



zero
books

SLIME DYNAMICS

BEN WOODARD

Introduction

Slime Ascent

“As long as humankind recklessly proceeds in the fateful delusion of being biologically fated for triumph, nothing essential will change.”

-Peter Wessel Zapffe, *The Last Messiah*

“Life is not even meaningless.”

-Herman Tønnessen, “Happiness is for the Pigs”

Millions of years ago, above a recently hardened earth, gases in the atmosphere reduced and then were exposed to solar and other forms of energy, allowing the creation of organic compounds such as nucleic and amino acids, which would eventually interact leading to the first forms of life. These globs of swarming proto-life within the primeval oceans “regulated by principles of physics for self-organizing systems” provided the template for all organic being and all eventual thought on the planet Earth.¹

Despite the fact that humans gradually ascended from these clustered ponds of ooze, *slime*, as both a general name for a life-generative and semi-solid substance in the physical sense and the disgust of life, the ostensible grossness of organic being in a metaphysical sense, slime remains something to be left behind and forgotten. This is despite the fact that humans are well aware of the fact that our individual biological geneses consist of the unceremonious mixture of slimy biological components (of sperm and egg); sexual procreation being an obvious example of the disgusting yet generative articulation of slime-as-life and life-as-slime.

While it would be impossible to exhaustively explore the numerous religious and cultural vestiges it can be argued that both religious and cultural discourse assert that either we are not slimy or, if we are, we can escape our sliminess through culture, aesthetics, juridical systems, piety, abstinence, or the next life if need be.

The part of this abandonment of slime we will explore results from a misconstrued sense of evolution: the sense that our sliminess can simply be shed over time, evolution as perpetual betterment instead of local adaptation. As Stephen Jay Gould describes “The vaunted progress of life is really *random motion away from simple beginnings*, not *directed impetus toward inherently advantageous complexity*.”² An assumption of eventual perfection attempts to rid human being of not only an accidental beginning but of its base material nature.

While the cultural and religious resistances would clearly obstruct any assertion that our existence as a species is only material and accidental, what is surprising is that intellectual adventures which set out to be more rational such as science and philosophy are themselves guilty of refusing to accept the tenuous and material moorings of humanity. That is, regardless of scientific or other intellectual discoveries it seems that humans must, for the sake of pride or simply life-justification, retain an inherent meaningfulness.

The question of life’s meaning leads us to the problem of what about life makes it life? This opens up the problem of emergence—what is it exactly that is emerging from the slime pools? Emergence can be defined as the arising or generation of complex entities or systems from less complex sub systems or less complex entities. Or, put more directly, emergence allows a thing to be more than the sum of its parts. That is, at some point inorganic entities combine (under very specific environmental conditions) to create organic systems which then interact and become life. Eventually we go from chemical compounds to something like a virus (self replicating but often not considered alive) to life as a self contained, self replicating entity which grows and changes by borrowing energy from its environment. Emergence is the theoretical explanation of these jumps. Emergence is generally divided into weak emergence and strong emergence. Weak emergence implies that the novelty or change observed can be traced to the specific results of its component parts. An example of weak emergence would be explaining the structure of a snow ball from the structure of a snow flake given atmospheric changes over time. There is nothing seemingly new about the snow ball given what we know about snow, it is merely an arrangement of smaller parts into something larger. Weak emergence means that new properties arise in a physical system are reducible to the components of that system.

Strong emergence on the other hand suggests a certain irreducibility arising from a system’s components. The primary example here would be consciousness or even life itself.

That is, an emergent account of consciousness would argue that consciousness arose from the work of synapses and neurons but would assert, contrary to what reductionists claim, that consciousness is essentially beyond the material capacities of neurophysiology. Strong emergence would hold that thought, on some level, escapes the limits of its physical components.

At first glance, the concept of strong emergence appears as one of the last (and strongest) bastions of anthropocentrism, of demanding that humanity deserves, or automatically occupies, a place of metaphysical or spiritual importance. Rather the issue is treating phenomenon on their own level, that is, explaining a process of digestion chemically does not explain the activity of an animal acting in order to consume food.³

Engaging with levels of existence can easily lead back to a formulation of existence where humanity reigns on

high, if for no metaphysical reason, then for our technological or artistic capacity.

It should come as no surprise that even after the numerous dethronings of Man: Copernicus knocking us out of the center of the universe (in the heliocentric model of the solar system), Darwin kicking us face first into the pointless chance of evolution and of Freud unthreading the rationality of our own minds that humanity still attempts to remain resolutely immune to the baseness reality of life and matter.

Steven Johnson's text *Emergence* begins with Toshiyuki Nakagaki's work on slime molds in which he trained one of the blob-like creatures to find the most efficient path through a maze towards a food source despite the gooey organism's lack of cognitive function.⁴ As Johnson points out, slime molds have attracted much attention since they function as both individual cells and multi-cellular organisms.⁵ Slime mould behavior questions the very division between life component and life as such especially when they appear to act with intent, when they get better and better at solving the maze.

