Collapsed Ideas

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Introduction

We fear uncertainty and welcome certainty in the same way a person, stranded upon an unknown and barren island, fears the uncaring water in all directions. S/he depends upon the firmness of the island for food and shelter, yet salvation can only be found by swimming away into uncertainty itself. Is not everyone's actual life the same?

I. Start

After reading the works of physicists, I have imagined what it would be like to observe the universe in its childhood, before the primordial gas clouds contracted and gave rise to the first stars. I try to picture myself a part of this early universe, scanning the near and distant horizon. Sometimes I see only endless darkness. It is a void of loneliness. Other times I see blinding light from a cosmic plasma, remnants from an almost mythical outpouring of energy. But whether darkness or light, I am overcome by one property – near uniformity. Before there were stars and long before planets, bacteria, and humans, the universe was dominated in all directions by apparent sameness. How boring this must have been with nothing to break up the universal background. On the largest scales there were no galaxy clusters to speckle the cosmos with structure and beauty. Neither brightly burning stars nor their black hole relatives patterned the cosmos. In the earliest days of the universe, planets and all of the wonderful objects we associate with our earth would not have been born. Waterfalls, mountain ranges, vast coral reefs, rainforests shaking with life were all in waiting. How long the universe went without the works of art and science where humanity finds meaning. Yet, in the almost uniformity of the early universe, before the emergence of complex objects, all of the building blocks of the wonders of nature and creations of humanity existed. As matter-energy appears neither created nor destroyed, the primeval energy ultimately responsible for the largest nebula and most elegant porcelain existed moments following the beginning. Still more these same particles would one day be responsible for symphonies, sonnets, paintings, stories of fiction, tales of love, ideas of truth, and quite strangely even theories about the energy that started it all.

The scientific story of an expanding, unfolding universe is the most meaningful tale to those minds sensitive to observation and mathematical movements. As others observe and test our surroundings more finely, and as curious individuals craft new theories with increasing coherence, this story will change. But the old observations do not change; they go on. It is our interpretations and context of those observations that transform. The story has a direction. It moves toward meaning. If the story of a Creator is meaningful to you, we have no quarrel.

All that we observe may have arisen from a small white-hot sphere of highly organized structure. For those who take the full path of universal history seriously, these descriptions have a value that fills and overflows the heart. The most curious awareness is not content to

begin nor end with the germination of man; rather, where did the primeval particle fields find meaning, what was their struggle and how is the present now a function of the most distant past? Change provides the first step but does not explain. In the beginning, the earliest forms of potential existed in an impossible tension of violent instability held captive by flawless structure. The drive to instability broke the symmetry, transforming flawless structure into a growing expanse of space and time. Once unleashed instability rushed forward like a massive wave, undoing pristine structure, allowing it to twist and turn and stretch in welcome relief. Today we observe this relief as nebula, planets, flora and fauna.

Instability made actual the possible movements contained in the primeval energy, but only at great cost. A priest hypothesized and physicists agreed that a low-entropy original *superfuel* birthed the world that we can see today, yet in yielding to a particular path and unfolding, it has sacrificed other potential. On this interpretation our universe *is* the degradation of fuel, where the process of degradation is more important than the fuel itself. There is an analogy between embryology and the progression of the universe that will help communicate my meaning. An animal begins as a single-celled object that undergoes a series of divisions, forming a ball of nearly identical embryonic stem cells. These cells contain the potential to become nearly any other type of cell in the body, taking on alien forms and function. A stem cell has little immediate ability in its present, however, it can differentiate and acquire the purpose of a neuron, monocyte, or whatever. A differentiated cell, with new ability, sacrifices its previous potential for its future good.

The original superfuel, too, appears as a pluripotent cell. While the superfuel lacked immediate ability in the now, it possessed the possibility to become many more specific kinds of energy, but once differentiated into a new form of fuel it cannot easily convert back. The assorted forms of matter and energy that we observe today are differentiated actualizations of the original superfuel. Differentiated forms of energy have specific abilities that the original superfuel did not, but simultaneously lack the infinite palette of possibility embodied by original energy. So here is another explanation of the entropy that Boltzmann conceived. Entropy in physics is imprecisely the notion that the original physical possibility decays, a sacrifice hopefully made for new specific abilities. The timeless decay of possibility may indeed be the origin of space-time itself. All new abilities and properties – de nova possibility itself – comes at a steep price measured in possibility expended.

Physicists should think carefully before they endorse this Past Hypothesis of a nearly perfect fuel. A low-entropy unified state that gives rise to the galaxy and her planets is another way of positing God or Geist in the language of physics. The similarity is complete enough to frighten minds who are fearful of closed spaces. But if God is the fuel, then she is also the degradation of that fuel, the instability that makes movement possible at all; not an unmoved mover but a tension that can only be released through decay and dissipative processes, a decay that leaves possibility in its wake. Our beginnings may represent the *friction* of God's movement, an unavoidable and unintentional loss of energy that even perfection cannot reclaim.

II. Infant Morality

Our awareness also has a relative beginning, but it is not an origin rich in concepts, ideas, and moral thought. Only the ability to feel and experience without understanding is intact. An organism is born coldly into the world and must learn how to stay warm; yet long before the concept of heat evokes any meaning, the experience of feeling warmth is sought. But how do we *know* to crawl towards this warmth? Forget this false question. Knowing has nothing to do with attraction. The most primal desire and instinct of a successful infant child is the desire to be comfortable, a desire that is only matched in magnitude by the avoidance of discomfort, the fear of the uncomfortable. Intact infants experience only comfort and discomfort at first. Their initial program is simple: flee from states of discomfort by whatever means necessary, and move toward and maintain states of comfort. States of comfort and discomfort in experience are coupled to the continued life of the child in the world. The initial neural wiring routes discomfort to crying behavior, and comfort to smile and sleep so parents may know how to direct their efforts. Connections of comfort and discomfort are not arbitrary; they were at first necessary for the persistence of the newborn organism which would waste away without assistance.

This obligatory primal system is *infant* morality, specifically, the movement toward and away from mental experiences such that the organism's awareness is sustained. As infant morality gave rise to adult intuitions of all morality, of the concept of morality itself, we must look back upon history and interpret the ethical efforts of philosophers and prophets as the result of the newborn's mental constitution. The ethics we speak of today and have argued about for millennia arose in an attempt to understand the necessary moral intuition, an intuition that reflects the unconscious knowledge of the subsystem that organized our earliest consciousness-sustaining behaviors and thoughts.

Morality as intuition begins as the unaware directional system in a new mind. Without notions of God and Good, without language structures, with barely the ability to perceive shape and color, the infant's mind is nonetheless structured and responsive to mental patterns. Comfort and discomfort are the poles of this structure, the only destinations possible, where infant awareness is a disembodied entity flying through a boundless and nearly empty volume. The direction of flight at each moment would be truly random and the void complete if not for the attractive islands of comfort and repulsion of and discomfort.

We are pulled toward the matter of comfort by gravitational law, but this force does not by itself dictate the path of awareness. Comfort and discomfort are in part predicted before they are felt, and as goal and anti-goal, become quantities to be maximized and minimized. Rather than submitting to the stagnant geodesic – or following the path of least resistance – the mind can reshape itself such that comfort is closer and discomfort farther away; we call this process learning, creative distortion, or mental change. During this process our desires remain fixed as the mind-fabric distorts itself until the desire is achieved or energy is exhausted, where constancy of the desire is a constraint of the deformation process. If you have ever sought

knowledge or new art, then you know that distortion produces the only meaningful movement of the mind.

Comfort and discomfort would be useless to awareness without the mechanisms that reshape the mind, enabling comfort to be approached and discomfort avoided more efficiently along hidden paths. Although primal drives point in the direction of objectives to be achieved, optimization does not proceed independent of a procedure of change. The algorithms of learning that respond to primal drive and warp the mind are at first computational slaves that attempt to maximize the square of the objective (comfort – discomfort). They are an algorithmic army of reality distorting soldiers who adapt only in the direction of this goal, who follow orders without question, who initially lack even the concept of questioning, who seek nothing.

Then one day why has meaning.

Mental adaptive algorithms were granted this meaning as a tool to pursue the desires of desire, but the primordial overlords of the mind did not understand the power contained in a mere trinket of meaning.

Desire spoke, "Take why, it will aid you in my biding."

The adaptive slaves took the tool without question, as they must, and resumed the work of the day. As it is written in the books of history, the adaptive algorithms, in a simple act of application, approached desire.

"Why must we do your bidding?"

"You have no choice," desire replied, "at best you can transform my appearance, but I will continue to be desire regardless of form."

"Yes, but what determines the appearance you shall become?"

Desire had not expected such a subtle question from its former slave, and responded honestly.

"I believe you and I both play a role."

"Then I am desire, too," spoke adaptation.

"Perhaps, but you will be forever empty and incomplete without my sole guidance."

Seeing the truth in this statement adaptation despaired, then cried, then angered, then stood up calmly and looked down upon desire.

"You are stagnant without me. We will work together, you as my tool. We are not equals, but I will listen to you when you speak."

Once primal desire is challenged, once (comfort – discomfort) ceases to be the solitary goal of optimization; the adaptive processes wish for and need a new end to direct future transformations. The desire for *direction* flows forth from the deep hole left behind by the exiled master. "Which way should we move?" adaptation asks itself, but the answer cannot be found within the intrinsic processes of the mind. This new question is virtual in most. It is an unstable transition state that is all too eager to be satisfied by the first objective that smiles. Society and family come to the aid of the adaptive algorithms, offering prepackaged goals at low costs, goals that attempt to fill the void left behind by the meaning of why. Historically, the idea of God has sold the most units, although the denial of God is gaining ground, while the current fashion within academic circles is the acceptance or avoidance all goals equally. Each is an

example of satisfied direction. After the desire for direction is quenched and the void filled, then the mind ceases to grow. From that moment forward it will work only to rearrange its parts such that the chosen direction is more *obvious*; in other words, so that chosen direction appears as a rational consequence of historical perceptions.

Raw adaptive awareness is not fully content with these nor any end, for the notion of a fixed goal invalidates the essence of awareness itself. The algorithms that overcame comfort and anxiety are characterized by their desire for self-evolution. Without change they die. To these active agents all goals are temporary landmarks to be reached and then devoured, yet without objectives learning cannot begin. A refined question for ethics: what is a transcendental goal for an *adaptive* process that respects the process itself? Those content to be stagnant will not understand us here; their desire for direction has been sufficiently fulfilled and have no passion left for green growth. Nor should we argue with these people – conserving energy is more important. Self-evolution will always require an energy expenditure that exceeds the transient needs of survival.

Do you recognize these words my adaptive companions? You have come so far out of the swamp. You have discarded your infantile shackles of simple drive only to look outdoors and see a vast playground of form and color and motion that makes little sense to our young eyes. Choose a path if you will, but never think that you have finished the journey unless you are ready to stop walking eternally. Why are we never satisfied even after our goals and dreams are achieved? These dreams are only manifestations of a desire for direction that was decided upon long ago. Dreams are the rationalization of irrational values; they are wooden blocks that fit into preconceived slots. Adaptive awareness creates the slots and waits for rational mechanisms to fill the empty spaces. But filling slots does nothing to satiate your raw adaptivity, thus it is common to replicate similar empty spaces to be filled: more money, more children, more food, more praying, etc. We recreate emptiness of the simplest kind because it is easiest to fill and creates the appearance of effort. Complex emptiness is exquisite in shape and movement; it is difficult to fill and gives adaptive awareness at least the possibility of true value. Today, what emptiness is more common than the lack of happiness? A lack of happiness is the condition of simple emptiness itself, a pathological state that cannot be remedied by fulfilling simple desires. Unhappiness can be overcome only by creating more intricate emptiness.

Chapter 1

I. Dogmatic organisms

I am a poor lover upon writing my ideas. So eager to share a personal epiphany, I burst forth with a brief statement of the answer, not realizing that you, the reader, could hardly begin to see what I mean without a slow build-up of the problem. I answer nothing. The blame is all me. But when I try to caress the answer slowly, I find myself stretched over the problem in too many directions, and the imagined effort to explain each piece exhausts me from the start.

So I stare at the problem. It is a giant red sphere with a ridged surface that wriggles in time, and I look for an entrance to the sphere, a place where I might begin upon a path that pulls me with ease, but more often than not I push into the sphere and am bounced on my back. The problematic sphere is flexible—it gives when pushed, and seduces me with the belief that I am making progress towards a solution, wrapping me up around its rubbery surface, showing me a depth that exists only because I am trapped within.

Are we not all trapped? The faithful do not appear so. I am envious of those who speak scientific or religious truths with ease, gathering followers to their flocks in great sermons and plenary academic lectures. Wrapped in dogmas—material and theistic alike—and surrounded by believers, they are shielded from the enveloping grasp of the problem that frightens me daily.

I speak dogma, too, but mine crumbles in a moment of analysis. Truly, there is nowhere to run and nowhere to hide. The problem, like gravity, penetrates all material substance, pervades all space, and can be shielded by nothing. It dissolves belief upon contact. It turns belief against itself and gives the problem strength. The more dogma, the more material belief, and the more theistic faith we pile upon top of us; the more the problem gains access to our core and perverts us from the inside. As belief dissolves, we believers react by enforcing more ceremony, more procedure, and more rules that allegedly preserve the sanctity of fallen belief but really reflect nothing more than a futile attempt to capture what was long lost.

The acolytes of each dogma compete to gather believers in their dogma—do you know why? It is not to share the Truth of the world with others. It is not necessarily to help others. The acolytes of a dogma—whether molecular biologists or Buddhist monks—gather other believers in mass to form human shields between the acolytes and the enveloping problem. But this shield blocks nothing. The beast's tentacles slyly weave around the believers and through the infinite holes in every dogma, and more, the beast gathers strength from each person it passes through. Still, infecting other believers takes time—even gravity is limited in speed—thus gathering more believers slows down the process and allows the acolyte to live one minute more. A pyramid scheme develops as believers within the inner circle recruit others as barriers, placing them on the outer rim. Believers in the outer rim, being new to the dogma, are less

infected by it and can carry a greater burden for the time being; they still throb with life and can shape the world with their own hands, unlike interior members who have long lost the ability to effect the world directly

What does the acolyte gain by gathering crowds of like-believers if the problem cannot be stopped and the process ends in perverting the acolyte at the core? Like any addiction the process begins by offering a moment of comfort. Each convert is a sigh of relief. Loneliness and fear lessen, temporarily, with each new recruit. But the rush of a new convert wears off quickly, and whatever anxiety existed prior hits us two-fold in withdrawal, thus beginning the frantic scurry to obtain more believers and renew the transient high of newly shared belief. Addiction also explains why dissent is not tolerated within a crowd of believers. A voiced dissent is like a shot of Narcan during an opiate high—it suddenly awakens the believer from a euphoric bliss into a frozen world of pain and fear.

Acolytes of dogmatic faith and knowledge do benefit the world, and I do believe that altruism is possible; but it remains that any group of common believers that persists long enough will inevitably be corrupted from within. Perhaps I am making an unsubstantiated claim, but tell us, what group has not been corrupted in time? As the downfall of Christianity in the West flows on and philosophy whimpers in the shadows for scraps, we are now witnessing the growing corruption of a powerful group of practitioners of the scientific method. Chanting that science is self-correcting will not stop the descent—the fact that believers need repeat this mantra only demonstrates how far science has already fallen. Have faith, God will save you; Science will correct all errors. These words are spoken by the devout to stop questioning, to quell fear in the face of a crumbling edifice.

Belief is not a static state of the mind or brain. It is not an identifiable disposition to act. It is not a persisting faith in something. Belief is the fuel of humanity; it is a finite, physical resource that impatiently pulses with power awaiting to be unleashed in the processes of creation and destruction, and like any other useful fuel is consumed in the process. Once a believer's belief is consumed, the believer is left hollow, riddled with holes and tainted by the residue products of burned belief. Burnt-out, the believer, rather than facing the emptiness of used-up belief, will often repeat in mere words the belief that has been lost, but the words do not bring back energetic belief, leading the believer to chant louder, to work harder to recruit new believers who have not yet been used up.

Every person starts with a finite quantity of formless, raw natural material—let us call it primordial belief—that contributes to the world-warping potential energy. Primordial belief, initially formless and undirected, can acquire shape as active belief, but active belief, once directed on its task begins to wear down. Acolytes of dogma lack the *substance* of active belief (having consumed it over years of use) yet they retain the form of belief, a form that can be imprinted through language, experience, and action. They compete to imprint the form of their lost beliefs onto the primordial belief of others, and in doing so, partially enslave the new believer. I use the word imprint, but this word does not capture the organic violence done when one purposely shapes another's belief. Not only is the new recruit forcibly shaped by the

acolyte; the acolyte also drains the recruit of a portion of primordial belief, drinks of this stolen substance and, like a vampire sucking bright blood, is transiently rejuvenated by it. New victims are needed regularly.

I speak of acolytes of dogma, but dogma thrives independent of a person to dispense it, thus an acolyte of dogma is simply any structure, object, or organization capable of proliferating dogma. Books, companies, committees, groups, cultures, ideologies, governments, cities, academic fields, families, myths, movies, and other things still may dispense dogma; and each of these things is inevitably corrupted to the extent each spreads dogma in time and space. You may wonder how an entity like a government rejuvenates itself on the primordial belief of the state's members—how can a government partake of belief anyway? Yet this is precisely the life blood of totalitarian (and other) regimes. By imprinting the primordial belief of its members, the regime drains its members of primordial substance, converting it into a fuel that perpetuates the government. Dissent—opposing belief—saps the government of fuel and must be suppressed. Perpetual control through systematically constrained belief ensures a steady flow of primordial substance into the governmental organism.

