstrous Feminine: Film, Feminism, Psychoanalysis*. Routledge, 1993.
- Des Chene, Dennis. *Spirits and Clocks: Machine and Organism in Descartes*. Cornell University Press, 2001.
- Dudenhoeffer, Larrie. *Embodiment and Horror Cinema*. Palgrave, 2014.
- Fortin, David T. *Architecture and Science Fiction Film*. Ashgate, 2011.
- Gerachty, Lincoln. *American Science Fiction Film and Television*. Berg Publishing, 2009.
- Goodnow, Katherine J. *Kristeva in Focus: From Theory to Film Analysis*. Berghan Books, 2010.
- Grant, Barry Keith. *Invasion of the Body Snatchers*. Palgrave, 2010.
- Hantke, Steffen. *Monsters in the Machine: Science Fiction Film and the Militarization of America after WWII*. University of Mississippi Press, 2016.
- Hodgson, William Hope. "The Voice in the Night," 1907. Available at: [https://en.wikisource.org/wiki/The\\_Voice\\_in\\_the\\_Night](https://en.wikisource.org/wiki/The_Voice_in_the_Night)
- Hurley, Kelly. "Reading like an Alien: Posthuman Identity in Ridley Scott's *Alien* and David Cronenberg's *Rabid*," *Posthuman Bodies*, edited by Halberstam and Livingston, Indiana University Press, 1995, 203-224.
- Jancovich, Mark. "Re-examining the 1950s Invasion Narratives," *Liquid Metal: The Science Fiction Film Reader*, edited by Redmond, Wallflower Press, 2004, 325-45.
- Kerner, Aaron. *Torture Porn in the Wake of 9/11*. Rutgers University Press, 2015.
- Knight, Harry Adam. *The Fungus*. Bruin Books, 1985.
- Korody, Nicholas. "Architecture of the Anthropocene Part II: Haunted Houses, Living Buildings, and Other Horror Stories." Retrieved: [archinect.com/features/article/114117296/architecture-of-the-anthropocene-pt-2-haunted-houses-living-buildings-and-other-horror-stories](http://archinect.com/features/article/114117296/architecture-of-the-anthropocene-pt-2-haunted-houses-living-buildings-and-other-horror-stories)
- Kristeva, Julia. *The Powers of Horror: An Essay on Abjection*. Columbia University Press, 1982.
- Middleton, Jason. "The Subject of Torture: Regarding the Pain of Americans in *Hostel*," *Cinema Journal*, vol. 49, no. 4, 2010, 1-24.

- Miller, T. S. "Lives of the Monster Plants: The Revenge of the Vegetable in the Age of Animal Studies," *Journal of the Fantastic in the Arts*, vol. 23, no. 3, 2012, 460-479.
- Pallasmaa, Juhanni. *The Eyes of the Skin Architecture and the Senses*. Wiley and Sons, 1995.
- Sebeok, Thomas A. "Signs, Bridges, Origins," *Global Semiotics*. Indiana University Press, 2001.
- Sebeok, Thomas. "The Sign Science and the Life Science," *Applied Semiotics*, vol. 3, no. 6, 1999, 85-96.
- Sobchack, Vivian. *Screening Space: The American Science Fiction Film*. Rutgers University Press, 2001.
- Sontag, Susan. "The Imagination of Disaster," *Against Interpretation and Other Essays*. Farrar, Strauss, and Giroux, 1966, 209-25.
- Taylor, Thomas, Michael Krings, Edith Taylor. "Fungal Diversity in the Fossil Record," *The Mycota VII Part B: Systematics and Evolution*, edited by McLaughlin and Spatafora, Springer Publishing, 2015, 259-278.
- Telotte, J. P. "Human Artifice in the Science Fiction Film," *Liquid Metal: The Science Fiction Film Reader*, edited by Redmond, Wallflower Press, 2004, 57-63.
- Vitruvius, *On Architecture: Books 1-V: Loeb Classical Library*, translated by Granger, Harvard University Press, 1931.
- Vitruvius, *On Architecture: Books VI-X: Loeb Classical Library*, translated by Granger, Harvard University Press, 1934.
- Wilson, Laura. *The Gut: Spectatorship, Embodiment, and Physicality in the Contemporary Mutilation Film*. Palgrave, 2015.

### Suggested Citation

Gardenour Walter, Brenda S. "The Fungus among Us: Zoosemiotics and Fuzzy Bodily Boundaries in Science Fiction Horror Cinema." *Trespassing Journal: an online journal of trespassing art, science, and philosophy* 6 (Winter 2017). Web. ISSN: 2147-2734

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