For humans, the mindless functioning of life, of organisms moving towards goals without any form of intelligence, of creatures that function in a completely bottom up fashion reasserts not only the accident of thought but also thought's unimportance for survival. In other words, the very idea that simplistic forms of life can accomplish what seems to us complex behaviors raises the question: to what degree is higher intelligence a significant advantage? That is, the idea of complex behavior without an intelligence guiding it is ostensibly disheartening in that chance and coincidence surpass telos and destiny and yet, at the same time, if emergence is essentially pattern recognition the question becomes whether emergence is merely an objective or subjective category. Does emergence merely describe shifting patterns of complexity that only appear to us as new or does emergence make a difference in the world, in an ontological or at least non-sensorial way?

In regards to biology emergence suggests a non-intentional behavior or set of behaviors between already constituted objects. Take for example ants in an ant colony which we know as individual organisms and observe as a swarm of ants. A swarm is a pattern that necessitates an empirically decided boundary be placed on the moving object (that is, what counts as a part must be decided). A swarm must be a swarm of something. A swarm's behavior is a result of the actions of the individual things in relation to its proximity to other individuals. A flock of birds for instance occurs not because of any centralized coordination but because the birds follow individual needs in the vicinity of others birds benefiting themselves and one another. While in collective animal behavior it is easy to distinguish the components of the swarm or flock, the ability to tell object from non-object centers on the divide between weak (or epistemological emergence) and strong (or ontological emergence).

In physics, for instance, it is a matter of debate whether subatomic particles can be described as objects or whether they are merely points or zero dimensional objects. But is a point, or zero-dimensional object, different from the name of the thing itself as a point? That is, when do we know when have arrived at the fundamental part of any human-defined thing or object or body?

To return to the question of life and its creation, is life ontologically emergent or is it an identity and not a fact since we cannot say why life emerges but only that once a life emerges (and is classified as human, monkey, etc.) we can then distinguish its identifiable existence from its components. We must question then what kind of differences are 'real' or what is it about particular species that have real effects versus patterns which only group movements via categories. In other words, the identity of life must be decided, as well as that of un-life.

As Jack Cohen and Iain Stewart (mathematician and biologist respectively) point out in their text *Collapse of Chaos*, the difficulty lies in discovering the complexity of simplicity. Emergence is commonly opposed to reductionism, to the theory that phenomena can be explained by its lesser components that "a collection of interacting components can 'spontaneously' develop collective properties that seem not to be implicit in any way in the individual pieces."⁶ Cohen and Stewart point out however that without knowing what is meant by simplicity, by simple components, emergence means very little. Cohen and Stewart acknowledge that humans tend to create patterns by smoothing out fluctuations in their observable world⁷ and that patterns are after all ideals.⁸

On the other hand reductionism explains the how but not the why of life since it does not take into account the resulting feedback effects of externality on the development of life. As an example Cohen and Stewart compare the eyes of herbivores to those of carnivores. They argue that where a reductionist explanation would tell us how the eyes developed via DNA and biochemistry it would not explain that evolutionarily herbivores with eyes at the side of their head to watch for predators thrived as did carnivores with eyes that faced forward and therefore were useful for hunting.⁹

On a large scale Cohen and Stewart point out that evolution and emergence have created a landscape where space and competing species create bottlenecks and bridges that lead to convergence overriding contingency in differing eco-spaces.¹⁰ The conclusions that Cohen and Stewart draw from these arguments lead to assertions about humans that seem to lean towards a form of anthropocentrism. They write: "The patterns that our brains perceive are accurate representations of large chunks of reality because our brains and sense organs evolved that way."¹¹ This argument seems to shed the haphazard nature of human evolution in that it assumes that convergence

overrides the contingent factors of evolution. That is, the jump between animals having strategically oriented eyes and humans having a brain that can understand, even indirectly, the deep structures of the universe, seems somewhat dubious. Ray Brassier, whose work we will engage heavily towards the end of this text comments on this problem albeit in a philosophical context: “The chief obstacle standing in the way of a proper scientific understanding of the physical world would seem to be that of our species’ inbuilt tendency to process information via epistemic mechanisms which invariably involve an operation of subtraction from the imperceptible physical whole.”¹² In other words, human knowledge obtained through observation tends to be contoured by the fact that we think and observe according to our own perceptible world and concerns.

To return to biology, Gary Marcus makes clear in his text *Kluge*, that the human brain is only a slapped together piece of faulty machinery, where adaptation and development are a response to threats more than anything and that our minds are always built upon pre-existing structures.¹³ For Cohen and Stewart convergence points towards deeper structures since those structures influence convergence for Marcus and others, context just as easily leads our brains away from any deeper understanding of the universe towards quick and dirty survival tactics meant for the short term.

The issue then becomes one of navigating reductionism, mechanism, and emergence without lapsing into anthropic assertions about the nature of the universe or unrealistically cheer-leading our own epistemic capacities. While we could agree that the mind is caused by but cannot be derived from fine structures and rules this fact does not trump those fine structures.¹⁴ We cannot say that emergence is ontological in regards to life but only that it is epistemological.¹⁵ The question is how do we divide our mental capacities from the reality of the universe – or how naturally in tune with the universe is conscious thought, or is it ever?