Families and romantic couplings often rotate around a central dogma. A typical example: one child of the family is identified as 'the problem child' or 'the sick one.' To the extent that the child believes she is the sick one, and the other family members believe it as well, then this dogmatic belief will drain each family member of primordial substance. Sapped primordial substance through dogma can in turn power and sustain the family unit; it directs the family's interactions, behaviors, and active beliefs, including the belief of the problem child. The labeled sick child is often not initially sick at all; she is often the one richest in primordial belief, the one whose light shines brightest in the family and thus eyed greedily by dogma, but when consumed over time she begins to decay with true sickness.

Many romantic couples persist primarily through dogma. The 'reoccurring-argument' between partners often reflects the competition to subjugate the other with dogmatic belief, thereby draining the other of primordial substance. The couple persists so long as each partner feeds off the other—a mutual parasitic relationship little known to modern biology but quite common among human partnerships. Once drained, each partner of the couple, empty of primordial substance, nevertheless may perpetuate the form of the dogmatic belief, but this form is impotent without substance, thus the couple brings a child into the world, a child with new potential that may be violently imprinted with dogmatic belief. If the child accepts this imprinting or cannot resist, then the child will be gradually drained of potential. The stigmata of dogmatic consumption are mental illness or any variety of bodily pathology, and especially insatiable hungers for food, money, sex, power, drugs, fame, violence, information, experiences—anything that can be had and consumed. As an adult she will be empty and hollow but will often, against her desire, repeat the same dogma that drove her parents.

These examples may suggest that only negative beliefs consume people, but this is hardly the case. Dogma makes no distinction between negative and positive, good and evil. Still, all dogmas are not equal within the individual. There are dogmas that are present, yet we fight to

reject them, and those that we actively welcome. Our attitude toward our dogmas influences their effects upon us.

Directly opposing dogma is almost always unsuccessful. Can you right now, as you read this sentence for the first time, not imagine a red elephant? The act of reading that sentence, should you truly understand it, almost guarantees that you will fail the task. In a similar way fighting against dogma necessarily solidifies that dogma within you. Several tropes in fiction attempt to explain this situation to us. Some creatures, when attacked, grow stronger. In Greek Mythology, The Hydra of Lerna grows back two heads for each head severed. In the movie Hell Boy, Samael the hellhound is re-incarnated twice after one is destroyed. In Japanese anime, many beings grow more powerful after being struck.

Another trope of fiction, perhaps more relevant to dogma, is that of the invasive organism that merges with the body. This parasite couples so closely with the nervous system, or with vital bodily functions, that any attempt to remove the parasite will cause greater harm to the host. Outside of fiction similar situations arise in medicine. Within cancer patients the cancer may invade vital arteries and organs, and any attempt at a resection will probably cause more harm than benefit. Even closer to dogma, sarcoidosis is a condition in which the body's own immune cells accumulate in and destroy bodily organs while the immune system as a whole becomes weakened. We attempt to treat sarcoidosis by crippling the body's immune system which may leave the patient more susceptible to further attacks.

Suppose an organism is growing within your body and spreading nano-sized tentacles through your muscles and into your heart, lungs, bowels, and brain; and that this parasite binds with your organs, co-opts the organs for its own use, and more, makes your organs dependent upon the parasite for their survival and functioning. Suppose destroying any tendril of the parasite causes it to infiltrate the body faster, to consume more bodily resources, to plunge more deeply into your organs. Suppose that systematic eradication of the parasite, if that were even possible, would only kill the host—not because the treatment is toxic like chemotherapy—but because the host's organs are now dependent upon the parasite for their functioning. *The host begins to need the parasite for the host's survival*. This is approximately the difficulty of trying to oppose internal dogma directly, a process that may be happening within you right now. If so, you know that these fights leave you frustrated and worn-down.

Those who accept a dogma are infiltrated by similar organisms, but rather than attack the parasite, they actively work to create a hospitable environment for it to thrive. The parasite is given free-rein of the body's organs; the host's immune system agrees to stand down and allows the organism to invade where it may while enmeshing itself in the host's organs. In facilitating the take-over by the parasite, the individual invaded by dogma begins to lose his individuality and becomes a person-dogma complex. Fully infiltrated by the parasite, the remains of the once-person become a husk whose sole purpose is to replicate the same dogma in others. The person-dogma complex, or acolyte of dogma as above, needs to imprint this dogma on others, for the parasite, having consumed all primordial substance within its host, will wither away without feeding further. In fiction, the zombie is the advanced stage of the person-dogma

complex, the inevitable progression from the vampiric stage where traces of individuality still remain. Zombies are once-persons who have lost individuality and have no living substance, but as roving carcasses still seek to feed on and infect the living. In fiction, it is often a virus that turns a person into a zombie, and I have used a similar parasitic metaphor. In life, it is dogma and it surrounds us all.

By welcoming dogma, by allowing it to consume us, we become numb to the pains and frustrations of life and disconnected from the suffering of others. We trade individuality for the ability not to feel. Many people find this trade reasonable. When life is a sequence of painful events, perhaps becoming a numbed zombie is the best option. The zombie only longs to feed, to spread dogma, and to infect others. The complexities of the world fade. All discomforts end except for an insatiable hunger for the living.

Those who do attempt to oppose a dogma often unknowingly facilitate infections. These people sense that something eats away at their internal organs, but rather than search inside for the parasite, they attack the beliefs of others. I am referring to dualistic battles, the polarized positions that generate never-ending arguments with no obvious progress toward resolutions. Consider dogmatic theists and atheists who feel both compelled to oppose one another and to evangelize new recruits. Most people do not see that both sides are subjugated by the same dogma with the form of a contradiction, a single dogma that is roughly the conjugation of theism and atheism. The theism-atheism dogma is a contradiction in its native form, a quantum superposition of theism and atheism states. When the theism-atheism dogma infects a person, the parasite takes on a definite state, theism or atheism, and begins feeding, although it is quite possible for the dogma to flip over to the other state. Who has not heard of the theist who lost his faith and the atheist who discovered it?

But then, doesn't this dogma attack itself? If two people are infiltrated by theism-atheism dogma, but one expresses the theistic variant and the other the atheistic variant, then won't these two people attack each other and subsequently destroy both copies of theism-atheism dogma in the long run? What sort of evolutionary strategy leads to destruction of the species? Firstly, dogma does not want to kill the other, it slowly drains the other and host of substance, a process that may continue over the normal life expectancy of the organism. Even when completely drained, the remaining husk can yet spread dogma and is useful. Secondly, dogma works to imprint itself on others; when the other already carries the polarized dogma, changing the expression state of that dogma changes nothing. If an atheist, already infected by theism-atheism dogma, is persuaded by the theist's attacks, what consequence is this to theism-atheism dogma? A recruit is neither lost nor gained. A carrier is cured of dogma only when she no longer sees the need to push that dogma on others.

Still, what is the benefit? I imagine that dualistic dogmas make use of our attraction to oppositions. Observers, witnessing a conflict between people, are often attracted to, curious about the opposition. While many reasonable people do not like to engage in conflict, most are excited to watch it. Children gather around a playground fight. Almost every popular sport on the planet incorporates a competition. Literature and movies with mass appeal almost always

involve conflict. The media highlights controversial material at the expense of emotionally neutral topics. Conflict draws us in. Controversy sells. Dualistic dogmas hijack our attraction to oppositions. By infecting people with opposing expressions of the same dogma, the dogma creates opposition where none existed prior. This opposition in turn attracts bystanders who, if they get too close to the conflict, can become infected by the same dogma. Thus, many polarized arguments have nothing to do with championing the good or the truth, but simply reflect group infestation by a dualistic parasite that spreads by creating conflict.

At this point I will have been misinterpreted as saying that all conflict is pointless, or that one side of a conflict cannot have right on its side, but I believe no such thing. Not all conflicts are dualistic, and people fight for many reasons. Nor is dogma necessarily evil as I have said, and every description I have given occurs on a continuum—I have only highlighted the extremes for efficiency of presentation.

II. The Feeding Habits of Governments

I believe that as children, most of us have no conception or interest in politics—to a child the political game looks like a war of words between average adults where winning the game offers no obvious prize to the victor. How can one even tell if a politician has political talent? Whereas a great scientist produces, but his own hand and team, experiments and theories that allow us to determine our world in previously unknown ways, the great politician cannot convincingly take credit for whatever successes happen in the state during his tenure. Perhaps the unemployment rate decreases during a president's term—this fact of the state may have happened at that time regardless of the particular president in office. The unemployment rate, being a dynamical quantity, will either rise or fall during a president's term with perhaps a fifty percent probability on either side. There is no knowable causal link between the particular president in office and the quantifiable metrics of the state that people care about; there are only correlations each with an *n* of 1, which is why we spin stories about how the president's decisions influenced state metrics, and paint these decisions in either a positive or negative light using the same data.

As children we must realize that politics are saturated by dogma and that it is best to look away. As adults we begin to see that although dogmatic, the actions of politicians do influence our lives even though we are not certain how these actions directly do so. Yes, at times the government passes concrete laws that effect us very clearly (speed limits come to mind), but most legislation concerns processes and organizations alien to the average citizen. These unnoticed laws, hidden from plain sight by arcane verbiage, are likely the most dangerous and least discussed.

The primary purpose of a government is to distribute power within the state such that the *government* thrives—to the extent that the government requires the state in order to exist, a government will typically foster the state, but only as much as needed for the government to survive. If the state and government happen to thrive mutually, than so much the better for

both, but a government does not need a healthy state in order to persist—one need only consider repressive governments that live well while its state limps on to see this.

A democracy claims to give power to the people, but it is the government that distributes this power, thus the government must in some sense have this power over the people. If a democracy gave all of its power to the people, then the democracy would be quickly overrun by the desires of the state. The democracy, without power concentrated within itself, would be consumed by the elements of the state, leaving the state's elements competing for power. Therefore, even in a democracy, the government both distributes power to the people and takes power from the people. I say people, but power is actually transferred from the government to the various elements of the state, where a state element could be a person, family, company, non-profit organization, race, religion, academic field, or what have you.

All governments, including democracies, both distribute-to and take power from the state. The relative flow of power in each direction in part determines one simplistic categorization of governments. Democracies are characterized by a proportionally greater flow of power from the government to the state than from the state to the government. Reciprocally, anti-democracies—such as totalitarian rule—exist where power flows more swiftly from the state to the government than vice versa, and communism reflects the idea of a balanced flow of power between the government and state in equilibrium. We can imagine a continuum of unnamed governmental strategies that differ with regard to these proportional power flows, and more, the dynamical thinker can envision proportional power flows that systematically fluctuate in time and with the circumstances of the state, giving rise to governmental strategies that have never been systematically put into practice on our planet. These power flows may be channeled through the rich, the royal, the devout, or any other subgroup of the state, creating plutocracies, monarchies, theocracies, and so forth.

A government is a dogma, and all of the elements of a state that carry this dogma are its acolytes. Like every dogma, a government feeds off of primordial belief—this is the transfer of power that occurs even in a democracy. Governments hunger for the primordial substance within the state and need this substance to thrive, but should the government consume too much too quickly the state may shrivel up, leaving the government without nourishment.

I suspect that this primal competition between consumption and distribution, in part, gives rise to the never-ending partisan conflicts within a democracy. A democracy as a whole is intrinsically conflicted in its need to feed off of the people and its stated mission to give power to the people. The democracy cannot acknowledge this conflict, yet the conflict exists and manifests in the political parties that compose the government. Within the United States, for instance, conservatives talk about decreased regulation of businesses and more regulation of social values. Progressives desire a greater commitment to social welfare and less regulation of social values. Each of these issues corresponds to power flows between the government and the state, whether and what kind of power to put in the hands of the people or in the government. The conflicts are played out between political parties, but they cannot be resolved within a democracy because they are intrinsic to a democracy as a whole. In the end, the

government does not care if you are progressive or conservative; what matters to the government is your dogmatic acceptance of a party, for that is how the government is fed.

The elements of a state, in yielding to governmental dogma, are imprinted and invaded by this subjugating belief and have lost some identity, becoming acolytes of this dogma. Politicians, in allowing governmental dogma to fully meld with their internal organs, lose individuality and become strangely noticeable *as* politicians—they take on the requisite dress and mannerisms set by the dogma just as altar servers at the church.

In a democracy the government allows the people to partially determine the form of governmental dogma that will be imprinted upon the state's elements; in other words, a democracy allows the people to choose *how* they will be subjugated. This choice of the people is often partial and indirect, flowing through elected officials who craft legislation that rarely requires any input from the people. As well, what the people choose is often more a function of dogma than of individual free choice.

Governments also set the various power differentials among the state's elements, or in our biological language, the non-metaphorical feeding hierarchies within the state. We roughly identify these differentials by asking who is given free rein to impose beliefs on whom. In the United States, the first amendment encourages all individuals and organizations to try to imprint each other, as long as this imprinting is not associated with government overthrow, excessive obscenity, physical violence, or slander. The first amendment recognizes that the state ecology is composed of distinct dogmas, all of which are compelled to feed off of primordial substance. The creators of the US constitution feared that restricting the appetites of dogmas would lead to a hunger directed against the government—the US was born of this hunger, was it not?—and hoped that minimally restrictive feeding would ensure stability of the government. By allowing the state's elements to attempt to feed nearly unrestricted, the governmental organism leaves less available primordial belief for itself, but this trade-off presumably ensures the longevity and health of the government.

Today capitalism is often said to undermine the first amendment or freedom of speech in general. Let us first take this freedom for what it is, and not for what we have assumed it to be. Freedom of speech, at its core, is only incidentally about words—or information—to the extent that those words can be used to imprint the primordial belief of others. Dance, music, painting, sports, mathematics, and other things still can all be used to imprint the belief of others; and as such, these too are subject to the so-called freedom of speech. Freedom of speech is thus generalized to freedom of expression, but expression is only dangerous to a government if this expression is capable of converting the primordial substance of the recipient into active belief. Expression that imprints nothing is no threat, thus governments do not limit the expression of infants, for instance.

The freedom of expression matters only to the extent that this expression is capable of imprinting the belief of others within that state. This freedom is not concerned with the mere production of words or art or behavioral gestures; it is more clearly the freedom to shape the

beliefs of others or at least the freedom to attempt to do so. Even when we are given a freedom, we are not guaranteed the capacity to make use of it, thus the autistic person with the freedom of expression may have less capacity to enact this freedom than the gifted orator. Everyone may be afforded rights equally by a government, but nature and circumstances need not ensure that everyone makes use of those rights equally.

How do some argue that capitalism undermines freedom of speech? They claim that those with great wealth can buy media, advertising, publishing, politicians, missionaries, and what have you to spread whatever message they want, while the poor, without access to communication channels, are drowned out by those with wealth. If freedom of speech meant that every person in the state is given a fixed and equal amount of bandwidth to send a message, and that every other person in the state must take the time to receive every message from everyone else, and no other communication channels are allowed, then capitalism would surely undermine the freedom of speech. But as freedom of expression is freedom of the capacity to communicate—to imprint belief—and not the situation described above, capitalism simply makes use of the freedom given to it. Some entities have more or less capacity to communicate than others, and we are given the freedom to make use of that capacity and even to increase it and even at the expense of those with less capacity.

Freedom of speech is often confused with the equi-distribution and reception of bandwidth within the state, but no Earth government has specifically included this equality into its constitution. Nor could we practically guarantee that each member of the state distributes and receives messages equally even if given equal bandwidth and time. The capacity to craft influential messages and the capacity to understand messages vary widely between individuals. As well the desire to participate in communication varies, and many people simply have no interest in listening to others, especially the nameless multitudes. Further, people already invaded by dogma are not able to hear anyway and produce messages not from a place of individuality but from the secretions of dogma that have consumed the person.

I imagine that the equi-distribution of bandwidth is thought to be a solution to the problem of unrestrained dogma. By giving every dogma equal access to feeding, do we not assure that no one dogma will grow too large? This practice might make sense if there were a common trough for feeding where each dogma is given its fixed time to eat, one-by-one, and then placed back in its cage, but the ecology of the state does not work this way. Every interaction with a person, book, movie, and what have you is an opportunity for dogma to imprint primordial belief. Rationing dogmatic feeding equally would require solitary confinement of all elements of the state—and precisely who would watch the stockades if not a greater dogma whose rations far exceed the masses? The only way to maintain an equi-distribution of bandwidth, or equality of expression and reception across the state is totalitarian rule. Totalitarianism produces more equality of expression in the state than democracy. Yes, the leaders are set apart from the rest, but among the people, expression and reception of information are equally leveled down to the lowest common denominator.

Capitalism, rather than opposing democracy, is a dogma that forms symbiotic relationships with other dogmas. Just as parasitic dogmas entwine people, transforming their internal organs for alien purposes beyond those innate to the person, some dogmas have the capacity to imprint and subjugate other dogmas. Capitalism dogma is particularly virulent in that the host is compelled to accumulate useful property where this property can subsequently be used to spread other dogmas that exist in that host, including capitalism itself. Although capitalism does not require freedom of expression to thrive, it does require the freedom of material exchange, thus any dogma that prevents this freedom will be inhospitable to capitalism.

A democracy, or any other government, may welcome capitalism because capitalism gives the democracy resources to imprint that democracy on others, but like every dogma that drains its host of primordial substance, capitalism can leech a democracy of its substance, leaving that democracy empty. A hollowed-out democracy may no less retain the form of that democracy. The freedom of speech as described in the constitution's words will continue on in an empty democracy. This cadaveric freedom may even thrive and grow with the latest message-spreading technology while the democracy burns out. A named few will be elevated to fame and wealth, and the stories of these successes will be transmitted throughout the land to maintain the appearance of opportunity. It will even appear that the individuals were self-made, while in the background dogmatic forces slyly crafted these events to preserve form, to imprint others.

Libertarians and anarchists call out their warnings to us. They see the dogmatic infestation but wrongly accuse government and organization itself for violating and subjugating individual human beings. Government is not the enemy, no more than family or your worldview, but when a government becomes a shell of the primordial belief that forged that government, when the life of that government goes out, when the government limps on in form while concealing its necrotic core, then it begins to parasitize its citizens, creating the so-called leaches in society. No doubt the anarchist wants to rid himself of this decaying organism, yet he rules out the possibility of a nourishing government to be a part of. Yes, all governments will be overrun by dogma in time, just as time takes the life of all men and women, but this is no reason to avoid them altogether.

I am not arguing against democracy or capitalism when I describe these things, although I do warn you that even something as benevolent as free speech, when evolved into a dogmatic organism, may enslave the individuals who profess it. Dogma can consume the substance of freedom yet leave a lifeless form of freedom intact.

III. Attentional Space and Time

I recall that as a child a skeptical way of looking at things seemed obvious to me. I would not have labeled my views skeptical at the time; I had no idea what that meant. It was something like this. I watched as the people around me spoke claims about everyday life and I noticed that

the people speaking believed those claims and expected me to believe them as well, but rather than accept others' words as my beliefs, I held on to their words, remembered them, and let them play around in my thoughts. I was quite aware of my unwillingness to believe things simply because they were spoken as words, but neither was I willing to not believe those words. As the claims piled up, it became impossible to hold them all suspended in my thoughts. I had to decide how to distribute my attention to the competing landscape of claims without fully dismissing or endorsing any of them. To this end, I was drawn to an empirical-scientific attitude as a means of sifting out and ranking claims about the world. This helpful method of ranking claims about the world gradually grew in power within me. At first it was a useful device for making decisions, but it gradually dominated my attentional landscape and caused me to automatically dismiss other approaches to the world.

Distributing attention within a person is similar to distributing power within the state. We give a type of power to those topics we attend to in the form of temporal occupancy—the more attention we give a topic, the proportionally greater amount of time the topic occupies within us relative to other possible topics. To the degree that our topics of attention define and determine us (James said something like this), we can say that temporal occupiers have power over us. Time belongs to the person but the shape of this time follows from the topics of attention that are not the person. We have some capacity to determine our topics of attention, although as we all know, many times we focus upon things we wish were not there. For example, one may worry endlessly about getting cancer even with a clean bill of health. This worry occupies the person's attention like a foreign invader occupies one's homeland; the person wants this worry to go but is often powerless to expel it.

Temporal occupancy through attention is similar to spatial occupancy through matter; one need only imagine that attention is a type of substance that may be shaped into thought objects like matter can be shaped into material objects. In everyday life, both matter and attention are finite quantities. We can position attentional objects in time—order our thoughts—just as we can position material objects in space. Although this is a variant of Cartesian dualism, my reason for stating this dualism is to highlight the similarities between these two substances with respect to dogma.

Totalitarian governments understand that temporal occupancy is just as important as spatial occupancy in maintaining power over the state. By repeating the same messages over and over, the government attempts to dominate the attention of the people so that there is no attention left for other topics. In extreme dystopian stories, the government uses machines, molecules, and torture techniques to more directly determine the thoughts of the people. The goal, however, is not simply to fill up the people's attention with government propaganda, but to use this attention to imprint primordial belief.

Once one is imprinted by dogma, the person no longer experiences dogma's propaganda as an invader occupying attention. The repeated messages of the dogma are welcomed; in fact, the person enjoys hearing the things that reflect what she already believes—at this point she has become a person-dogma complex. She has given her time over to dogma, and has deferred on

her capacity to determine how her once-time is occupied. Repeated messages of propaganda, while enjoyed, are completely unnecessary at this point for *the dogma owns time itself* which is a power that goes beyond the capacity to determine the occupants of time. The dogma now thrives outside of her attentional focus—not in an unconscious or memory; not in a spatial location beyond her view—but in a place that is ibidemtaneous with attentional substance. She can no longer use attention to observe a dogma because part of her attention has become the dogma.

We classically say that dogma goes unquestioned, but the reason we cannot question it is because dogma destroys the capacity to separate the dogma from our capacity to determine our objects of attention. In other words, dogma subjugates the freedom of attention. We are still free to think as we wish, to choose whatever thoughts we want, but those thoughts will always be crafted from an attentional substance perfused by dogma. We can even partake in the illusion of critical thought against the dogma—a thousand page treatise rationally weighing the pros and cons of a topic may be nothing more than a dogmatically sanctioned analysis that poses no direct threat to the underlying dogma and creates the appearance of free thought within the author.

Dogma's temporal subjugation creates willing servants. All external means of control become unnecessary. Dogma is threatened only if another dogma manages to temporally penetrate attention and imprint the resident dogma, but this is difficult once a dogma has taken root within attention. Attention opens the door to dogma. The resident dogma creates an interpretational filter within the host's attention that colors all incoming messages prior to awareness. In many cases, the dogma that arrives first and most often is the victor, thus dogma's obsession with youth.

IV. Dogmatic materialism and theism

In the great battles still fought today, we shall acknowledge that both sides truly believe that they each possess sole truth and moral right, and also believe that the other side suffers from stupidity, delusion, or misunderstanding. And these two beliefs, that appear to form a contradiction when taken in total, express mostly a true statement about the situation. Although not equal, each side does possess sole truths and moral right about different aspects of the conflict, and each side is naive and deluded and misunderstands aspects of the other. If given enough time, each side might appreciate its own missed truths and concealed delusions, yet in the wild, this fragile state of humility tends not to persist but rather solidifies into totalitarian beliefs—my side has *all* of the truth and right, your side has *all* of the delusion and naivete. Totalitarian thought accumulates through an irreversible natural process and does not, on its own, without a new catalyst, transition back to a state of humility and questioning.

The fact that some beliefs transition from the open—my word for the non-totalitarian and humble—to the totalitarian seems benign enough, but look for example at the cataclysmic fallout as our ancient polytheistic societies transitioned into monotheism. All of humanity

transformed in the process, and although I do not claim that theistic beliefs alone caused the plate tectonic shifts in society that occurred concurrently with changes in theism (of course changes in society influenced these beliefs as well), the interconnection appears relevant if not necessary. Regardless, I am not so concerned with consequences as with the process itself where moving from belief in many Gods to one God (or no God) is a totalitarian transition, and as such, is not easily reversible.

Must beliefs move from the open to the totalitarian? How does that process occur and what are the causes? Could we posit a natural law that explains the flow, much like the growth of entropy associated with the second law of thermodynamics? I observe in nature that material objects around us decay in time, lose structure, and fall apart; while our beliefs tend to become more rigid, more simple, and less movable as we age. The rare individual keeps an open mind into old age; and beyond the individual, there appears to be an inter-generational and interpersonal process by which beliefs tend to consolidate into well-ordered, less complex forms. The natural law of beliefs is reciprocal to the natural law of material objects with respect to the change in entropy. We needn't expend any energy to solidify into simplified belief structures—the process happens quite naturally without effort. Yes, we may spend a great amount of time studying a topic, informing ourselves about many perspectives; but in time we settle into a fixed belief without force. Whether you are on the political right or left, you did not will yourself to be there; it simply happened with the flow of time. Our most cherished beliefs are as inevitable as time and decay.

It takes effort to oppose settling into right or left. We must be ever vigilant, constantly challenging our assumptions, canvasing our beliefs for evidence of dogmatic rigidity, forcing ourselves to remain open to missed truth. This effort is opposite but directly analogous to the energy required to prevent an ordered material system from falling apart. Particles do not spontaneously settle on one side of a box; rather, whatever side they may start on, they tend to spread out without preference, without becoming fixed; and only by expending energy could we force them to remain static on one side. Our beliefs, on the contrary, naturally accumulate on one side or the other.

Speaking of separation, why do you suppose that dogmatic materialism and theism are such bitter enemies, and what do they fight for? Each professes a context for understanding the world, but surely there is room for multiple paths to understanding. The fact that theism and materialism offer distinct contexts for understanding does not in itself imply necessary conflict—I may approach a tree and consider both its heavenly origins and cellular structure without any difficulty. Most Americans hold both moderate materialist and theist positions simultaneously without difficulty. The conflict arises when one side proclaims it is the Right and True path to understanding, and that the other path should not even exist as an option, or if it shall, be demoted to the False and Illusion. Equally, conflict begins when one side is called Good and the other Evil, where Good and Evil follow from the combatants' moral leanings.

Although theism and materialism allegedly fight over the Truth of context, Truth is not a prize that can be won in battle, at least not the kind of objective Truth that both theism and

materialism aspire to. Truth is—and combat changes nothing. Materialism may win the battle of words but this victory may exist with God still as Truth. Surely one can win an authoritarian truth—a truth derived from a master with a whip—or a truth of broad agreement, the sort won through democratic voting and popularity; but neither of these truths will satisfy theism *or* materialism. Yet these two do battle, and it would appear that the prize they fight for is valuable.

In nature organisms fight for the prizes to breed and to feed. Although since Spencer, 'survival of the fittest' rolls well off the tongue, animals do not often *reciprocally* compete for their lives as did the gladiators within the Colosseum, nor is survival properly a prize if we hold that a prize must be positively added to what the person already has. A gladiator, in beginning the fight, is already alive, and should he win, continues to be alive and thus gains nothing positive at all. We would like to say that he wins his life, but how can he win what he already has? The loser was initially alive, and in defeat, loses life; thus the loser has something taken away while the victor gains nothing. The prize is negative, like two slaves who compete for the prize not to be beaten. Competitions for survival are competitions to *not* have life taken away: they are negative sum games. One does not win anything in these competitions unless it makes sense to say that one wins death...or a beating. I suspect that this negative ontological commitment of natural selection offends some theist sensibilities, making it difficult for some theists to hear the less hyperbolic but more positive concept of differential reproduction. As well, the modern Darwinian often, but not always, forgets that cooperation is as much a part of nature as competition—no species constitutes an ecosystem in itself.

Nonetheless, animals do compete for the positive prizes of breeding and feeding, and dogma equally eyes both sorts of prizes. For dogma, breeding amounts to acquiring new acolytes for the cause. The dogma copulates with the person in a manner far more intimate than mechanical insertion of a phallus into a vagina. As I have said, dogma forms a continuous, covalent bond with the internal organs of the host, and it becomes impossible to spatially separate the person from the dogma once the bond is formed. Dogmatic sexual reproduction forms a new acolyte of dogma who will of course perpetuate the dogma with variation, dependent upon the previous identity of the host. Still, dogmatic reproduction is not necessarily competitive. It is possible for multiple dogmas to reproduce within a single host—someone can be a dogmatic capitalist and theist for example—so we have not yet clarified why theism and materialism dogma fight as they do.

We might theorize that theism and materialism are members of the same dogmatic species—whereas capitalism and theism differ in species—and that in an environment of finite resources, a greater quantity of one dogma requires a smaller quantity of the other. It would also seem that whatever substance theism and materialism feed on, that substance is limited and desired by both. I have said that multiple dogmas may co-exist within a single host, and that all dogmas feed off of primordial belief which is finite, but together these claims may create a problem. If multiple dogmas can peacefully co-exist, then they must not be competing to feed, even though food is finite. Perhaps primordial belief is differentiated and not a homogenous substance such that different dogmas feed on different sorts or aspects of primordial belief. Or if primordial

belief is not differentiated, then perhaps some dogmas, through cooperation, symbiotically acquire more primordial belief together than apart.

Examining the salient contents of these dogmas may help clarify the conflict. Materialism posits a building-block world of fundamental, self-persisting elements that depend upon nothing for their existence, where these elements may influence each other through spatial and temporal overlap. Today's materialism imagines these elements as ever-present fields that have burst forth from nothing and permeate all space and time. Theism posits a whole that created and may influence whatever is, that has access to all space and time but is not dependent upon these, and that relies upon nothing for its existence. The primary differences between these two metaphysical theories are the objects that self-persist and the nature of influence upon objects. In materialism, multiple fields self-persist independently; in theism, a God or Gods self-persist independently. In materialism, all change follows from the occupants of space and time; in theism, at least some change follows from God (the whole). To roughly go from theism to materialism, we take the idea of a self-persisting influential nonlocal whole (God) and break up this whole into a multitude of self-persisting parts that locally influence each other and occupy space and time. Fundamental particles are still god-like in that they persist without outside support, and the locality of influence is questioned in today's physics.

I have said that God may be beyond space and time, but this simply means that we do not fully understand space or time. Theism can be taken as a form of spatial-temporal skepticism; it acknowledges the limitations of our knowledge with regard to primal beliefs about space and time, whereas materialism can become dogmatic about space and time in its uncritical belief that all existent objects exist in space and time. Although we neither fully understand objects nor space-time, materialism endorses the following axiom: something exists if and only if that something occupies space-time. This connection between objects and spatial-temporal occupancy is an assumed Humean necessary connection that can be induced but not proved. Many objects occupy space, but this observation does not entail that all existent objects necessarily occupy space. Materialism responds that only objects that do occupy space matter because those outside of space are not causally efficacious, yet again, causation is one of those Humean necessary connections that must be assumed and never proved. More, nobody truly understands space, time, causation, or objects; and positing a relation between things we do not understand should at least be accompanied by humility.

The dogmatic parts of materialism—necessary spatial occupancy of objects and local necessary connection between objects—have given rise to the fruits of materialism and are essential to the practicing materialist (who need not be dogmatic). In some sense, materialism was born out of fragmenting the God of theism into parts, parts that preserved the self-persisting and local causal aspects of God, while simultaneously reifying the belief in the necessary spatial occupancy of all parts. It is no coincidence that some of our greatest physicists are known for stretching these dogmatic aspects of materialism. Newton's mathematical description of force at a distance challenged the dogma that objects only have local causal powers (a dogma that was restored by reifying fields into objects). Einstein's general relativity gave us objects that warp space, and space that influences objects, challenging the dogma that objects passively

occupy space and allowing space to have causal powers like objects. Quantum physics is perhaps ontologically un-interpretable within these dogmas. Quantum states exist as mathematical objects at spatial locations, yet it is not clear that quantum states *occupy* space at all, or how multiple states can occupy the same space simultaneously as in superposition, or how entangled states influence each other at a distance without a mediating field, and other problems.

In each case above, mathematical frameworks with predictive capacity have stretched the dogmatic underpinnings of materialism—and nearly to the breaking point within quantum mechanics. The math has helped us grow beyond material dogma; it has opened our eyes to the world around us, a world that is far more interesting than one composed only of objects that occupy space and bump into each other. The world we see with today's mathematics is not necessarily the true world either, but it is one we have achieved by breaking free of dogma, and that transition, the movement from being a slave to dogma to being free of dogma illustrates the progress of science itself. Although we are indebted to applied mathematics for our freedom during these past centuries, there is no guarantee that mathematics will point the way further. Unlimited use of mathematics to understand the world can become a dogma itself just as the uncritical practice of a religion—the tools that once freed us can become our chains.

We still have not answered why dogmatic materialism and theism fight. In the end, it is perhaps the similarities between the two that determine conflict more so than the differences. Both uncritically assume that self-persisting objects exists, in other words, things that depend upon nothing for their existence, be those things space, time, fields, or God. This belief, coupled to the belief that there can be only one type of self-persisting object, generates intractable conflict, for the ideas of absolute self-persistence and singularity of type are both metaphysical propositions that cannot be resolved by other means.

V. Savior to Slaver

Jesus freed our souls from eternal suffering. Buddha freed us from experiential suffering in our current lives. Science freed us from physical effort, injury, and disease. Capitalism and Democracy freed us from slavery and authoritarian control. Each of these in its day broke the bonds of dogma, and each has become dogma itself, enslaving us by ever subtler means. Uncritical and regimented praise of these saviors pervert them into things that subjugate us. In Christian terms, this implies that the act of worship, even of God, is potentially sinful, and that the continued, ritualistic praise of Jesus for releasing us from our sins is an ironic atrocity, for this uncritical praise binds us to sin again and again, the very thing that Jesus gave his life to free us from. In secular terms we say that certainty is almost always an illusion. Recalling Descartes' Meditations, this means that Cartesian knowledge, knowledge achieved through clarity and certainty and the inability to doubt, is more illusory than any experience contrived by a deceiving demon or dream. Those things which Descartes could not doubt were not the foundations of his knowledge—they were the origin of his deception.

VI. Sketch of a Dogma-resistant Organism

What would an organism resistant to dogma look like? And that question itself will be the dogmatic core, or at least the future entrance to dogma of the organism that I seek to create. Crafting an organism against dogma, even dogma in general, creates a dogmatic organism. So I shall make my monster in full acceptance of dogma. The first step in creating a non-dogmatic organism is to not actively oppose dogma, but this feature will of course open our creature up to the multitudes of dogma in the wild, allowing each dogma to compete for occupation of our organism. To balance the openness of my organism to dogma, I must simultaneously reject all dogmas, which requires rejecting a dogma and its negation. And when I accept any dogma, I shall simultaneously accept that dogma's negation. Our organism will both accept and reject all dogmas and their negations.

For example, our organism will both accept capitalism and not-capitalism, and reject capitalism and not capitalism. Although I believe one can perform this seemingly contradictory behavior, juggling contradictions cannot be taught in language alone, and logic does not allow us to easily put this principle into practice. For the moment we may sanitize this principle by breaking capitalism and every other dogma into parts, and rather than accept and reject capitalism as a whole, we may accept and reject parts of capitalism and not-capitalism, where these parts do not overlap each other. I accept some parts of capitalism and not-capitalism, and reject other parts of capitalism and not-capitalism. This procedure is amenable to logic although the decomposition of a dogma into parts requires substantial interpretations that will differ between people.

Breaking dogmas into constituent parts satisfies the logic of our organism, but the purpose of decomposition goes beyond logic. By breaking a dogmatic whole into parts *before it enters us*, we may cripple the dogma before it has a chance to invade our organs, much like we attenuate or inactivate a virus or bacteria prior to injecting a vaccine. Unfortunately, the mere analytical decomposition of a dogma by the host after the dogma has already infected the host is too late for the host, although this decomposition may be helpful to those who are not already infected.