At this point it becomes necessary (or at least prudent) to step from science to philosophy and define the general philosophical approach of the following text as aligned with the emerging movement of Speculative Realism. Speculative Realism names a collection of disparate alternatives to the dominance of what Quentin Meillassoux names correlationism. Correlationism is the assertion that there must be a reciprocal relation between thinking and what is thought, that “there can be no cognizable reality independently of our relation to reality.”¹⁶

The anti-correlationist, what we could also call anti-anthropocentric, assertion we will make here is one following Iain Hamilton Grant (one of the original four Speculative Realist thinkers along with Ray Brassier, Graham Harman and the recently mentioned Meillassoux) stating that something must exist prior to thinking and that something is nature.¹⁷ In a seemingly backwards move in regards to the question of life, the approach to thinking this nature will be one of vitalism not as centering on an enigmatic life-force but as centering on, discovering and, understanding the forces which operate on and within life. Vitalism provides a formalization of our ignorance and perhaps a fundamental gap or inability to completely grasp the Real, the actual deep reality of the universe, of ourselves, of what we call nature and our placement within it.

As the guiding theme of this text, I propose an odd metaphysical construct opposed to emergence and that is at once a simultaneous resurrection and mutilation of vitalism. Traditionally vitalism does not seem too different from emergentism in that both suggest there is something more to life, something that drives and/or affects life that is not purely reducible to the classifiable components of life itself. The two have been grouped together by critics and proponents alike.

The vitalism we will be pursuing here avoids this connect in that it is not a theory that asserts a vital substance or stuff that propels life forward, but that the vital force is time and its effect on space. This at first may seem not like a vitalism at all but the focus of this project is to prove the effects of the temporal-spatial construction of existence on life as not merely the force of, but a force acting upon life that provides a rigorously deanthropomorphizing way of thinking. We will show that accounting for time and space does not undo vitalism but pushes it to its logical philosophical conclusion.

The contemporary philosophical orientation of vitalism is most associated with the work of Gilles Deleuze and Felix Guattari and it is against their use of the term that we must first set out to introduce our own spatio-temporal version outlined above. In *What is Philosophy?* Deleuze and Guattari describe vitalism as split between an “Idea that acts but is not and a force that is but does not act.”¹⁸

In the first half of Deleuze and Guattari’s damnation of vitalism, vitalism is merely a guiding concept without any sort of material consequence. In the second half it has a material substance but one that has no discernible impact. Deleuze and Guattari’s attack can be traced to a comment by the French thinker Henry Bergson who in his text *Creative Evolution* notes that vitalism adds nothing to change or to the emergence of life since life’s stages can be described by heredity. The French phenomenologist Maurice Merleau-Ponty in his lectures on nature added and expanded on Bergson’s account pointing out that one glaring issue with vitalism is its disregard of space – that it is assumed that some lively (but non-physical) substance (an *élan vital*) was moved across space, that it affected organisms without any concern for the spatial restraints of biological reality.

Summed up, for Deleuze, Guattari, Bergson and Merleau-Ponty, vitalism cannot be a thing (since genes are

what is passed on, not life itself) and it cannot be a force because it says nothing about life itself as a force, only that it develops but not how. What all the aforementioned critiques leave out is time as something beyond thought which is the force of vitalism (life emerges over time) and the substance of vitalism is not the germ plasm trumping heredity but space as it is filled by life. A spatialization of vitalism simply points to the fact that an organism attempts to extend itself across space through growth, mutation, and reproduction. A temporalization of vitalism likewise can be seen as the fact that life happens with time and that time means the birth as well as the death of all things.

H.P. Lovecraft, whose fiction will occupy much of the third chapter, was also disdainful of vitalism, placing it somewhere between the mythical and the poetic.¹⁹ This was mostly due to the vital force being taken as essentially spiritual and not energetic, as a fundamentally non-scientific vitalism thereby opposing Lovecraft's own adamant espousal of mechanism and determinism.

Finally the aforementioned construction of vitalism can be taken as a response to one more strike against vitalism from the nature philosopher F.W.J. Schelling, who commented that a force of nature (vitalism) is a self contradictory concept in that a force must be opposed, or in relative equilibrium, or in perpetual conflict, arguing that vitalism met none of these criteria.²⁰ Since space and time work together and upon one another we can therefore claim that this formulation of vitalism passes Schelling's rigorous rubric.

How do we further explicate vitalism, bring it into contact with reality and raise it from its spatio-temporal philosophical obscurity? Vitalism, as it has been articulated here, is a minimalist metaphysics which operates on reality by way of following an ontological cascade mirroring the cosmological progression of forces and matters. At the root of this vitalism is the force of forces following from an original One, a One not as a pure unification but the possibility of 'isness' itself stemming from the original simultaneous explosion of time and space as well as the resulting emanations, immanences, emergences and transcendences.

That is, vitalism is a mental shadow of the progression of the universe, from the speculative moment before the Big Bang, as a highly condensed mass, to its extension into time and space and matter, to biological life, and finally to reflective thinking. The above mentioned ontological cascade moves (in philosophical terms) from the Real, to Materiality, to Sense, and finally to Extelligence. Or, put in terms of the levels of the reality it mirrors, from bare existence as only possibility, to the configurations of matter and energy, to the interaction of stimulus and sense, ending with the extension of ontic being via symbols, structures, technologies, et cetera. The degenerate take on vitalism and the Neo-Platonic One will be taken together as a dark vitalism. But what is it about this conceptualization of vitalism that makes it dark exactly?

Part of the work of a dark vitalism is the sickening realization of an inhospitable universe, stating that the production of life as an accidental event in time which is then contorted and bent by the banality of space, of our particular (and just as accidental) universal geometry and then further ravaged by accident, context, feedback and the degradation of wear and age.

The dark of dark vitalism is thus three fold:

- 1 – It is dark because it is obscured both by nature (who is to say that we can divine and comprehend the details of the universe from our limited brains) and by time (we are at a temporal disadvantage in trying to discern the creation of all things) since the cause of most of the nature we know has fallen back into the deep past.
- 2 – It is dark because it spells bad news for the human race in terms of our origin (we are just clever monkeys that emerged as a result of a series of biological and cosmological lucky breaks), our meaning (we are just meat puppets based on our construction), and our ultimate fate (Earth will die and we will probably perish if not with it then eventually with the universe).
- 3 – It is dark on an aesthetic and experiential level our psychological and phenomenological existence is darkened and less friendly to us, and to our perceptions, given the destructiveness of time and space.

It is the third claim which this text will work hardest to prove focusing primarily on biological sciences and biological examples within popular culture through a collection of lurid cultural artifacts.

The first chapter engages the internality of dark vitalism through the unseen and unsettling interior productivity of life through mitochondria, bacteria, contagion and the like. I explore films such as *Outbreak*, survival horror games (*Deadspace*, *Resident Evil*, *Parasite Eve*) and real life examples of viruses to illustrate the terrifying interiority of the microscopic sliminess of human beings. I discuss how this relates to the question of immanence and emergence following Cohen and Stewart's *Collapse of Chaos* and Keith Ansell Pearson's biophilosophy.

I move from the interior to the exterior, looking at the spatial creep of fungoid life discussing various works of weird fiction by Thomas Ligotti, William Hope Hodgson and Stanley Weinbaum to demonstrate the unnerving spatiality of molds and fungus. I will discuss Reza Negarestani's thoughts on decay and rot and argue against Michel Henry's phenomenological and human privileging conceptualization of life.

In the third chapter I argue against Gaia-inspired theories of the earth and how the generative functions of life are restricted by anthropism. I look at the unrestricted organicism of science fictive monsters (the Zerg, Species 8472, the Tyranids and Yuuzhan Vong) as well as H.P. Lovecraft's Old Ones in order to demonstrate the interspatial horror of the organic. In this section I will focus on Schelling Iain Grant's text on him.

I conclude with a discussion of Freud's Vesicle, Lacan's Lamella and Iain Grant's "Being and Slime" as describing the relation of slime to thought calling for an extension of Negarestani's Cthuluid ethics and Brassier's conclusion of *Nihil Unbound* in which he calls for a cosmological extension of the death drive.

The following text aims to be less about slime itself than about the sliminess of life, of the inevitable biological and physical constraints on living in a world that, in one way or another, is always a being-towards-extinction. Slime itself, as we have seen, is always a toss a part of life meant to be left behind. There has always been an attempt to externalize ooze and slime and sludge but this effort cannot grasp nor undo the sliminess of slime as internal to life itself. This project is instead a vitiation of any orderly conceptualization of life; it is a celebration and liberation of slime in all its disgusting flows.

1.2

Fungoid Horror and The Creep of Life

“[...]the fungi, which occupy so considerable a place in the vegetable world, feed like animals: whether they are ferments, saprophytes or parasites, it is to already formed organic substances that they owe their nourishment. [...] It is a remarkable fact that the fungi, which nature has spread all over the earth in such extraordinary profusion, have not been able to evolve [...] They might be called the abortive children of the vegetable world.”

Henri Bergson, *Creative Evolution*,
“The function of mushrooms is to rid the world of old rubbish.”
John Cage

Where in the previous chapter the uneasy relationship of productivity and decay was largely human centered and interior here we are addressing the spread of the sliminess of life in an exterior and more ecological sense. Historically, fungus played an important geophysical role as an early formation of slime corroded the dull rocky surface of the earth leading to the creation of soil. In popular culture fungus shows up as sprouting patches of mushrooms from the black earth alongside the bleakness of gravestones, catacombs, and within cracked arcane tunnels. Fungus is ancient and always in the orbit of death, decay, and dampness.