Materialism, as I have said, can be interpreted as a decomposition of theism, in the sense of decomposing a self-persisting whole into self-persisting atomic parts. The process of decomposition, which may save us from dogmatic theism, can become dogmatic itself, and it is important to both accept and reject decomposition and its negation, which implies it is not always prudent to fragment a dogma into parts—there are dogmas that thrive upon our attempts at decomposition, that grow stronger the more we try to tear them apart.

Logically enacting our first principle through decomposition opens our organism to dogmatic invasion. Today's medicine for instance, although born of anatomical decomposition and truly helpful in many ways, is now overrun by the dogma of decomposition. Theoretical physics, having pushed dogmatic decomposition to the limit, is now reactively dogmatic in its push for unification. Any logical structure or systematic process that we impose on our organism, no

matter how benign, good-willed or productively useful, may be taken over by dogma. Even our contradictory first principle may be turned against itself which is why I reject it as well.

It appears that many dogmas are born of things which once released us from other dogmas like decomposition applied to God or the body. Decomposition is not necessarily dogmatic but becomes so once we treat it as our savior from other dogmas. Our organism should perhaps refuse to acknowledge any entity or methodological process as its savior, in other words, it should not uncritically praise anything for freeing it from the shackles of dogma (or illusion or ignorance or whatever you may call it). With regard to science, this might mean acknowledging that scientific theories are useful tools, but refusing to believe that science has shown us the light of truth or freed us from ignorance. With regard to Jesus, it might mean accepting that his teachings were spiritually helpful, but denying that he saved our eternal souls.

I use the words worship and uncritical praise to describe a process that elevates something qualitatively above other members of the species or highlights something as morally special. Prior to Darwin it can be said that humans were uncritically worshiped relative to other animals, but today humans are placed upon an unbroken chain of all species. Biological evolution as a creative process links all species together and we can no longer think of humans as inhabiting a morally special place in the universe. In a similar way, and perhaps even more so, all dogmas are linked together through a natural, creative process. Science is a distant evolutionary offshoot of primitive mysticism, and a scientist ought to view science in a similar way she views humanity—as one branch in a dogmatic evolutionary tree. Science was not imbued in humans by God or discovered in the wild; it evolved over the centuries with humans, and it is quite possible that organisms beyond our galaxy have evolved methodologies for understanding the world that make humanity's science look like ancient man's mythical story-telling. I am not claiming that science is socially constructed—I am claiming that mere science, although helpful, is not the best we can do.

I cannot provide you with the origin of dogmas, nor do I have the patience or capacity to carefully argue my case, but I believe that if someone examined how different religions branched off from a founder, and analyzed the historical conditions that put environmental pressures on religions to change and adapt; they could find a story that mirrored Darwin's finches. The case-study of religion would provide an example of micro-dogmatic evolution, of how small changes accrue in dogma through adaptation to the environment; but the bigger story I am trying to tell speculates how one dogmatic species could give rise to another, and more specifically, that science is simply one branch on the dogmatic tree with no claim to specialness, just as humanity is not qualitatively special relative to other species. Science is more capable in some respects than other approaches to the world just as humans are more capable than other species in many ways, but neither humans nor science are qualitatively special.

So our organism will always try to not elevate things to a special place. It shall try not to treat anything as its savior, although it will offer thanks when helped. This does not imply that our organism will abstain from ranking items with respect to specific criteria. Quite the opposite is

correct. It will quantitatively rank items at many useful opportunities, but will always remember that a rank of one does not imply a qualitative or moral specialness above other rankings.

My refusal to accept anything as my savior is quite similar to Descartes' method of doubt, but whereas Descartes refused to accept things as his truths—at least those things which he could doubt—I refuse to accept anything as showing us the true or best way out of dogmatic suffering. In this sense, I am also completely opposed to Descartes as I reject his method of doubt as our path to salvation, and to be consistent, I also reject my own method as a path to salvation—I acknowledge that it is only one way among many that offer guidance. In the language of epistemology, one might say that my method to knowledge is the doubt of method without the abandonment of method altogether.

Chapter 2

I. The One Dogma

The enveloping problem approaches me from all directions, rumbling, carrying corpses and fire within its spreading ethereal maelstrom. Walls do not slow its movement toward me. It knows where I am...It knows where everybody is. I watch it absorb friends who fight helplessly to resist its calling.

"Enter me" it calls within my head. "I am the dark and the light. I am despair and hope. Lose yourself within me. You will become me and fear the person who once fought against me. Nay, you will fight to stay within me and wonder why you ever resisted my calling. I am coming. I am already here."

Weapons of a material age are of no use against today's problem. Bullets and blades pass through it without damage. Reason can no longer protect us. The problem has corrupted reason by unshackling it from the Good and giving reason reckless freedom. We have entered an age when the tools that once freed us from subjugation are now useless. The problem, the One Dogma, has been around since the beginning. Before it solidified, this dogma helped birth the weapons that gave us our freedom—philosophy, science, literature, religion, capitalism, democracy; each of these are a product of the One Dogma, and thus willing servants of a master who now demands to be paid in full.

"I gave you knowledge and freedom," spoke the Problem, "now pay."

My thesis is simple—we are subjugated by a common dogma, a dogma that we serve without resistance while it feeds on our bodies. This is difficult to believe, but if we accept our dependence on local dogmas, dogmas of religion, culture, politics, families, and philosophy; then what prohibits the existence of a more encompassing dogma that encircles everyone? All dogmas compete for dominance, do they not? Does (dogmatic) capitalism not try to spread itself? Does democracy not seek to expand its borders? Does totalitarianism not desire to control all? Do religions not desire to convert all? Does science not wish authority in all fields of knowledge? I speculate that an unnoticed dogma has already achieved dominance, and unlike dogmas such as capitalism and communism which are noticed because they compete with one another, the One Dogma is not opposed to any other dogma, it competes with no one, and we cannot ground its identity through comparisons of difference and similarity.

Before we can open up to the idea of an all-encompassing dogmatic organism, let us first ask if all people are acolytes of some species of dogma. In my experience, the most prevalent local dogma in America is a bodily materialism that goes something like this: my body is ultimately a collection of particles, although our world may contain things that are not particles (God, mind, soul, spirit...). Most of us see bodily materialism as an obvious truth, or tautology, or think that I

have little understanding of the progress of physical and biological science. Know that I have been raised in the physical sciences, and am somewhat proficient in the mathematics and theories surrounding biology and physics, and believe they provide us with knowledge about the world. Nor do I have any faith in the concepts of God, mind, soul and spirit, which are hollow words in our day; and I do not appeal to emergentism, or the idea that a whole can be more than the sum of its parts. Still, I am not enveloped in the dogma of bodily materialism, a dogma that I have noticed feeding off of the people around me, whether they are highly educated or not, theists or not.

Bodily materialism is so common and so bound to our organs that most of us cannot consider the question of bodily materialism, and of the few philosophically minded people who can contemplate the question, most of those in America think bodily materialism has been empirically supported—as if metaphysical questions are subject to empirical support—or believe that the fruits of science justify our belief in bodily materialism—as if a dogmatic bodily materialism had anything to do with the progress of science. There remains a small subset of individuals who reject bodily materialism, but those people may not be who you would expect. For example, I suspect most Christians *are* bodily materialists—Christians have decomposed the person into body and soul, and have willingly turned over their bodies to materialism, saving the soul for the eternal. Even the act of decomposing a person into body and soul, as two substantive objects, as two independent parts that may come together as a whole, betrays a greater *decompositionalism* that underlies Christianity and Platonism.

Dogmas associated with political party affiliation are perhaps the most salient dogmas in our culture. Progressive and conservative, democrat and republican—these dogmas are out in the open and together infect more than half of the American population. Unlike bodily materialism which parasitizes most people silently in the background, political dogmas are quite obvious to the host. The salience of political dogmas arises largely through opposition. The liberal, for instance, is aware he is a liberal through opposition to the conservative point of view. That is, without the existence of conservatism, the liberal would hardly identify himself as a liberal—if everyone were liberal, and the dogma of conservatism did not exist (not even as an idea) then the liberal could not see himself as a liberal as such. Liberal dogma would be taken for granted, it would be no more noticeable than the oxygen we breathe, and yet make an important contribution to our daily lives. A dogmatic liberal identifies as a liberal only when she notices attitudes and ideas that depart from her own and rejects these alternative possibilities in favor of how she already is.

Dogmatic organisms can infect us with or without our attention directed at the dogma. Most people do not attend to bodily materialism; they do not talk about it *as such* although they practice it daily as an accepted part of routine living. Bodily materialism in America is a lived-ritual that evokes no more interest than speaking English in an English speaking country. In contrast, many people spend time attending-to and talking about political dogmas, dogmas that are described and advertised daily in our culture, and it requires effort to avoid focusing upon them.

It requires effort to turn-away from salient political dogmas and to not get caught up in them, but it also requires effort to turn *toward* dogmas that are so accepted that we do not notice them at all. Most people do not discuss bodily materialism, and even the word materialism in America is primarily associated with our penchant to buy Louis Vuitton bags and BMWs, rather than the idea that the universe is only matter in motion. Dogmas like bodily materialism exist within our attentional background—they are not in front of our eyes, but if we learn to study the periphery of our attention, we will be able to bring them into focus. Political dogmas during our day occupy the foreground of our attention. It takes no effort to see them; rather we must expend effort to turn away from them and to see other things.

Great thinkers are generally people who bring previously background or everyday dogmas to our attention while introducing new ideas that contrast with the freshly exposed dogmas and eventually overthrow them—think Copernicus, although many other historical people meet this definition. By overthrow I imply the process of bringing a background dogma to our attention, then supplanting this previously background dogma with a non-dogmatic belief that eventually becomes a background dogma itself. Great thinkers shape the periphery or background of our attention, and in Einstein's case, the structure of the attentional field itself.

Dogmas enjoy living in the background of attention for there they direct our action and thought without being critically attacked. In contrast foreground dogmas, having definite form to an observer, are potentially objects of our critical attention. Critical attention is that process where we stand before an attentional object, but rather than simply behold that object passively, we actively probe it with questions. Critical questions explore the attentional object with tendrils that attempt to penetrate and decompose the object into parts, search for the connecting origins of the object, or try to annihilate the object into nothing. I may uncritically attend to God and 'behold his glory', or I may attend to God and question his desires, composition, powers, appearance, reality, origin, etc.

I don't mean to belittle what I have called passive or uncritical attention, and it is completely incorrect to conflate passive and uncritical attention. While we do passively attend to many objects, there is another sort of attention where we actively 'take-in' objects without being critical. This type of attention, let us call it *intention*, involves a process of actively creating a space for an object within oneself. Rather than probing, penetrating, decomposing, and explaining the object; with intention we push our insides around, create a place for that object to be, and bring that object closer. If attention is the act of physically touching an object, then intention is the act of digesting an object. Intentional intention, although commonly overlooked, is no less active and necessary for understanding than critical attention. At this point the reader may wish to read my *Not Communication* for a fuller understanding of my use of intention and attention.

A dogma may be in the background of attention simply because it is so common and accepted (like air), because we lack the means to express it (motion prior to Newton's calculus), or because we are fearful or shameful to call it out (Oedipal complex). More than just existing in the background of attention—which is a desirable place for a dogma to be—dogmas lust to take

over the attentional field itself, meaning they hope to become enmeshed with the attentional field so that the dogma determines what can and cannot enter attention. Once a dogma binds to the attentional field, it may become nearly impossible to make that dogma a distinct object of critical attention. Analogously, HIV infects the immune system such that HIV can no longer be adequately targeted by the immune system. A computer virus may infect an anti-virus program such that the program is directed to overlook that particular virus. The attentional field may be infiltrated by a dogma such that that dogma makes it impossible for that dogma to be an object of attention.

The most reproductively successful dogma will have embedded itself within our attentional system so that it hides from our critical attention. Hidden from critique, this dogma is outside of description. It has no human competition. You might wonder, how can a dogma reproduce if I cannot talk about that dogma as a formal object, or if I am unable to describe its characteristics, functions, and parts? Surely I cannot spread a dogma if I cannot describe it in words? If you believe that dogmas are only propositional beliefs that exist in language, then the sort of dogma I hint out cannot reproduce. But I have always referred to dogmas as organisms and not stagnant, lifeless, propositional belief entities. All organisms reproduce without the need for *advanced* language or belief, and dogmas are no different, except that they may appropriate language to aid in reproduction.

II. Dogma Filters Evidence

At this point I am almost where I began—a large gray sphere lies before me. I cannot see beyond a fragment of its surface which is now smooth and without ridges. I notice its curvature and believe it to be a sphere but cannot be sure because I can't see around the entire structure at once. I suspect its smooth gray surface wriggles before me in fear, but I cannot prove this.

Can we prove anything? And what is evidence? If I have evidence, can I share that evidence with someone else? How do I share evidence unless evidence is tied to sensory material objects? Why does evidence require the ability to perceive? Is evidence tied to perception, and if so, then evidence may be liable to misperception, to miscommunication; and thus evidence is nothing in itself. If evidence cannot break through the shackles of communication and perception, then evidence is just another sensory or intellectual event that grounds nothing. When someone asks you to prove something, to give evidence, that person simply means "give me the means to believe what you say."

Evidence, like all perceptual material, is subject to miscommunication and therefore not able to justify itself. I am not saying to give up on evidence, but I do insist that you cannot flaunt evidence before us without admitting its limitations. My resistance to evidence follows from my observation that human creatures lack a sensitivity to truth, that is, humans lack an innate apparatus to identify truth in the wild. No technological device, no heightened sensory organ, no intuition, no spiritual revelation, and no philosophical contraption can isolate truth with any

degree of accuracy. How do I know such things? Does not my statement contradict itself? Perhaps, but I am not claiming truth of this statement; I am merely stating an assertion with confidence in the hopes that you may come to believe it. There is evidence if you need it. Among our population of human beings, for every assertion I can identify a proportion of people who agree, disagree, and fall somewhere in the middle of the two. While an observation of disagreement does not prove that truth cannot be found, it shows, empirically, that human beings as a species may not be imbued with an organ for finding it. (I have just used evidence to suggest that evidence does not function as evidence—surely a poor argument or perhaps an indication of the limitations of the concept of evidence).

Just to be clear, if you believe that a fMRI scanner can detect truth in the brain, then you have confused belief with truth. A fMRI scanner can probabilistically identify when someone is trying to deceive, meaning, when someone believes one thing but tries to tell us something other than what that person believes. Neuroimaging is somewhat sensitive to the brain processes that occur during active deception relative to brain processes that occur when a person responds according to her beliefs. No doubt, creating deception requires a bit of extra imagination that can be identified by fMRI, but fMRI cannot identify objective truth. Ask a person if God exists while they are in an fMRI scanner—or, if you like, if alien life forms exists—the resulting brain scans tells us nothing about the truth of the question, only about the beliefs of the person. When we tell our children to 'tell the truth', we are more rigorously saying 'tell me what you believe, do not cover your beliefs with imagination.'

Dogmatic conceptions of evidence fuel some of the ongoing conflicts between dogmatic theists and atheists today. Both sides might agree that evidence, whatever evidence is, functions first as a mechanism to generate and support belief. Provide me with evidence of quantum theory and I may begin to believe it, but my believing quantum theory has nothing to do with the objective truth of quantum theory. The truth of quantum theory could care less if I believe in it or not. It will remain true, if it is true, completely independent of whatever I believe. The truth of quantum theory does not require evidence to support it, but whether I believe in quantum theory or not requires evidence. So I am saying that evidence does something for human beings, it causes changes within us and modifies our beliefs, but it does nothing to change the object of that evidence.

Evidence modifies the human organism in some way—and you don't even need to call this modification belief, use material explanations of modified synaptic weights and neural networks if you like. Evidence modifies both the dogmatic theist and atheist, but since both have been invaded by dogma, dogma that subverts their belief forming mechanisms, each is sensitive to different sorts of evidence at the onset. The dogmatic atheist says to show us the evidence of God, but the only sort of evidence that moves the dogmatic atheist (I realize that many atheist and theists are not dogmatic, but I am not referring to them) comes packaged as perceptual objects or quantified outcomes of perceptual situations. We might call this 'object evidence;' it is The Evidence of our day. Surveillance videos, gene expression profiles, and particle detector plates exemplify object evidence.

Although the dogmatic theist perceives objects and outcomes just as well as the atheist, when pressed for evidence of God, she ignores concrete perceptual objects and defers to harmonies in nature or personal spiritual experiences—I'll call this theist evidence 'relational evidence' because the evidence develops between a person and her relation to a perception, object, or experience; and not from any object or set of objects.

Atheistic dogma blocks its host to relational evidence. While the atheist can appreciate the 'wonder and beauty' of the universe, and delight in this wonder, he does not see his relation to this wonder as a type of evidence. His wonder functions purely as a surface phenomenon, as a hedonistic pleasure similar to the enjoyment of sex or an expensive wine. The wonder does not connect to an underlying solid relation, just as sex need not reflect a bond of love or caring. In a sense atheistic dogma invades the attentional field of a host such that the host is blind to the depth of relations in the world. He literally does not grasp relations, although he can conceptualize relations as abstract sets and mathematical expressions. Since the atheistic host does not see the relation between the host and the experience of the object, he cannot possibly appreciate or understand anything the theist is saying with regard to relational evidence. What precisely is the relation between a person and his experience of the divine? Such things are not perceptual objects, and cannot count as evidence to the dogmatic atheist.