Take the following passage from weird fiction writer Thomas Ligotti’s short tale “The Shadow at the Bottom of the World”:

In sleep we were consumed by the feverish life of the earth, cast among a ripe, fairly rotting world of strange growths and transformation. We took a place within a darkly flourishing landscape where even the air was ripened into ruddy hues and everything wore the wrinkled grimace of decay, the mottled complexion of old flesh. The face of the land itself was knotted with so many other faces, ones that were corrupted by vile impulses. Grotesque expressions were molding themselves into the darkish grooves of ancient bark and the whorls of withered leaf; pulpy, misshapen features peered out of damp furrows; and the crisp skin of stalks and dead seeds split into a multitude of crooked smiles. All was a freakish mask painted with russet, rashy colors— colors that bled with a virulent intensity, so rich and vibrant that things trembled with their own ripeness.⁵³

In their *Romance of the Fungus World*, RT Rolfe and FW Rolfe point to an odd attitude towards fungi in scientific, literary and other communities, highlighting a sweeping condemnation of fungi as part of a widespread fungiphobia.⁵⁴ Rolfe and Rolfe justify this phobia through a brief survey of fungi in folklore and fiction, which shows a persistent association with pestilence, death and as “agents of dissolution.”⁵⁵ Fungi clear the forest floor of organic debris and subsequently vitalize the nutrients of the dead thereby making space for new life. Fungi disintegrate their organic neighbors through secretions⁵⁶ as well as rhizomatic expansion.⁵⁷

Beyond the organic, fungus dissolves inorganic structures and is vilified for its damage to manmade ones in particular. As Rolfe and Rolfe show, stories such as Poe’s “Fall of the House of Usher” are replete with descriptions of rot and fungi.⁵⁸ This de-structuring of fungus can be spread to the faltering spatial dimension of ancient history in general, of the deterioration of old texts, of faded ruins, to the stretch of all civilized space which crumbles indefinitely in time. Jeff Vandermeer’s steampunk novel *Shriek* and its precursor *City of Saints and Madmen* embrace this theme clearly. The setting of both novels, the city of Ambergris, is a place where the original inhabitants, a race of sentient mushrooms called the gray caps, were forced underground. Vandermeer’s book is an oddity of form constituted by a thrice edited manuscript which suggests the unreliability of all its narrators as well as history itself (history being the main concern of the text both familial and on a wider scale). Vandermeer’s texts infuse genealogical history with the hallucinatory and unpredictability of fungus forming a decaying yet growing patchwork form of history, a history that, in its very form, is rotting to mush.⁵⁹

The fungoid, the fundamental creepiness of life, displays the unhinged spatiality of life as well as its rampant ungrounding, of the very surface which seems necessary in order to sustain it and all other life forms. Evident in the above epigraph, Thomas Ligotti’s tales are replete with fungus as a simultaneous operative of gross life and perpetual decay. In the “Bungalow House” the narrator becomes obsessed with an odd local artist who describes an old bungalow house, with a “threadbare carpet” of “verminous bodies,” and filled with “naturally revolting forms.”⁶⁰

Furthermore, in Ligotti’s “Severini” the narrator discusses the odd artist Severini and the works of his followers which are classified under the unofficial name “the nightmare of the organism.”⁶¹ The most relevant title of these fictional works being “The Descent into the Fungal.”⁶²

Severini himself lives in a small shack out in the jungle, described as a “tropical sewer”⁶³ sitting amidst trees and vines where there were “giant flowers that smelled like rotting meat” in the fungus and muck.⁶⁴ The followers of Severini dream of a temple amidst a fetid landscape with “the walls seeping with slime and soft with mold.”⁶⁵

The sight of Severini’s shack is unbearable to the narrator as he states that “I never looked directly into the pools of oozing life” and that, unlike the others, he did not “wish to exist as a fungus exists or as a form of multi-colored slime mold exists.”⁶⁶ Ligotti’s narrator promptly burns the place to the ground. The characters of “Severini” dangerously short-circuit the generative slime of unbound growth and the slime as the morass of the decayed linked together as “that great black life from which we have all emerged and of which we are all made.”⁶⁷

To swing back to literal fungus, the intertwining of life and death has long been a mark of fungoid existence, with the death and darkneses of forests being populated by fungus which thrives in the hollow remnants of more majestic vegetative growth. In this sense, fungus is representative of death and not another form of life. The fungal marks the unnerving transitive nature of somaticism – the food of the dead and the fruiting bodies. Fungal bodies are thus hardly bodies at all as they stretch the conceptual limits of their own bodies as well as destroy and decay the purportedly solidity of other bodies. Yet such processes are hardly restrictive to the mushroom. The first of the four stages of decomposition (fresh, bloat, decay and dry) is autolysis – when the cells of a living thing self destruct as the body essentially begins to consume itself. The fungal merely aid the process of decomposition, of decay, by thriving in layers of generative putrefaction. Whereas decay is the breakdown of tissues following the cessation of an organism’s life, putrefaction is the aided process of life breaking down. If there is a central disgust to fungus, or to plant life in general, it is because creeping life is a life stripped down to its mechanisms, processes, and breakdowns.