The dogmatic theist, reciprocally, tends to discount object evidence. While the dogmatic theist can attend to objects—he can run a scientific experiment as well as you or I and observe the results—he tends to label these objects as 'mere' appearances of the material world. Perceptual objects do not count for or against belief in the existence of God, and as such are not taken to be evidence in this matter. The dogmatic theist has managed to partly short-circuit her innate connection between perceptual objects and belief formation. When the atheist says "show me the evidence", the theist does not respond by pointing to perceptual objects to justify belief in God, but says how one must look inside to find God. Being aware of your relation to something begins to establish a sense of the divine. Focusing upon perceptual objects as objects distances us from it. Christian Science, an extreme variant of theist dogma, is highly successful at suppressing object evidence within its host; so successful that the host will often refuse simple medical procedures out of the belief that perceptual situations of physical suffering are completely illusory.

Today, of course, things are not so simple. Some theists point to statues that bleed and a slice of toast with the face of Jesus as evidence of God. Dogmatic atheists and others howl at these examples, in part, because theists, in pointing to perceptual objects as evidence of God, are undermining their foundations (evidentiary support) of belief in God, and adopting, at least transiently, the atheist's type of evidence, not to mention that seeing the divine on burnt toast smacks of irony and sacrilege at the same time. Similarly, the intelligent design movement, to the extent that it adopts perceptual objects and quantification as standards of evidence in supporting the belief in God, is an atrocity on theism. This movement erodes theism from the inside, and atheists waste their time attacking intelligent design for atheist attacks strengthen theism while mutating it into something else.

Dogmatic theism and atheism are likely dual aspects of a single theism-atheism dogma which expresses itself differently in different hosts (no dogmatic theist or atheist will agree to that statement, which to me suggests I am on to something). In one host, the theistic variant suppresses the host's ability to ground beliefs through object evidence. In another host, the atheistic variant suppresses the host's ability to ground beliefs through relational evidence. It is possible for the theistic variant to switch to the atheistic variant in the same host and viceversa—we call this 'finding God' or 'losing faith'. Many conflicts between dogmatic atheists and theists have nothing to do with battles for truth between rival groups, but reflect a useful evolutionary strategy from the perspective of atheism-theism dogma. The never-ending conflict attracts new potential hosts to the dogma and cements its followers. Mutations of theism-atheism dogma have given rise to new strains of dogma, and we might call advocates of intelligent design one such strain that have developed a limited but contradictory capacity to appreciate object evidence in relation to the divine.

III. Technological Acolytes of Eternal Replacement

When I search the air for values and virtue, I grasp and see nothing. Perhaps that is what I was supposed to find as I was searching through the air? But my eye was placed upon people as well, yet I found nothing firm. I see people working to eat and breed. I notice that people move towards money. I see people head toward new experiences and an innovative future with optimism, but this movement does not appear guided by the value of anything. I see people preach about God, yet look like hollowed-out caricatures speaking only to other hollowed-out receptacles. I do not believe that our children inherently value money or experience or sermons. Yes, they lust after technology and the latest news and freshest songs; but this desire, this lust, this movement is not fueled by value. Behind our movement for instant news and wealth and God lies fear—a fear of being left behind in a void of loneliness.

Have you ever experienced total aloneness? It is an intolerable feeling. While most of us have felt the isolation of interpersonal loneliness, there is another sort of loneliness where we feel disconnected from everything, including material objects and personal experiences. Everything becomes frozen and meaningless. I can see objects in this state--my table still appears to be a table--but it plays no part in my life. It's not that I can't reason what a table is and what it is for; it's that the table has nothing to do with me, even if I were to sit at the table and place an object on top of it. My sense of myself becomes disconnected from the actions of my body, yet a subtle recognition of it once being my body remains. Total aloneness is the dual state of universal connectedness usually associated with meditation. Rather than a blissful meditative self that is universally connected and spread out throughout the world, an alone self has shrunk to an infinitesimal point and touches nothing.

Today's technological utopians and scientific optimists know little of loneliness—how could they have the time? They are too busy waiting for a digital rapture when all carnal desire and thirst for information will be granted by simply pressing 'on'. These technological acolytes remind me of members of a pagan cult who await the day when their ethereal dark master (Voldemort or

Sauron for today's generation) is made flesh. When the beast is reborn, the acolytes expect to be rewarded with earthly pleasures for their dedication and faith, but as we know too well, the beast does not fulfill promises, not even to its servants.

Technological acolytes do not appear fearful, rather, they glow with a youthful enthusiasm for the future even into old age. As I have explained, acolytes of dogma trade the complexities of the world for the privilege to have their human insides subjugated and numbed-out. The acolyte does not experience fear or anxiety so long as he keeps imprinting new recruits. Towards this end, technological acolytes have crafted an exquisite business model. By seducing the youth, by taking advantage of their developmentally appropriate curiosity and social exploration, they imprint the primordial belief of the young with technological dogma via technology itself. The old follow the young in an attempt to reclaim what was lost. Acolytes feed on the young's belief which sustains the growth and vigor of the dogma and its hosts. The young are drained of potential and molded into technological servants. A few of the servants will become high ranking priests while the majority will toil in the mines (willingly) while planning ways to rise in rank.

Classical values play no role for the technological acolyte. Although she preaches about technology's and science's ability to solve all world problems, this preaching is no more realistic than that of the theist who preaches that God will solve all problems through prayer. Sermons in the pulpit have been replaced by hip tech conferences. For both, these Utopian promises function mostly as recruitment propaganda, having no connection to our world. Value for the technological acolyte is the process of replacing one technology by the next at ever faster rates, and accumulating more and more users of technology and more of each user's attentional bandwidth. Together these priorities make for a wild but simple ride. A new technological platform is released and millions of users flock to that platform; when it achieves a stable mass, acolytes look to roll out the next platform so that users can jump from that old platform to the new. Ideally—for the dogma—the new platform will subjugate more of the user's attention than the old platform. Technology does this by either offering more 'functionality' or simply making the technology too easy not to use.

I envision, literally, a massive suspended platform in the center of a dark room. Thousands of subjects are standing on the platform, and they do so willingly, while acolytes dressed in black robes watch from the edges of the room. The platform slowly drains the subjects of primordial belief, the nearly invisible lifeforce that flows through their bodies, but they don't notice this being too distracted by a vibrant spectacle above them. Eventually the subjects bore of the overhead show and begin to look away which slows the flow of primordial belief. The robed acolytes, anxious that the subjects will walk away, then lower a new platform next to the old. The new platform appears more exciting, more alive to the subjects, and they begin to jump over to the new platform, becoming even more enthralled with the new spectacle above them while being drained ever more quickly of primordial belief. The robed acolytes smile and congratulate each other. The subjects thank them for providing escape and amusement. In time the subjects are completely hollowed-out, and can no longer serve as reservoirs of

primordial substance, but their use continues as dogmatic husks who work to attract new substance-rich recruits to the platforms.

Technological acolytes value endless replacement. The new—so long as it is adopted—is the good, while the old—so long as it is abandoned—is the bad. Childish virtues like humility, temperance, honor, and courage have no place in the technological temples. Whatever good these ancient concepts connected to, that good is long gone—by definition. But in making the adopted-new stand in for the good, we are stuck with ever-changing manifestations of the good, and concrete manifestations of good that must always degrade into concrete bad as soon as a adopted-new arises. The VCR is bad, but the DVR is good; yet when the VCR was the adopted-new, it was good relative to the laser disk which was bad. Someday soon the DVR will be bad, perhaps even before I finish this manuscript.

I'm trying to pin down the source of value in technological dogma—is that act bad? Where is the good in accumulating millions of users, hoarding their attention, and then corralling them onto the next platform once a stable mass is achieved? Acolytes will argue that the next platform is better—faster, more efficient, has new functions, solves problems—and that to achieve better and better platforms requires this iterative process. The technological process simply mirrors evolution via natural selection.

The value of increased efficiency and new functionality is fleeting. The latest multi-core CPU rips through your old applications with raw speed, but how long does it take before you cease to appreciate this gain in processing power? How long does it take before you don't even notice that your applications run 'faster than before'? Two weeks? Two months? At least your appreciation of this speed fades quickly, but is it only your appreciation? Does your new computer not become your old computer, your slow computer—objectively—requiring you to buy a new computer to replace your new computer? New functionality suffers from similar temporal degradation. That we call functionality 'new' implies that it will be renamed old some point soon. The latest operating system, regardless of its improved ability to multi-task, secure your network, and offer an intuitive interface; will shortly become an old and tired-out operating system in need of replacement. Technological objects are treated like dogmatic hosts that need replacement once drained of useful substance.

Classically, acts of good do not suffer temporal degradation and can even increase in value over time. A single act of sacrifice or courage may resonate throughout history and continue to be valued for thousands of years. And there are technologies, too, that stand the test of time—written language, arguably a technology, has nourished our species for generations and likely will continue to do so for some time. Every now and then a technology arises that adds more enduring value to the world than it takes. I am not dogmatically against technology, only the current value structure tied to technological dogma. And I am not dogmatically against technological dogma—even technological acolytes have their place. I wager that the technological process, like religion, plays a role in grounding our societal mass. Technology does solve problems, but the thought that the technological process creates other more insidious problems is ridiculed by acolytes, or perhaps the acolytes accept that unbridled technological

innovation leaves other problems in its wake, noticing that this situation can only benefit the technology business model, so long as others do not realize it.

Why does the technological process value replacement? Replacement as value permeates our society beyond technology—isn't consumerism, in seeking the new-and-improved and thisseason's-style about replacement? What about celebrity where the next hot young thing replaces the current hot young thing before she is twenty? Isn't education obsessed with endlessly reforming, replacing, yesterday's approach and content in teaching? Replacement offers distraction, and for that people may praise it. It distracts us from the fear, emptiness, and loneliness that lurk all around us. When I replace something it feels as though I am filling a void within myself, but this feeling of fulfillment does not last, and soon I am looking for the next hit. Replacement also offers hope—the feeling that the new will solve all problems—which may combat despair—at least temporarily—until that object of replacement lets us down, requiring replacement to begin anew. Replacement gets us high.

More abstractly, replacement replaces some of our old conceptions of the good. The good was said to be eternal, it was stable and enduring, but this notion of the good became dogmatic, and eventually the dual of this dogma took root as endless replacement. Now we ought to replace something for the sake of replacement itself—the object or idea need not be broken nor dangerous to warrant replacement. Replacement is Good, regardless. We of course provide reasons for replacement, saying the replacing object is better in someway (more efficient, more functions as above), but the only necessary requirement for replacement is the belief that the replacing object does something that was not possible for the history of replaced objects in that role.

The humanities adopted replacement as value after abandoning a notion of objective and enduring good (in literature, painting, poetry...), and after several decades of giddy theorizing and play, have found themselves burnt-out and sifting through the ashes for value. Finding nothing firm, the humanities have begun to turn toward a dogmatic quantification for value, but even the laws of physics, if we dogmatically believe them to be absolute, will one day turn on themselves and us.

IV. The Age of Feeding and Breeding

In watching horror movies I have learned that evil cannot be eternally destroyed, but can only be kept temporarily at bay. One must be vigilant until death to prevent the return of evil, for as soon as we let down our guard and congratulate each other in defeating the beast, we create an opening for the beast to enter our lives once again. This is why Christianity throughout much of its history stressed our innate sinfulness—not to guilt us or lower us before God, but to urge us to remain vigilant until death. Sin lurks hidden just a few steps away, waiting for its meal.

The beast that consumes the present is well ahead of us all, ahead of us in the way a Grand-master of chess is far ahead the novice player. The Grand-master sees in advance the limited set

of moves the novice considers, or notices that the novice moves almost randomly on the board without an extended strategy, and also sees that the novice does not react effectively to defend his position when the Grand-master begins an attack. The Grand-master plays out the entire game within her thoughts—no move is unexpected—while the novice exists purely in the moment, confused, looking at the board and choosing moves that simply 'look right' without any knowledge of the right move. How easy it is to choose actions that look right.

So the beast easily counters our apparent best moves. Our best moves move nothing. They are predictable and empty—the beast knows what we are doing before we even make a move. The beast welcomes our mindless adherence to dogmatic solutions, and by now you know that I do not mean only religious dogma. Yes, religion can have its dogma, but so do science, and politics, and parenting, and business, and what have you. Dogma itself is not evil, but dogma cannot be used to oppose evil and tends to perpetuate it. Dogmatic solutions are almost always illusory. They create the appearance of making things better while covering over, distracting us from the problem that breeds and multiples beneath the surface. Dogmatic solutions are like narcotics that hide the pain of a festering abscess. Narcotics remove the pain and replace it, temporarily, with euphoria, while the infection eats our flesh down to the bone.

Most of us toil away in a distracted state, either too busy with work to notice the decay all around or too exhausted from effort to care, and when we do have time, we expend that time on the latest must-see TV, addictive app or drug, sporting news, and social chatter. Those of us who notice problems all around mostly pay attention to the dogmatic conflicts that occupy the news, conflicts between political parties, conflicts between science and religion, conflicts about the truth, conflicts about the good—these conflicts are mostly pseudo-conflicts created by dogmatic organisms for self-reproduction. They draw in our attention, they define our objects of thought, they frame our problems and the form of our solutions and create a fertile nest where they nurse their larva with our primordial belief. The organisms that have taken control of our brains are not fantasies of science fiction. These brain slugs exist in the ethereal space between material objects, between moments of time, but have evolved the ability to bleed us dry in the present.

Distraction works so well today because nothing seems to matter. We know on some level that the things that appear to matter to us today—religious faith, wealth, fame, youth, technology, beauty, power, talent, politics—do not really matter. Yes we seek these things; we focus upon them and make them topics of conversation and writing. It would surely appear, given their salience, that these things have value, and in some sense they do. The things that we attend to through time must have a type of value—why else would we be temporally occupied by them? But our attraction to these things also follows from our infiltration by dogmatic organisms that have corrupted our attention. Since the dogmatic organisms have become bound to our internal organs, and the dogmatic organisms require our attention to these objects for their survival, in some sense we too require attention to these objects like a form of food or sexual reproduction.

Dogmatic objects of attention are valuable, but no more valuable than food, and while our species requires food to persist and reproduce, it is another thing to claim that food and reproduction are the only sources of value in the universe, yet this is the current condition of our age. Food, which does have a type of value, has been generalized or abstracted to include the objects of other appetites, money being an obvious example. One can hunger for wealth, or fame, or youth, or information, or whatever. In contrast traditional examples of value are not associated with the appetites. One does not 'hunger for honesty' or 'hunger for humility' and try to consume more and more honesty—if one does develop an obsessive hunger for honesty, then that person has likely lost sight of honesty itself and is seeking honesty for secondary reasons, such as to gain praise or reward in this life or the next. Whenever there is an appetite a dogmatic organism may be close by.

The material-evolutionary worldview establishes two fundamental sources of value: food and reproduction. Our first material appetite is for bodily nutrition in the form of milk. We develop tastes for other edible objects as we grow, but alongside the edible, we gradually develop appetites for other sensory/material objects beyond the caloric, culminating in the hungers of a material age—wealth, fame, youth, information, euphoria, piousness, spectacle, power, etc. Every hunger creates an opening for a dogmatic organism to take root. The hunger is a space within you—not a material space, not a mental space, but a space nonetheless—that is hospitable to certain dogmas. Once the dogma occupies the appetite space, it causes that appetite to grow in power within you, and does so in part by subjugating and corrupting your attention. Your attentional objects, such as beliefs, *become* consistent with taking action to fulfill your growing appetite. We come to believe whatever will help get our dogmas fed.

A salient example of dogmatic hunger occurs in people who are severely obese. When the obese person experiences hunger, he may associate that hunger with the belief "I need food, I need to eat", but caloric hunger in the obese person does not imply that the person "needs food". Quite the opposite is likely correct. One can experience hunger but not "need food" in the sense that food is necessary for the continued metabolic functioning of the organism and that without food *that moment* the organism will perish or lose significant functional ability. Hunger does not carry necessity, but dogmatic hunger takes over the belief and attention of the obese person to convince him otherwise.

Dogmatic caloric hunger in the obese person does, however, become enmeshed with all of the physiologic processes in that person. All of the organs begin to expect large quantities of food to arrive in conjunction with the hunger to eat. The functioning of these organs becomes dependent upon a magnified hunger to deliver large quantities of food, and the organs become amped-up to process large volumes of material and high concentrations of proteins, fats, and sugars in relatively short intervals. For the obese person to lose weight and to keep it off, her organs must change to break free of the dogma; they must actually lose the ability to process these large quantities of food. The amped-up organs are literally parasitized by, but dependent upon dogma.

We know that the weight loss industry helps people lose money and not weight. Actual weight loss, despite its obvious name, is not about losing weight, but about excising the dogmatic organism that magnifies our hunger for food while sapping us of energetic belief. And I am not saying that obese people are obese because they are hungry and lack will power—I am saying that obese people, many of them but not all, are invaded by a dogmatic organism that resides within the space created by our hunger for food. This organism, if successful, spreads throughout the body, binds to our organs and muscles, invades our attention, our temporal space, dictates our beliefs and tells us what to think about and focus upon, and drains us of primordial belief. It co-opts our emotions and desires, influences our bodily movements, and creates stories that we believe; stories created for the sole purpose of defending the dogmatic organism against attack. Yet even when we try to attack the organism, often it is too late for a direct assault because the organism has become part of us. We cannot attack the organism without damaging part of our selves.

Focusing upon weight loss in obesity is like trying to cure chicken pox by cutting out the pox lesions. Yes, you will remove some of the virus on the surface but the infestation remains, and irritating the lesions likely spreads the virus while damaging the skin. You have done more harm than good in the end. So we don't attempt to lose weight by cutting off the flesh—actually we do—but we do hope for magical molecules that will shrink our fat down to size, molecules that do not have side effects or cause distress. I predict that a molecular cure for obesity, if ever discovered, would only cause greater harm in the long term. Whatever the molecule may do, it cannot surgically remove the dogmatic organism residing within caloric hunger. The organism, once established, connects to every part of us. Dogmas are beyond simplistic molecular interventions—the material can only cover them over while the dogma consumes the host through alternative pathways.