To return to fictional territory, Stanley Weinbaum’s protoplasmic monsters of an impossible Venus, located in tropical jungles in his stories “Parasite Planet” and “The Lotus Eaters” expand on the inherently disgusting nature of plant life and particularly of fungus. The atmosphere of Weinbaum’s Venus is filled with “uncounted millions of the spores of those fierce Venusian molds” capable of sprouting “in furry and nauseating masses.”⁶⁸ The Venusian jungles contain a terrible scene as “avid and greedy life was emerging, wriggling mud grass and the bulbous fungi called “walking balls. And all around a million little slimy creatures slithered across the mud, eating each other rapaciously, being torn to bits, and each fragment re-forming to a complete creature.”⁶⁹ The oddest of Weinbaum’s creatures is the doughpot which Weinbaum describes as “a nauseous creature. It’s a mass of white, dough-like protoplasm, ranging in size from a single cell to perhaps twenty tons of mushy filth. It has no fixed form; in fact, it’s merely a mass of de Proust cells—in effect, a disembodied, crawling, hungry cancer.”⁷⁰ In the sequel Weinbaum’s protagonist encounters the lotus eaters, strange veined and bulbous creatures which state that they do not need or desire to survive but only must reproduce with spores – growing tumor-like on one another. One of the lotus eaters says life has no meaning, life is not something to fight for.⁷¹

Weinbaum’s alien fungi are part of a larger tradition of fictional strangeness of fungal forms. Again following Rolfe and Rolfe, this strangeness is found in HG Wells’ *The First Men in the Moon*⁷² and Jules Verne’s *The Journey to the Center of the Earth*.⁷³ In this vein, but also by pointing towards actually fungi, Weinbaum’s extraterrestrial extension of the sporaceous function of the fungal uncomfortably warps the internal in order to pollute the external.

Spores allow fungal life, as an amorphous creep, to extend itself into the vertical and to survive unfavorable conditions as thick walled spheres or as more parasitic entities which germinate inside host creatures or spread from the infected host to further spread again either as an interiority or extended externality. Whereas flowering plants are considered higher life forms working in conjunction with nature, cryptogams (fungus) appear to feed on nature itself and are considered a lower or simpler form of organism.⁷⁴

As Negarestani puts it “The spore, or endo-bacterial dust, is a relic with untraceable zones of migration and traversal, a swarm-particle creeping off the radar screen; a speck of dust you never know whether you have inhaled or not.”⁷⁵ We could also mention Bergson’s invocation of life as being composed of eddies of dust.⁷⁶ On the theme of inhalation and the senses, some fungi use a malodorous stench to attract insects. These fungi, in the family Phallaceae, can smell like dung or carrion to attract vectors of fungal spread (such as flies), again tying the specter of death to the germinal spread of life as well as binding the miasmatic life-of-death to the demonic evidenced in the names of some fungus such as Devil’s Snuff Box and Devil’s Stink-pot.⁷⁷ Furthermore, of the minority of fungus which attack warm blooded animals, the majority infiltrate through the inhalations of the lungs adding a realistic sense of wariness to the rotten smell of the fungus.

The aforementioned dark (bio) vitalism of Ligotti’s creeping nature is anticipated by some of the fungoid creatures of Lovecraft’s pantheon as well as William Hope Hodgson’s short tales “The Derelict” and especially his well known “The Voice in the Night.”

Hodgson's "The Voice in the Night" tells the story of a shipwrecked crew that becomes infected and slowly transmogrified by a gray fungus leaving them nodding lumps. Beyond the creeping horror of the fungus – it also fills the victims with an "inhuman desire" to consume the sweet tasting matter, to consume the long dead corpses of others that have been slowly grown over. Hodgson describes the miserable island of fungus thusly: "In places it rose into horrible, fantastic mounds, which seemed almost to quiver, as with a quiet life, when the wind blew across them. Here and there it took on the forms of vast fingers, and in others it just spread out flat and smooth and treacherous. Odd places, it appeared as grotesque stunted trees, seeming extraordinarily kinked and gnarled – the whole quaking vilely at times."⁷⁸

In "The Derelict" the encounter is far more rapid and terrifying. A ship of men aboard an abandoned vessel find themselves barely able to escape with their lives as a brown squelching fungus attempts to consume them. The active/passive divide of the fungoid horror is replicated in fictional fields as a form of trap and an assailant, a trap in its psychedelic spore launching form and an assailant in its aggressively consumptive modality.

This putrid fungal pantheon is formalized and maintained in the literature of several role playing games such as the *Dungeons and Dragons* monster manual. Creatures with the names Phantom Fungus, Shambling Mound, Shrieker, Yellow Musk Creeper and so forth fill the book, creating a taxonomy of fungal horrors that speak to the seemingly endless morphology of fungal creep and toxicological capacity. This fungoid monsters furthermore introduce the uncomfortable notion of plant movement, of the base creepiness of the creep.

The question becomes what is the limit of the creeping mechanism, of the stretch of the creep?