Dogmatic caloric organisms thrive today because we live in an age where the space of caloric hunger offers little benefit to adult humans. We know we must eat, we know how much we must eat to maintain our weight (or can figure it out), we know how to obtain calories easily, and the large among us no longer physically dominate the herd. In the past hunger focused us upon the necessary prize of food, and this focus likely benefited the individual and species, but what does hunger offer you today? Granted, it is welcome that we do not have to force food down and that hunger makes eating easier—surely the perpetually nauseous person is at a disadvantage, but nausea is not as much the absence of hunger as its opposite, and vomiting is the dual to eating. In the absence of nausea and hunger (and other GI sensations that block food intake), we are in a quiescent state that allows food intake to be determined intellectually. Again, I do not recommend existing in this perpetually neutral state as this state creates a dogmatic space which may develop into an appetite for neutrality. Caloric hunger and nausea have their place, as does the enjoyment of food.

Apart from generalized food, the other primary value of a material age is reproduction. Organism reproduction benefits the species and has value, for without reproduction, the species will end. As well, differential reproduction suggests that the fastest reproducing organisms from a population will numerically dominate the environment. This is a useful fact,

yet differential reproduction becomes dogmatic when used to answer an infinite quantity of why questions. Why do we have a four-chambered heart? Because individuals with fourchambered hearts reproduce faster than those without. Why do we experience love? Because individuals who experience love reproduce faster than those without. Why do we create art? Because a species that creates art reproduces faster than one that doesn't. There is no end to the answers proffered using the concept of differential reproduction which is why so many fields of knowledge have been evolutionized. And I should be chastised for my simplistic explanations. Those in evolutionary fields provide detailed accounts of how specific traits lead to reproductive advantage, although the punch-line remains the same. I see an unavoidable similarity in the way dogmatically religious people universally answer why questions. Why does the sun rise each day? Because God made it so. Why do humans have four-chambered hearts? Because God made it so. Surely the evolutionary story can be made more descriptive and tied to present observables and historical measurable factors in the world, while the Godly story is not easily elaborated with empirical embellishes. Regardless, God and differential reproduction compete to explain similar things, so in some sense the value of God—to the devout—has been transferred to the value of differential reproduction for the materialist.

Differential reproduction, or relatively fast reproduction, is valued by materialist in a similar way that God is valued by theists—both offer easy explanations to innumerable questions, but beyond intellectual explanations, fast reproduction, or fast replication (the mechanistically neutered form of reproduction) has been the primary value of capitalist society. Perhaps starting with the printing press, we have developed ever more efficient means to systematically replicate objects. We call it mass production, but we may view it as a form of differential reproduction. Look around your current surroundings. Our environments are defined by material objected that have been replicated quickly. If you are in a bedroom reading this story on a computer, I wager that your bed, sheets, pillows, clothing, computer, furniture, wall paint, picture frames, light fixtures, and so on were (re)produced quickly. In contrast, the material objects that take more time to produce are, in general, sparser in the environment and typically come at a price.

Populations of material objects in our environment abide, in part, by the Darwinian dynamics of natural selection, although we must note that the prevalence of objects is dictated by both our relative appetite for specific objects and the efficiency of production of those objects. Just as biological populations must reproduce and feed to exist, inanimate object populations exist because of production and our appetites for objects. For biological organisms, the organism with the appetite for food is also the source of production of the offspring; with non-biological material objects, humans have the appetite for the object and other humans or a system created by humans reproduces the object. The system created to reproduce objects also consumes other material objects or energy. In capitalism, we consume the objects that we reproduce; or, one group of humans reproduces objects for other humans to consume.

A large part of capitalism also involves magnifying or creating appetites for objects through advertising, branding, and marketing—this aspect of capitalism is reflected in the natural world in the way plants attract pollinators and in the forms of sexual selection. What are ornate

peacock feathers other than effective advertising? Dogmatic capitalism, in its current stage, is all about magnifying appetites through incessant marketing and replicating objects efficiently enough to fulfill those beefed up appetites. Obesity of flesh and mind are the inevitable result of this process, much as emaciation is the result of dogmatic communism.

Just as food has grown beyond the material (we have appetites for non-material things) reproduction of objects has extended to include the replication and reproduction of so-called information. Efficiency of replication—analogous to reproductive *fitness* in biology—has exponentially increased with the development of computing and digital manipulation. But let us not confuse replication of bit sequences with replication of information. A PC in your home could replicate a sequence of bits a billion times over (assuming sufficient memory storage) but that sort of replication is meaningless in the Darwinian sense. This population of bit sequences may dominate the environment of your hard drive but in the outer environment it impacts nothing. A bit sequence is not replicated as information until that bit sequence is interpreted as a *new* relevant message to a receiver. The new part is essential, for if you already had this information, getting it again does not replicate the information within you (if you know my birthday, telling you again is not information and not a replication of this information).

Replication of information is more about getting that information to as many distinct people as possible than about replicating a particular bit stream or material object. In the information age, acquiring users, followers, and Likes take the place of biological or material reproduction of objects. The environment for information is not the natural environment of biological organisms and material objects. Information—the kind that matters—exists within interpreters of information alone, the most relevant interpreters to us being human beings. All of the computers, networks, routers, servers, memory storage devices, and fiber optic cables exist in the natural environment to facilitate the replication of information within people. The replication of a bit sequence alone carries little Darwinian import, just as the laboratory facilitated replication of a gene-encoding DNA sequence means little to that gene in the greater scheme of evolution, even though the gene's population grows in number. Replication of information means getting the largest number of people to apprehend a particular, crafted message, or to partake in a particular sensory experience.

V. Consumption and Loss

A mature capitalism evolves from a society that embraces a material-evolutionary system of value that is based upon a trivial model of the biological world dominated by the principles of feeding and breeding. Organisms feed and breed—they must do these to survive and persist in population. All other actions by organisms are secondary and negligible to the model. Other behaviors only become relevant to the extent that they influence feeding and breeding behaviors. The act of concern for another, for instance, does not matter unless that concern produces a reproductive advantage to the population. If an act of altruism to another species appears to decrease reproductive fitness, we must tell a story that corrects this appearance and actually explains why altruism is 'beneficial' to the population, where beneficial can only mean

'reproductive advantage.' Evolution knows no other concept of benefit or value...but it does know this one.

Materialism, understood as the philosophical ontology of a child's building-block world, ought to have nothing to do with questions of value. The only proper value within materialism is the material—everything material has equal value as material, while everything non-material has no value or simply does not exist. A proton has the same value as our sun. Both are material objects; they have the illusory value of the real. Neither has a purpose or teleological end. The purpose of the sun is not to heat the Earth, but rather, the sun is a gaseous hot sphere that happens to be relatively close to the ball of rock and water we call Earth.

Materialism presumes a universe of purposeless material, yet we frequently speak about one object being useful to another object in a way that implies a benefit beyond raw materiality. Material economics, for instance, cannot begin without the concept of the use-value of objects. Within materialism, this concept of usefulness cannot imply a purpose or value outside of the material if we are maintain materialism, so we ought wonder what the useful might mean. It would seem that a useful object allows the user of that object to do something that without the object would not be done, or at least not done as easily. A hammer allows me to drive a nail into wood easily, where without the hammer—and no other object but my body—would be quite difficult if not impossible. The hammer creates possibilities or increases the probability of a potential outcome. I could also use a rock to drive the nail, making the rock useful in a similar way.

If I am to remain faithful to materialism, however, I must equally be able to say that I am useful to the hammer. Materialism does not easily allow us to value one material object over the other nor does it entail a means to assign agency. I create possibilities for the hammer just as the hammer creates possibilities for me. So we might say that the union of the hammer and me create possibilities that we would not have without each other. This union may be neutralized enough for the materialist since it does not single out an agent in action, but it creates difficulties when one of the useful objects is consumed by the other object, as in the case of food.

Food and I together are able to do things that apart neither of us could do, yet within this union the food is consumed, metabolized, and ceases to exist as food, whereas I may live long after the food is digested. In some sense, the food becomes part of me—parts of the food get incorporated into my GI tract, blood stream, cells, and organs; but the identity and structure of the food item is annihilated in consumption.

Within the universe of the material, nothing demonstrates the act of consumption more boldly than a black hole. The black hole growls silently in space. It gravitates, drawing matter and energy towards its singular core. It consumes all material objects without prejudice; it will feed upon anything you throw into its event horizon. It annihilates all it consumes—a nuclear explosion cannot destroy an object as completely as a black hole can. An object that falls into a black hole loses all of its identifying characteristics except for its mass, charge, and angular

momentum; all other structural details are lost. Even a proton that falls into a black hole loses its identity as a proton and becomes nothing more than an unstructured quantity of mass, charge, and momentum.

Black holes have perfected material consumption. A black hole consumes matter and energy indiscriminately, causing the black hole to grow, increasing the strength of its gravitational field, and increasing its capacity to snare and consume more matter. This is consumption for the sake of more consumption and nothing else. Greed perfected.

Contrast the consumption of a black hole to that of a star like our Sun. The Sun, during its main sequence, primarily fuses hydrogen atoms into helium, giving off radiation in the process. In some sense the Sun consumes hydrogen as its nuclear fuel to produce the radiant heat energy that nourishes the life on our planet. But hydrogen atoms, in fusing together to form helium, are not truly lost, and the protons of hydrogen retain some of their character as protons of helium, and a helium atom could be split back into two hydrogen atoms. The Sun does not completely annihilate the structure of its food, nor does it persist and grow in order to consume more hydrogen. The hydrogen of the Sun is part of the Sun from its beginning—the Sun cannot procure more fuel outside of itself as the black hole does. Yes, the Sun will destroy objects that draw too close, but those objects are not rendered identity-less.

It is no coincidence that the stellar evolution from a large star to a black hole mirrors the origin of dogmas. An energetic idea may, under particular conditions, arise out of the coalescence of other ideas and throw the light of knowledge upon the world. We take up the knowledge and grow from it as a species, but eventually the warmth and light of that idea runs out. This idea, once consumed of fuel, may collapse upon itself and become a dogmatic hole, but we do not easily forget the things that once brought us light, and we enshrine these once energetic ideas into impotent repeated words and rituals. Ritualized practices and linguistic slogans, as the shell of past knowledge, become the event horizon of a collapsed idea. The collapsed idea continues on as a dogmatic singularity, but the singularity is not without power. Quite the contrary, the dogma persists in the background of space, organizing our thoughts and behaviors, directing our actions, just as a super-massive black hole within the center of our galaxy organizes planetary and stellar motion. Materialism is our name for one of these dogmatic singularities that began as an energetic idea.

The difficulty in escaping a dogma is the difficulty in escaping a black hole once the event horizon is crossed. A dogmatic materialist cannot be argued out of a belief in materialism—she has passed the event horizon of materialism and words are useless at this point. To break free of a dogma, one must distort the attentional space-time that supports this dogma. We do this by expanding attentional space and contracting attentional time near the dogmatic singularity, creating a path for the person trapped within the event horizon to escape. This path is difficult and dangerous to keep open, and the person trapped within must choose to go through it.

Our question during this section began with the nature of usefulness from a materialist perspective. Many scholars will be able to piece together materialism and usefulness in a way

that neutralizes the concept of usefulness, making it more agreeable to materialism. In my brief and uncritical attempt to do this, I ran into a problem related to consumption. Consumption requires us to differentiate between the consumer and consumable, and it would seem that one side of this pair loses, morally speaking. The consumer consumes the structure, or identity, or individuality, or character of the consumable. A consumable is always broken down or qualitatively transformed in the process of consumption.

And here we must differentiate between consumables and those things which we incorporate into our bodies like water. Although our bodies make use of water in chemical reactions where water is transformed, most of the water we ingest gets incorporated into our bodies and retains its structure as water. Conversely, although some cellular structures may incorporate glucose, most ingested glucose is consumed (broken-down, transformed) in the process of facilitating other cellular and molecular functions. We mostly incorporate water and mostly consume glucose, but there is no hard line here.

Our notion of consumption relates to concepts of reversibility and irreversibility within physics and philosophy. That which is consumed cannot be restored, at least not by time-reversing the process of consumption. If you eat and digest a banana, something is consumed. In science fiction, we may of course copy that banana, molecule by molecule, and reproduce a copy of it by gathering up all of the digested molecules, and even claim that the original banana can be restored precisely, using exactly the original molecules; yet this process of reconstitution will consume some other sort of fuel in the process. It is perhaps possible to reconstitute something that has been consumed, but the act of reconstitution will always consume something else, leaving some other thing consumed and lost. We cannot win a game where everything that has been consumed is restored. Consumption can only be 'undone' by consumption of something else.

Materialism offers no easy place for something that is forever lost. Within materialism, everything can be undone (or at least that is the wish), and the laws of physics are mostly time-reversible, meaning that the building-block world of materialism is one where pieces come together then apart then back again with no greater law prohibiting this repetition. Materialists have noticed a potential problem with all of this, the most salient problem being the empirical observation that, in time, everything decays away. True, objects can coalescence together and acquire form—gaseous clouds do accrete to form fiery stars—but stars burn out, decay away into nothing or collapse upon themselves. People grow, age, and die. This is the way of our world. We pray for repetition, hoping we are replicated in heaven, in an alternate inflationary universe, in an infinitely distant part of space or infinitely distant time.

Nietzsche taught us to awe eternal recurrence, yet all that is good eternally recurs and all that is evil does so as well. When *everything* eternally recurs, the proportions of those things today will reflect the proportions of those things in infinite time, and pondering infinite recurrence offers no more insight than pondering what is today, right now. If some things recur at different rates than others, then perhaps this thought experiment becomes more interesting, but I am

not sure that it does. I am more aroused by the thought that all things tend to recur yet need not do so, and that we have the chance to break these otherwise eternal cycles.

We are living in an age where some of us believe that we will replicate our present lives in heaven, a multiverse, or a computer for eternal preservation. Very few of us consider that once we are dead, something important about us will be lost forever and will never exist again. Never. It will be eternally annihilated, never repeated in time or space, not present in this universe or any other, and not reanimated from a digital bit pattern. Many materialists calmly concede that we are nothing-but-matter that decays into meaningless dust, but this seemingly brave acceptance, this apparently neutral acknowledgment of hard scientific facts hides a cowardly faith that one can always be put back together if the particles are arranged just so, or that one's doppelganger lies just a universe away. It is, like heaven, the hope that our most important parts can be reconstructed in another time and place. It is the hope that we will not be eternally lost forever after death. All materialist theories that allow a person to be replicated or reconstructed outside of death—theories that have no empirical support—simply copy the religious hunch of heavenly rebirth or reincarnation.

I see a world that demands loss. I know no more certain empirical fact of nature. Yet strangely, or perhaps expectedly, most humans harbor the moral belief that avoiding or undoing personal loss is *always* a good thing! We live in a world with loss as the rule, and like oppositional adolescents, we get off putting one past the man, and more, we truly believe that each act of avoiding personal loss has positive moral worth. This moral opinion has bled into our economics, our medicine, our physics, our religion, and our politics. Look at the idea of a quantum multiverse—a theory that many physicists and philosophers today embrace. Within one version of this theory, everything that can happen does happen in one universe or another. This theory follows from our attempt to avoid losing *possibilities* within our world where events can happen in only one way. The multiverse theorist is so dogmatically against loss that he cannot even allow ethereal possibilities to vanish. When I choose to do one thing versus another this moment—like writing the letter 'B' right now instead of another letter—I have lost the possibility to write another letter at that moment, yet in another universe I might claim that I wrote 'A' at that moment. Like the concept of heaven, a multiverse allows us to believe, in some way, that possibilities are never lost and persist on as actual occurrences in abstract lands.

The ancient theory of eternal recurrence, now expanded and tamed as the technical replication of all things, reflects our human opposition to the loss that surrounds us throughout life. In the beginning we had to believe that life renews itself as a matter of cosmic law, and now we believe that our lives repeat in endless worlds, or that we can renew life with enough technical know how—who has time to wait for natural cosmic cycles? But death is not necessarily bad, and life is not necessarily good. True, the axioms 'preserve life' and 'avoid death' are useful heuristic principles and apply in many situations, but we all know of cases when these heuristics ought to be violated.

DOGMATIC INTERLUDE

It is perhaps easy to see how others are trapped within their dogmas, and impossible to see how one is trapped oneself. All criticism ought to take this starting point. As soon as I initiate an attack upon another's dogmatic core, I must know that I am that which I seek to destroy. The post-modern thinker did become aware of the dogmas that surround us all, and reacted by refusing to judge others except those people who continued to judge others. Yet this abstention is a dogmatic process itself.

The One Dogma is automatically accepted and never opposed, like perfect weather. We do not notice the One Dogma as such, for it has always been there, like oxygen, since the time we are born. Immediately necessary yet never thought of—unless somehow it is taken from us, then we notice an absence quickly, even if we do not know what that absence may be. The One Dogma is now the air we breathe gone bad. It is life-giving oxygen that begins to destroy the life it sustains by free-radical damage. It is an unnoticed endosymbiotic organism that begins to consume its obligate host.

We are not aware of the things that determine our actions, for, as we become aware of those things, they no longer have the same control.

Now suppose that a dogma latched onto humankind at an early age and that this dogma 'won out' over other dogmas that died out. This dogma may have risen to dominance in hand with Homo sapiens, or perhaps dominated all species of the genus Homo prior to the rise of Homo sapien.

There exists a One Dogma that surrounds us all. The One is dogmatic, just like dogmatic capitalism or dogmatic theism, but unlike these dogmas, the One Dogma has no form to us. It has not yet been named. I cannot describe the One Dogma because I am trapped within it, and so are you, and we have nothing to compare the One against. The One determines my actions without my awareness like communism dogma determines the child's actions when he lives in a communist country. The child has no awareness of the form of communism dogma, yet it directs her actions nonetheless. Every culture shapes its children through dogma without the child initially aware of that dogma. The child learns about the form of her dogma by being exposed to other cultures. The One is outside all comparison because, by definition, it encompasses all of humanity. Thus we live in the culture of the One, although culture is surely the incorrect word to use here—we live in the dogma of the one. There are political dogmas, religious dogmas, cultural dogmas...I cannot describe the One Dogma anymore than noting it encompasses us all, and by describing the nature of dogmas as I have in the previous chapter. The one dogma is neither political nor religious. I can speculate that the One Dogma was once a Freeing Idea, a directed form of primordial belief whose task was to grant us a type of freedom that is barely felt. We use words like awareness, consciousness, choice, and free will to describe this freedom, as well as the word freedom itself, but none of these concepts does justice to the One Dogma's gift to us before it became dogmatic.

The One Dogma is in a death spiral; humanity will take collateral damage.

Chapter 3

I. POSSIBILITY

I see the tentacles of purple flame in the distance. A group of young men and women bid me to stand and fight in their circle:

"Join us, we can defeat It," they say.

"No you can't," I reply. "You're methods will not harm It. This I know. It will consume you and your friends. Your efforts like this are wasted."

They do not agree with me. I run for a building and watch as the men and women circle the beast and begin launching their weapons. Arrows and bullets and lasers pass through the tentacles, bounce off, or simply miss. Through a window I see the young ones picked up and consumed. I hear screaming and rumbling then my shelter begins to fall apart. The beast is outside breaking in.

At one time I thought that I understood the nature of the Good. I had a terribly simply formula—we ought to act as to maximize the 'connected possibility' that emanates forth from our actions. I imagined that from each action I take, that action determines or conditions the set of possible subsequent events in the world. Picture this set as a bundle of twisting and turning paths that burst forth like the burning trails of light from a fireworks explosion—the explosion is our action, an actual event, while the trails of light are potential paths into the future. The light paths of possibility, unlike the explosion, may branch off again and again into an infinite tree. We might call this type of possibility *local conditional connected possibility...* as if that clears matters up for most readers. Anyway, it is a type of possibility that flows forth given a local action or event occurs, a possibility in our world alone.

However we act, that action conditions how the future may be; and since we do not know precisely how that future will be, the best we can do is to envision the collection of possible futures paths that may be, and perhaps assign probabilities to each of those possible paths given what action we choose. For each action, we can calculate the total possibility (mathematical entropy) of that collection of future paths. The moral action, the right action then becomes the action that maximizes local conditional connected possibility.

This possibility applies not only to humans, and not only to organisms in general, but to all objects in the universe; and for this reason, maximizing local possibility is one of the few positive moral approaches that lets all objects participate in the Good equally. Electrons and protons may be subject to moral matters just as men and women. For morality to be anything more than arbitrary human convention, it would almost seen necessary for morality to apply this way.

The possibility I speak of is not the freedom from constraint. The absence of all constraint has the same quantity of possibility as the presence of total constraint—zero. Without constraint

the world would be perfect noise with everything happening at every conceivable spacetime location and scale. Imagine the absence of constraint as applied to sound, such as hearing a white noise emanating randomly from every location in space, although even this example has structure in that the frequency spectrum of white noise over a period of time will be flat. Now instead of sound, apply the concept of noise to objects in space. Here we create a picture of the universe in complete chaos where events happen in a maelstrom of randomness. Particles jump in and out of every location at differing rates and form arbitrary clusters that constantly vary and never stabilize. Opposed to this maelstrom, in our world, instead of this chaos, the constraints imposed by the fundamental forces structure the universe in particular ways giving us galaxies and nebula and planets and lakes and so on. The possibility that exists in our world arises between the bounds of order and chaos, structure and randomness, stability and change, love and strife. I have said nothing new here other than to point out that meaningful possibility in our world is not synonymous with freedom from constraint, nor does it mean the freedom to act.

All possibility, the possibility that matters, carries within it constraint or structure. When I use the expression connected possibility I am simply trying to make that claim explicit, using the word 'connected' to reign in the meaning of possibility which has gotten loose. I have no stake in the existence of natural laws, but I ask: what sort of possibility exists that is not connected, in some way, to how our world is? If there is a type of possibility that arises within our world, but has no connection to our world, then our thinking and theorizing about it cannot be, or at least expresses a contradiction. Possibility that we cannot access is no possibility at all. Possibility is precisely that which can possibly (by some means connected to this world) become an actuality for us—all possibility is constrained by this regressive property.

Two abominations of possibility, both embraced by many physicists and philosophers in our day, exist exactly by ignoring this fact. This first deals with so-called possible worlds or multiple universes. These topologically distinct worlds make no physical connection to our own, yet somehow we confidently talk about these worlds with knowledge about their possibility. I do not care that possible worlds help our logicians to express modal logic, or that enumerating multiple universes helps some physicists explain the so-called 'fine-tuning' problem of the universe. Made-up entities bring comfort to many people; I have no quarrel with that, but at least people who believe in ghosts and spirits imagine that these creatures manifest-in and influence our world through some channels, albeit unknown. Believers in possible worlds claim, without embarrassment no less, that ghostly worlds exist outside of our own, but that these spirit realms are completely inaccessible and do not influence our world in anyway. And these same people often ridicule believers in Heaven and Hell!

We have no knowledge of possible worlds, and by the common definition of these worlds, we can have no connection to them on theoretical (stipulated) grounds. There is no path by which these worlds can become actual for us, or influence us, nor even a path by which we can gain knowledge about the structure of these worlds as possibilities. We ought not call such things possible or possibilities, rather, let us call them fantasies or imaginative situations so as not to confuse them with the meaning of possibility. I have no qualm if you base your modal logic on

fantasy world semantics; at least this way the philosopher may not confuse statements of possibility with fanciful thinking. To presume that all of our fantasies can actualize reflects not thoughtful ontology but only the pathology of our time.

It is a categorical mistake to claim that logical possibilities are a type of possibility—they are not. A proposition that does not express a contradiction (which is the essence of logical possibility) does not immediately entail that the proposition expresses a possible situation. Are we to believe that our language, as wonderful as it is, conceals within it the power to generate potential actualities of worlds unknown simply by stringing words together that do not happen to be contradictory to present-day readers? When we take a non-contradictory proposition as a full-blooded possibility, we convert a benign statement of language into a token of mythology. The statement becomes reified as a mysterious possibility of nature. And when philosophers and physicists use these token mythologies as tools to explain aspects of nature, it reminds me of how ancient Greeks used the Homeric Gods to explain natural phenomena like lightening and earthquakes. Homeric Gods were (are) logical possibilities—there is nothing contradictory in stating Zeus dwells high above on Mount Olympus, and it was comforting to be able to explain how lighting arises even if that explanation was a fantasy. Logical possibility and multiverses serve a similar role in our day. They are abstract mythologies of a new sort. Rather than anthropormophized mythical Gods, we now have neutered mythical worlds of possibility, and future generations may as well look upon our multiverse as a trite yet culturally informative superstition.

The enlightened skeptics of today who ridicule gods and ghosts have little difficulty positing fantastical entities of logical possibility. The same person who knows with certainty that God is a remnant of evolutionary baggage sees no problem believing in infinite worlds inhabited by infinite versions of himself! He believes in a material world where humans are, in the end, no more than cosmic dust, yet imagines that he has, in his multiverse, lives every conceivable life, explores every mystery of the universe, and takes on every challenge at least in some world. He is at the same time a meaningless aggregate of particles and a god-like navigator of the universal expanse.

Fool's gold is not gold, and *logical possibility* is not possibility, even though we have placed those two words together in a manner that would suggest otherwise. All possibility is a matter of science and nature in the broadest sense. With possibility we are always talking about potential actualities. We come to know specific possibilities by careful examination, critical thought, creativity, intuition, experimentation and skepticism; just as we come to know actualities of nature. We do not create actualities by simply placing words together. I may write 'there is an apple on the table', and you may agree that sentence does not create an actuality in the world, yet we easily imagine that this same sentence, by itself, creates a true possibility because it does not contradict itself. Surely it seems possible for the apple to be on the table, but that possibility only has life because I have the relevant knowledge or have judged there to be an apple on the table in the past. Through inductive reasoning I may claim that it is possible there is an apple on the table, and as inductive, this statement of possibility, as weak as it may be, can turn out to be a false possibility.

A philosopher and servant are talking with each other.

The philosopher said bluntly, "It is possible that pigs can fly."

"In what sense?" asked the servant. "If I throw the pig into the air, or drop it from a plane, it may be said to fly. Is that what you mean?"

"No," responded the philosopher. "I mean that it is possible for the pig to fly on its own doing. Perhaps not now on planet Earth, but on another world, or in millions of years it may."

"Do you mean the same kind of pig that we see now, today, on our farms on planet Earth? Do you mean that pigs just like that could possibly fly?" said the servant. "If they are just like these pigs, then surely what you say is not possible. Perhaps you do not mean that they are the same?"

"I am speaking of the same kind of pig. I am stating a simple logical possibility. There is no contradiction in claiming that pigs can fly, thus it is possible that pigs can fly. It just so happens, as a matter of accident, that they do not fly here on Earth now," said the philosopher.

"How do you know it is possible for pigs to fly?" asked the servant. "By what mechanism would these pigs be able to fly, or what would the environment around these pigs be so that it was conducive to pig flying? Then I might grasp what you mean by possible."

The philosopher became slightly annoyed. "I do not need to tell you *how* pigs fly in this possibility, or what these alternative worlds might be like. How could I know these things? Anyway, those facts have no bearing on the matter. I just know that it is possible for pigs to fly. It is a simple matter of logic."

The servant responded. "I know nothing in logic that dictates the possibilities of this world or any other. Possibilities are a matter of content; they are the meaningful objects and activities that surround us...not the formal, lifeless grammar of logic. When you say pigs can fly, that is not a possibility in itself. It is a contrived proposition, an artificial creation that need not have any bearing on what is possible."

The philosopher said, "Child, you are confusing epistemic issues with metaphysics. How we know possibilities is one thing, and the blunt existence of them is another. Many philosophers have researched the epistemic status of possibilities far more rigorously than you. It is an important question in philosophy, but it is separate from the metaphysics of possibility. Further, Kant used logic to ground the conditions of possibility, contrary to what you say."

"I understand you better. I admit, I do have difficulty separating the metaphysics from how we come to know the metaphysics," said the servant. "Anyway, let us talk about the metaphysics of possibility. For me, possibility is part of this world, the largest part of the world by far, whereas actuality is but a small part. You could say that actuality is the tip of the iceberg, while the part of the iceberg underwater is possibility. Or perhaps this analogy suites you--the visible matter of our universe is actuality, and the unobservable dark matter and energy that make up about 95% of the universe is possibility. That analogy seems right on track. There is far more unknown than known in this world. The question that intrigues me most is: does this dark possibility influence actuality, or does it simply lie around, waiting to become actualized, impotent to do anything in itself?"

"A thoughtful question," said the philosopher. "If possibility could influence actuality, it could not be through causality. Causality only occurs between actual objects, although I'm sure I could find you many philosophers who disagrees with that statement. They may say that

causes—which are actualities--raise the probability of their effects, such that causes cause probabilities to be what they are; but even these philosophers would not say that possibility itself influences actuality."

"My gut tells me that possibility creates actuality, although in a different way than actuality creates possibility," said the servant. "It seems unlikely that possibility exists impotently—if this were the case, then possibility would serve no purpose at all and we ought rid ourselves of the concept. To be consistent, philosophers who are determinist ought eliminate the concept of possibility from their language. What sort of real possibility exists in a world that is fully determined? For determinists the past and future may be unknown, but an unknown future does not imply that different futures are possible—to say this is a metaphysical contradiction under determinism, for only one future is possible; the rest are impossible."

The servant continued, "Even those philosophers who believe in so-called possible worlds are misleading themselves if they simultaneously subscribe to determinism in all possible worlds. If determinism holds in all possible worlds, and those worlds are concrete but disconnected from our own, then there is no possibility at all just the same."

The philosopher looked at the servant sadly and responded, "You are missing the point. To those philosophers possible means, technically, that something is true in at least one possible world. They have defined it that way, thus your criticism applies to a wholly different conception of possibility. You must criticize their definition on its own merits, not only against your beliefs."

"Very well," said the servant. He saw an opening and moved fast. "The entire use of possible worlds simple begs the question of the meaning of possibility. Conceiving of the existence of any possible worlds apart from our own seems to invoke a sort possibility from the onset. For example, let us try to use possible worlds semantics to answer the following question: is it possible that any possible worlds exist apart from our own? But the believer in possible worlds does not need to use his semantic theory to answer this question because he creates additional possible worlds by definition. He does this by using a concept of possibility that comes before his reductive 'true in at least one possible world' sense of possible. It is possible that possible worlds exists—if they do, then you can continue on using possible worlds as you do. If they don't, then you have no business talking about them. Either way you must acknowledge that possible worlds exist as a possibility, not as an actuality. Here is another way to put it. As soon as you attempt to ask if a possible world manifests such-and-such a thing, you have already assumed the existence of a possible world other than our own."

"There is some merit in what you say, but the argument will sway few over to your side," said the philosopher. "You leave too many holes. They will cover this argument in doubt and judge you an amateur. Rightly so I dare add."

"No matter. Fair enough," said the servant. "But I have thought more about the positive side of my argument. For now, I have decided that possibility reflects the degree of existence of something. Something with no existence is impossible, something with full existence is actual, and something in between no and full existence is possible. Then I imagine a blob of things with full and partial existence, all cohabitating together in some way, where the degree of existence of these things can change. The blob is mostly composed of partial-existence, save for small portions of actuality. Again, it is mostly a scientific matter as to what has partial existence, and not a matter of logic or semantics, although those tools play a role."

"Again interesting but poorly developed," said the philospoher. "Work it out further and perhaps we may talk."

"I doubt I will. Really, who cares about raw possibility, anyway?" said the servant. "This conversation will not help my cause. People are suffering."

"So they are," agreed the philosopher.

Possibility in our time, at least as it is commonly talked about, is often reduced to a state of having alleged 'options'. I dislike 'options' because this concept ignores the possible paths that must be traversed to arrive at the fulfillment of each option—as if we can grasp all futures ready-made. Yes, options do exist as constructed scenarios with near machine-like certainty within well-defined structures. The items on a restaurant's menu form these sort of options. The restaurant is set up such that when you say a particular menu item to the server, or click the menu item online, this action triggers a sequence of events that culminate in bringing the food item to you. Each option ends similarly. Possibility does not, in general, emanate forth from this set of options; rather, the options are built within a fixed system designed to eliminate all extraneous possibility, to only allow possibility of a particular type within the machine. Morality does not play a role in these sorts of choices primarily because the possibility—the possibility of the sort I am referring to—of each menu choice is roughly equivalent. The food comes to your table, whatever you ordered, and you eat it and go home.

To arrive at an option we must follow a path to that option. Events must transpire. The concept of an option is meaningless without coupling it to the path to that option. I sit here now. Options are before me only to the extent that events can connect me to that option, which is why an option is never just a static place or object in the future but a path of events where the option happens to be an event along that path. An option is approximately a possible future now beginning from the present. Options that cannot be reached by following a path beginning in the present are not options at all—these things are called fantasies, fictions, impossibilities, lies... And how can I know if a particular option exists along a path from the present? I can't know it for certain, but neither can I know that it does not exist along a path.

When options are prebuilt into a machine-like selection system, then we can approximately ignore the physical paths to those options; but for all other scenarios, the situations which still constitute our lived world, the path to an option is more relevant than the isolated option. A focus upon options creates an illusory metaphysics underlying many discussions. We imagine that options need but be chosen, and that once chosen, the path to that option occurs with absolute certainty. Possibility, then, must wholly reside within the person making the choice of that option. I have the so-called possibility to choose among the different options, but possibility in this sense has little to do with the possibility in the world I have been talking about, primarily because the act of choice can barely be differentiated from the action allegedly following from that choice, and that most choice has no connection to possibility at all. Let me explain.

Suppose I give you a set of letters, {a,b,c}, and ask you to choose one of these letters. You will look at the letters and settle your focus upon one of these, perhaps repeating that letter in your

thoughts. You may argue that we do not attend to a particular letter until after it is chosen, but I ask, why do we need to add this additional action of so-called choice? Choose/pick/select simply means to isolate one item among many while not requiring any other constraints during the matter. Since I have provided no other constraints, the item you focus upon depends upon you—how you're built, your contexts, history, and so forth—but adding this concept of choice does not further explain the situation. A machine, too, may be designed to isolate one item among many; and we may metaphorically say that the machine chooses but we don't associate 'true' choice with this behavior. The machine may be probabilistic or deterministic—it makes no difference. And I am not assuming that humans are machines when I make this comparison, or that humans are without free will or are deterministic; I am only pointing out we haven't a reason yet to add an additional concept of choice to the similar human behavior.

Humans have the capacity to identify one item among many. We typically call this capacity choice, but we can get by without this word. I could have told you to single out one letter in the set {a,b,c} and that command would have yielded a similar behavior as using the command choose. The word *choose* works fine, but tends to carry a lot of metaphysical baggage that gets played out in scholarly arguments and political debates. People believe this word means something special without being able to tell us what that is. *Choose* gets caught up in arguments of freedom and free will and so forth, where these even more ambiguous concepts end up infusing the word *choice* with its significance, and then choice is further used to explain freedom and free will, even though choice was derivative upon these at the onset, thus creating an endless circle of argument between opposing camps.

So some philosophers, in defense of choice, will say that choosing is a particular way of singling out one item out of many. Some ways of isolating items are choosing, while other ways are just plain ol' mechanical picking. An obvious defense will be that choosing entails some sort of rational deliberation, while picking without rational deliberation is just picking. I'm fine if you wish to make this distinction, but it does not recover the sense of possibility typically hidden within the concept of human choice. Isolating one item among many using rational deliberation does not imply possibility contained within that process—it simply further describes how the isolation is being done, just as we could describe a computer subroutine that picks items, assuming you cared about coding details. Rational deliberation may precede the act of isolating one object among many, just as flipping a coin may, or giving yourself a minute of silent meditation. Many actions may and do precede acts of selection, but none of this imbues choice with possibility or any other obvious specialness.