In the previous chapter we saw the explosive internality of life whereas the fungal appears to be an infinite expansion of the already extended, an endless development of the odd spatiality of the fungoid, of the sick perpetuation of foul matter being simultaneously the cause as well as the result. The fungal operates as a counter to the apparent somatism of vegetative life due to the space-traversing capacity of molds, mushrooms and other crawling bits of dark vegetative forms. Whereas life in evolution can be construed as merely mutations on variations on a form, fungus appears as only vegetative variations without form. One could also consider Rolf Sattler's take on plant morphology in which leaves are not a plant structure with processes but the leaves are processes themselves. Following Sattler, fungi would then be pure materialized process, or materiality as simply the production of production where the distinction between body and intensity or more basically matter and energy is abnegated.

Fungus then seems, at least how we have viewed it thus far, to embody extended mutation to the degree that it moves and grows in the sphere of nature itself, functioning as a kind of living landscape. One aspect of the insectoid Zerg species in the videogame *Starcraft* series is a nightmarish play on this theme; the Zerg must grow an organic carpet in order for their infrastructure and war machine (or war organism) to develop and spread. The bio-matter plane is called the creep by the non-Zerg – a biological plasma threatening to fill/cover the totality of space itself. The creep grows over, but does not extend through, 'empty' space itself - it fills the full, it remains grounded yet the sporous allows new terrestrial unconnected zones to be plagued by the fungus.

Returning to Hodgson's fungus, we see, on the other hand, that he extends biology beyond such absolute space and introduces the truly horrifying aspect of biology as endlessly spatial and naturally mutated, as growth unbound. The disturbing possibility that Lovecraft cultivates for instance, is that there are monstrosities that will live far beyond us; the possibility of a something that "whirled blindly past ghastly midnights of rotting creation, corpses of dead worlds with sores that were cities"⁷⁹ would continue to torment us. Put another way, Lovecraft extends biology to terrifyingly vast temporal as well as spatial limits. Where the mucous-like creep of the Zerg assumes a knowable limit to space time, Lovecraft questions even this boundary.

In his tale "The Dream-Quest of Unknown Kadath" Lovecraft describes Azathoth (an Outer god like Nyarlathotep) as "that shocking final peril which gibbers unmentionably outside the ordered universe," that "last amorphous blight of nethermost confusion which blasphememes and bubbles at the centre of all infinity" who "gnaws hungrily in inconceivable, unlighted chambers beyond time."⁸⁰ Azathoth's name may have multiple origins but the most striking is the alchemy term azoth which is both a cohesive agent and a acidic creation pointing back to the generative and decayed status of slime in Ligotti's work as well as Weinbaum's disgusting Venusian doughpot.

To return closer to the topic at hand, Lovecraft engages in his own descent into the fungal especially in his "Fungus from Yuggoth" a set of sonnets depicting his reality of cosmic horror where the twenty first piece is titled Nyarlathotep and the twenty second Azathoth. In his sonnets Lovecraft seems to move between Ligotti's horror-of-origins and Hodgson's monstrosity, but staying with mostly formless creations. Lovecraft's utilization of the fungal can be seen as attempting an assault on the senses in various modes, appealing to the most base disgust of life, of being an organism (as Ligotti does) as well as portraying the awful pliability of the fungal and the vegetative, as the inevitable creep of life, not as life as always enduring but as always dying, as always being ready to be consumed. Michel Houellebecq, whose engagement with Lovecraft will we examine more closely later,

points this out in his *H.P. Lovecraft: Against the World, Against Life* when he points out the inherently disgusting quality of Lovecraft's reality.⁸¹

From the fourth sonnet of Lovecraft's *Fungi*:
"The day had come again, when as a child
I saw - just once - that hollow of old oaks,
Grey with a ground-mist that enfolds and chokes
The slinking shapes which madness has defiled.

It was the same - an herbage rank and wild"⁸²

And from the fourteenth:

"What fungi sprout in Yuggoth, and what scents
And tints of flowers fill Nithon's continents,
Such as in no poor earthly garden blow.
Yet for each dream these winds to us convey,
A dozen more of ours they sweep away!"⁸³

Lovecraft plays on these themes in the aforementioned "Dream-Quest..." in the following way: "In the tunnels of that twisted wood, whose low prodigious oaks twine groping boughs and shine dim with the phosphorescence of strange fungi."⁸⁴ The rank smell of fungus leads to its unnatural iridescence, partially lighting the way for a descent into the horrible.

Taking a another step into the swamp, Lovecraft's compatriot Clark Ashton Smith's *Tsathoggua Cycle* and Lovecraft's own "Whisper in Darkness" discusses the filth-god *Tsathoggua*. *Tsathoggua* is an amorphous toad-like creature and his servitors are black formless spawn which reside in a rotting basin of slime. The smell of rot obscured or contained within creation, reasserts our aversion to new life when it is shed of its humanistic shell, *Tsathoggua* attempts to return us to the cesspool of evolution without the blanket of telology or designed betterment. From Clark Ashton Smith's "The Tale of Satampra Zeiros": "though unsurpassably foul, was nevertheless not an odor of putrefaction, but resembled rather the smell of some vile and unclean creature of the marshes. The odor was almost beyond endurance, and we were about to turn away when we perceived a slight ebullition of the surface, as if the sooty liquid were being agitated from within by some submerged animal or other entity. This ebullition increased rapidly, the center swelled as if with the action of some powerful yeast, and we watched in utter horror, while an uncouth amorphous head with dull and bulging eyes arose gradually on an ever-lengthening neck, and stared us in the face with primordial malignity."⁸⁵

Again, to return to the briefly mentioned theory of miasma, where the causes of disease are the result of bad air which is often thought as merely an outmoded theory of disease production, here we are concerned with the production-from/ofrot of which miasma is the strongest representative. The tropical sewer of *Ligotti* mentioned above is fundamentally miasmatic as well, where particular stenches are indicative of the production of death and decay, of the exumate materials resulting from organic forms moving towards creating new organisms in the biosphere.

The production of life requires decay and a clearing a way of the biosphere space to make room for new species. As we have seen, the spore production of fruiting bodies, of the sexual polyp of a particular fungus, mirrors the bad air aspect of spreading an infective form of life. The stench of death is also the stench of fertilization, of a turning over in the churning teeth of nature. This biological and geological churning is *Vandermeer's* crumbling history and the horridness of all creation, and the interplexing relation of degradation and generation.

One of *Houellebecq's* poems tie the two together:

"Deep in some woods, on a carpet of moss,
Foetid tree trunks survive their leaves;
Around them develops an atmosphere of mourning;
Their skin filthy and black, mushrooms pushing through it"⁸⁶

Houellebecq's poem echoes the darker passages of *Percy Shelley's* "The Sensitive Plant," in its depiction of the morbid fecundity of vegetative nature.⁸⁷ The possibility of plant death, of the rottenness of poetic and beautiful nature is followed by the emergence of sickly fungus.

As *Negarestani* points out however, decay is not merely a clean integration of life and death but the summoning of irresolution, of an unsettling and infinite softening.⁸⁸ The fungal, as the spatial extension of unified production and decay is ultimately troublesome as it appears as a corrupting production.

This corrupting production raises an interesting link between the organic of the fungus and the inorganic on which it grows and spreads. The softening of the terrestrial where the fungus regrounds (cracks, and breaks apart the hardest materials) but doesn't unground the terrestrial completely.

The fungal becomes the deathly embodiment of the terrestrial-generative, “it was though the sick earth had burst into foul pustules”⁸⁹ or, in one strange outmoded theory, fungus was the corrupted earth itself caused by the energy delivered by lightning.⁹⁰

The softening of the fungal and the de-and un-earthing of the vegetative becomes troubling when it encounters the living body of humans or other physical creatures intersect the fungal. While we have already discussed the degradation of the organic by the fungal, what is extra troubling is the fact that the fungal threatens to undo the necessity of the body, of the form for life. It was already mentioned that the fungal stretches the bodily limit of life as well as takes apart the solidity of other forms of life and, as we have seen, crumbles the purportedly one sided relation between inorganic nature (such as the planet) and organic life. Once this distinction falls apart the very liveliness of life is no longer traceable to the organic or to any identifiable form of life, but is immediately debased. Before reaching this point however solidity requires further dissolution.

The ultimate example of such horrifying undermining of solidity paired with somatic is the muck monster – the creatures taken from the tradition of the Judaic golem but exorcised of religiosity – such as the heap, man-thing, swamp thing to the great sludge enemy of Godzilla - Hedorah and so forth. Muck monsters which range from the dumb automaton (the Golem) to the comic book hero, put thought too close to nature, decorporealizing that which is supposed to be properly formed in order to think. As we have seen the decorporealizing processes of the fungal are met by a recycling and rebuilding (through spatial expansion) thereby undermining the humanistic solidity of its fixed boundaries complicating the difference between sense and thought, between life as bound and life as creeping. Philosophically speaking, muck monsters provide a degradation of phenomenology in that thought becomes another object in the pile of nature and not the sole means of determining nature through the senses. This residue or base connectivity of life can be seen in Negarstani’s brief comment on the Menstruum or living mud. The Menstruum works as a “communicational entity” between elements and can be taken as a kind of stuff of life.⁹¹

Again, returning to Lovecraft, his Shoggoth which appears as “a shapeless congeries of protoplasmic bubbles, faintly self-luminous, and with myriads of temporary eyes forming and un-forming as pustules of greenish light all over the tunnel-filling front that bore down upon us”⁹² questions the purportedly necessity of a shape to life and to intelligence, to the necessity of a identifiable entity as being something we need to recognize, the suggestion that if something thinks, and even more, if something reasons and is a form of life it must not be a complete assault on the senses.

The amorphousness of fungal life indexes life’s reliance not on the necessary thinkability of life but, as evidence above, its connection to the earth, to the inorganic, and the long strand of succession of physical and chemical forms leading to its accidental development. The spatiality of fungal life as different from the networked life of contagion (of time overcoming space) is the spatial over coming of time, the revenge of an old earth and old life being reinscribed and mutated against itself as in the case of Iain Hamilton Grant’s anti-somatic Schelling.

Again life becomes that of being trapped between (bare) matter and mattering (being generative and mattering, and having meaning). We will address the possible rampancy of the organic in the following chapter, questioning the possibility of life across multiple biospheres and its relation to nature on the cosmic scale.