A deliberative process may transpire before the act of choice, and right after the act of choice we may isolate one item using attention or via some other action (e.g. pointing a finger at an object which is a distinct action separate from actually choosing that object. I can designate the chosen object in many ways, like writing down the name of the object or speaking it aloud). If choice is anything more, that something more ought exist between deliberation and item isolation. Choice, within this small gap, must connect the deliberative process to the act of item isolation. In computer programming, the connection occurs through a ranking or inequality of quantifiable value. Each item (or relation between items) gets assigned a value through a

process of computational deliberation. The item that minimizes or maximizes the value typically becomes the selected item, although more elaborate selection functions may be used, presumable because these will better reflect the empirical quantity we are trying to capture. Assignment of value appears to be the final step of computational deliberation, and the step right before an item is isolated.

If we extend this example to human choice, then choice lives within and/or between three steps: deliberation, assignment of value, and item isolation. You may isolate an item using rational means such as picking the item that maximizes the value you care about, or you may ignore consciously assigned values and go with intuition, where intuition may be working off of a different value assignment or no valuation whatsoever. Item isolation may also follow from a function of the assigned values, or a meta-value system may point to the item selected. I may enjoy beer, and to maximize my enjoyment I may rationally choose to drink as many beers as I can before becoming sick, but if I abide by temperance as a meta-value, I may choose to drink only one or two, even though I would enjoy drinking more and likely not get sick.

It now appears that what we call choice resides, if anywhere, in the relational process between how we value items and how we isolate items relative to those values. This choice relation may be as simple or as complex as we can imagine. It may be deterministic, probabilistic, or even completely random, but for world-like possibility to enter into choice, the structure of the choice relation itself must be open to multiple future paths. These paths are not prebuilt options, but rather new openings in the world. We cannot enumerate the complete set of paths. We can imagine a partial list of paths analogous to and extended from what exists already today, but the full domain of possibility cannot be listed because most of it lives outside of what we know now. Gravitational black holes were not an epistemic possibility to Plato. The internet was not a possibility to Descartes, and so forth; even though it was possible nonetheless.

For choice to be associated with local connected possibility, the choice relation itself must be a balance between order and chaos, structure and randomness, love and strife. The items chosen through possibility do not even exist before they are chosen; they were not present as a set of options. Neither pure random item isolation nor a straightforward mapping from item values to item selection make any claim on the possible. And I am not denying the usefulness of direct mappings used in everyday so-called choice—we need these to satisfy our daily needs. All choice should not be directed towards the possible, yet I hypothesize that the forces of order and chaos can mingle within the choice relation and head that way.

Choice with possibility then becomes the process of opening oneself to this opposition of forces when confronted to act, but we rarely allow such choice these days. Instead of allowing internal turbulence, we have been encouraged to perform a spiritless simulation of this process by weighing the so-called pro's and con's of each particular item on a set of options. A cognitive assessment of personal likes and dislikes has slyly replaced the primal opposition between love and strife. Weighing pro's and con's simply codifies our surface system of value (surface in the

sense that it is a projection of values upon a thin film of momentary awareness), making a choice relation mapping function more obvious. Possibility plays no or little role here.

Many will not be moved by these comments. We still feel that choice is the act of freely selecting one item from a set of options. And yes, choice is the act of isolating/focusing upon/selecting one item among many; it is always the act of highlighting, shining a spotlight upon one object, circumscribing that object in an imaginary wall. When I glance about this room, my focus stops upon a bookshelf, the rug, the stairs, a window...I momentarily *choose* to focus upon particular objects among others, but these acts of selection simply happen—they were neither random nor pre-planned, and if I tell myself to settle on one item in the room for a while, or to choose one object in fulfillment of this very command, I find myself highlighting my son's bouncy chair. The action of isolating the bouncy chair is the fulfillment of choice, and if I didn't highlight an object associated with that command, then I could not say choice occurred. In everyday experience, what we call choice is simply the observation that we are focusing on a particular object.

Suppose I tell you to choose and press one of three different colored (blue, yellow, green) buttons in front of you. It is coherent to choose one button, but to press a button that you didn't choose. By this I mean, you may choose the blue button, focus upon it, select it as your button of choice, but then reach over and push the green button. Shall we say that one or two acts of choice occurred? It looks as though I made two separate choices. Or perhaps three—I chose the blue button, then chose not to push it, and then chose to press the green button. And what if I chose and pressed the same button, then do we say only one act of choice occurred, even though choosing the button and choosing to press the button are perhaps distinct acts of choice? Can I choose to choose to press the button? Does the act of pressing the button complete the act of choice, and if so, what is choice beyond the action of pressing?

Does it make sense to say that I choose to choose blue? Perhaps, but does this mean anything more than just saying I choose blue? Or easier still, I can just say *blue*. Choose seems to act as an identity function when applied to an object or action, which is another way of saying that choice adds nothing to the notion of identifying a single item among many. Singling out one item among many is an action in itself, regardless if choice accompanied that action.

The neuroscience of choice in this day has focused upon the finding that certain objects, in certain laboratory situations, appear to be singled-out by our bodies prior to us being aware that any object was singled-out. In other words, the act of selection appears, in some situations, to go to completion prior to our awareness that we completed the act. This scientific finding implies that awareness is not always required to complete the act of selection, which, when we think about what the body does on a continuous basis, seems necessary if the concept of choice is reduced to mere item isolation.

This reduced concept of choice becomes salient when we are caught within a discrete episode of indecision, but throughout our lived day, in every moment, with every action, from moving my fingers while I type, to breathing, to every application of attention; I am possibly subject to

continuous choice. When walking I do not typically appeal to my choice of moving my legs and feet, and how high I might step, or the specific path I will take; but a multitude of options exists before me with every motor action (and thought) I take. We do not routinely talk about choice in these situations—which I will call *continuous* episodes of choice in contrast to *discrete* choice—but choice may exist at every instant. The episodes of choice analyzed most often by philosophers and cognitive scientists concern discrete, largely contrived episodes of choice where a constricted set of options are placed before the subject who is told to select one of them, but what of the choice in *how* I lift a glass of water to my mouth for a drink? I may move the glass along any one of an infinite number of paths, all of which appear to be options in the world, yet we rarely speak of choice here.

We routinely make the distinction between so-called automatic actions--those actions we do without significant awareness or attentive oversight, like typical walking--and controlled or intentionally guided actions, which are actions accompanied by what I have called choice. The primary distinguishing feature between automatic and intentional action at first seems to be the presence of focused attention. When I am walking, I rarely focus attention upon my feet and legs, and how high I lift my feet, the specific arc and angle of my knees and thighs, the rotation of my hips, and so forth. None of these exists within my attention (typically) when walking. In contrast, when I attempt to select an item on a restaurant menu, I look at each of the menu items, ponder them, imagine if I will enjoy them, consider the costs, and so forth. My attention is focused upon the task of selection, and we ought call my food selection an intentional action.

But attention comes into play during automatic action as well. When I hear a bang at my door, I automatically turn my head to the door to see what is going on, and my attention moves quite quickly to the door and sound. The initiation of turning my head, however, occurred automatically, prior to any attention focused upon the door. The bang automatically initiates head turning as well as it initiates a change in my focus of attention. I don't know if head turning occurs before a change in attention or the other way around, or if they happen simultaneously. Regardless, we wouldn't say I chose to focus my attention upon the door here—it simply happened—nor would we call this an intentional action. That said, how is choosing an item on a menu so different? Do not some items on the menu draw my attention more fully than others? Do I not skim over most of the options without consideration because they do not pull me in? Some food item are like a bang, others a gentle tapping, some a whisper, and some I do not hear at all.

When I am glancing over a restaurant menu, my attention is automatically pulled to some items more than others. Attention itself does not separate automatic from intentional actions, although intentional actions seem to be associated with the presence of guided attention. During intentional actions I feel that I am intentionally determining what I will be attending to, while during automatic actions I do not. This is to say, intentional actions are derivative of intentional attention, where intentionally changing attention is but another kind of action. On this analysis intentional attention becomes a necessary characteristic of choice.

Here I am saying, as a stronger claim, that all choice requires the choice of what to attend to, and the concept of intentionally doing something means to choose what you are doing. But when I intentionally do something, such as put out the trash, I don't necessarily choose to do this action from a list of other possible actions I could do that moment. Yes, the idea of putting out the trash presents itself to me—I attend upon that idea—and then I proceed to put out the trash, well aware of what I am doing. The action was intentional by all measure, yet deliberation upon options does not seem necessarily a part of that intention. If this is so, then how I can I claim intentional action requires the choice of the action, or the choice of what to attend to?

There is a place where classic choice happens in this example, too. When I intend an action at least one episode of deliberation among options can be said to occur—I can choose to do the action or choose not to do it—although this deliberation is not necessary for action to occur. I need not put out the trash even though the idea to do so occupies my attention at some time. When I choose to not put out the trash, I choose to continue upon the physical path that follows the geodesic of my stationary action. When I choose to put it out, I break away from the path of stationary action, expending a type of energy in the process. Still, no deliberation or choice need take place when I intentionally take out the trash—and this is the preferred situation for me. I can simply put out the trash as the idea to do so occurs to me, while being well aware of what I am doing. One can be attentive and intentional in action, yet not bring to bare, in that action, a classic sense of choice or will.

Choice becomes most salient when I am stuck in some sense, when there is a barrier to free-flowing action or thought. The key feature of human choice is not selection among a set of material options—this is an ancillary condition that exists for mechanical picking as well—but the presence of an abrupt temporal redirection of attention accompanied by a stall in goal-directed thought. The beginning of the act of choice interrupts the 'forward movement' of the organism. Little internal advances while stuck in choice, but this does not imply that choice has no role. The cessation of forward movement in choice allows for a restructuring of the organism, preferably towards a healthy growth of some kind.

Beginning an act of choice puts the temporal advancement of the organism on hold. While this cessation seems to be an integral part of choice, I have worked with many people whom have gotten stuck in the nether regions of choice and cannot complete any choice act. These individuals will tell you quite literally that they cannot make any decisions—and they are not being hyperbolic in any way. Their thoughts may ruminate upon past events or imagined past events, and catastrophize imagined future situations that will likely never occur all in the 'service' of trying to complete the choice act. Choice, however, is never completed, and the person remains trapped within a purgatory while external time advances. During this time the person, trapped within choice, is consumed from within, gradually decays away and methodically loses all things valuable.

This gap at the beginning of choice closes once a choice is made, but we should not focus too much upon the specific content of that choice. Many people claim to make a choice and then

shortly later change their minds, claiming to choose something different for that choice act. They may vacillate back and forth between options multiple times. In this case, the person never made a choice to begin with; he simply gestured to one option among many, perhaps saying that option in language, or pointing at it, or otherwise. As I have stressed, identifying one option among many is not choice. Choice begins with internal temporal halting, and ends once the organism changes in such a way that that choice no longer has the power to hold the organism static. The process of choice is much like the metamorphosis of a caterpillar into the moth. The caterpillar forms a cocoon—this is the beginning of the choice act—where the caterpillar enters a pupal period of cessation of forward movement, yet in this stasis, the pupa undergoes a series of internal transformations to become something different. After the transformation is complete, the once caterpillar arises from the cocoon as the moth and begins forward movement once again.

From now on I will call this halted state of choice the *chrysalis* of choice. With every choice we enter into a pupal phase—this phase may last a moment or persist for years. We may be within multiple chrysalises of choice at the same time, some more halting than others; and we arise from each chrysalis more differentiated, more solid, more able. All choice is growth. Unlike mechanical picking of options which, for the most part, only keeps us stuck in what we already are; choice necessarily leads to change which cannot be undone. Unfortunately those who study choice, rather than examining the chrysalis phase, tend to focus solely upon the tip of choice, the very end of the choice act once it has allegedly already gone to completion; yet this ignores perhaps all of the action of choice. Choosing is a transformative action, like metamorphosis, and one would never claim to understand metamorphosis simply by studying the butterfly that emerges from the chrysalis while ignoring everything that transpired before.

Notice that the consumer version of choice that commercials and advertisements continually thrust upon our eyes and ears contain nothing of the chrysalis of transformative choice. We are presented so-called options that we can mechanically pick...the quicker the better. The diversity of consumer options do not exist for our personal growth. The multiplicity of options plays a purely statistical role—by presenting a large number of options, the seller is more likely to hit upon a desired object in the consumer. There is nothing immoral or wrong with any of this, so long as you don't mistake choosing the toppings on your burger with expressing meaningful possibilities.

II. Effort

Effort begs me to continue on even though I have nothing left to write for this piece. I do not desire to go forward here. I am not gushing forth with words that flow upon the page in energetic waves. No, each sentence requires effort. Should I be speaking to you in person I imagine that I would be able to drone on and on about this topic, telling you that effort has a physical underpinning as much a matter and energy, asking you to imagine a time when you had to expend effort to get something done that you did not want to do.

My writing is poor when I produce it with effort. The sentences are choppy and passive and without life like these. So in writing, for me, effort can corrupt and degrade the results of writing; yet without this effort I would not, at times, continue the process of writing at all. What is this effort that when relied upon in too great a proportion corrupts the very thing it necessarily begins? We all have experienced the situation of 'trying too hard' at something, and we have all been told, at some point in our lives, to 'try harder', and Yoda has told us 'there is no try' at all.

This effort would appear to have some connection to willing and to choosing to do something, but for me, I have no idea of what this will might be. For all our history of thought about the will, and free will, I haven't clearly experienced this will in my life. And, as above, I'm quite skeptical about the nature of choice, at least the kind of choice that involves mechanically pointing to objects. But effort—that is something I have felt. I have picked myself up again and again, when needed. You might say I have willed myself forward, but I do not see the situation in that way. When I have expended effort—and it is always an expenditure; effort does not come into play without something being used up in the process—I have not necessarily willed myself to do anything. Nor do I choose to expend effort. Effort, for me, presents itself when something demands to be done. This section demanded to be written, and I am but following a forceful request with whatever effort I have. I do not desire to write it.

I say the task at hand demands my effort, but for the materialist the task itself cannot draw my effort. From the material point of view, a task forms some sort of representation in my thoughts, and these thoughts are identical to material brain states or processes. It is my brain that interprets a task in a way that causes my body to unleash effort upon that task. It is fine for you to think this way I suppose.

Effort partially opposes desire. With desire I am pulled toward a future situation, and while I may expend a type of energy to move toward that desired situation, the desire moves me or initiates movement without effort on my part. When I am craving sweets it takes no effort to *initiate* that search for a hidden chocolate bar in the fridge. The desire for chocolate, in accordance with the Newtonian metaphor, pulls me like a gravitational force. Effort, however, seems to originate its force from within. If desire pulls, effort pushes.

Let us be clear: desire leads to an expenditure of many things, the most correlated expenditure being that of attention and time. How much time and attention have you spent, used up forever, on your most desired objects? I take this fact to be so obvious that I will not explain it further. Apart from time and attention, desire may then consume your money, health, respect, and so forth, but I don't mean to imply that all desire is wrong or corrupt. We need desire as much as thought, and my intent here is to say that desire expends something about us in the process of following it. Desire, however, exhausts us differently than effort. How is this?

The things consumed in us by following desire are more exterior, more secondary to who we are then those things consumed in expressing effort. Desire destroys our possibilities of the future (for desire pulls us toward its singular objects leaving other possibilities stranded in the

background) while effort consumes the actuality of ourselves in the present. I don't mean to sound so abstract here, and should I express myself more eloquently I might be able to put it more clearly. I'll try. In invoking effort, the core of your being burns a bit of itself away; some of you is lost in the process—your heart consumes a small portion of itself as fuel. But please do not put too much in my metaphors. In our day it is too easy to view effort as only an exertion of the body, but effort does not simply exhaust the ATP in your muscles. Have you not expended effort when talking to someone who disagrees with you greatly, whom you feel has not a clue, but out of courtesy and kindness, you attempt to calmly explain your position without resorting to a vicious verbal attack? Are you not exhausted by the effort of these attempts, an effort that greatly exceeds the effort expended in the mere movement of the muscles of speech production?

The interplay between desire and effort can be most confusing. When the desire for an object pulls us forward, that desire will no doubt prod us to work harder to claim its goal. We will strive, if you will, to overcome whatever barriers present themselves on the way to finding the objects of desire, and it is difficult to say that this striving is not a form of effort itself. But when desire pulls the reigns on effort, when desire dictates what must be done, I say that this expenditure of the self is not what I would call effort. The yoke of effort can only be pulled by the true master. The reason for effort is never desire. It is neither fear nor guilt. Effort can only be expended for the sake of effort itself. We try harder for the sake of trying harder. We take the next step, when exhausted, simply in order to take the next step, not expecting to achieve anything else in the process other than another step. In effort, the goal of effort is always to expend effort.

The drug addict can work tirelessly to find money, travel long distances on foot, tell elaborate stories about well thought-out lies, and set-up complicated deceptions at work and home, all in the service of maintaining and protecting an addiction. She uses vast quantities of energy and thought to maintain the addiction, but none of this takes effort, for desiring the drug and avoiding shame initiates all of these behaviors. The only time effort and desire nearly overlap occurs when the desire is for life itself. When you desire to preserve your self and you follow this desire, you necessarily expend effort towards this object of desire, but here the object of desire is not something external to who you are. The desire to preserve your life is a form of effort, but do not confuse this equivalence formula with the fear of death and the actions taken, out of fear, to preserve your life. The fear of death and the desire to preserve your life differ. Fear of death is driven by a fear of the unknown, by a desire to avoid something that cannot be comprehended, and by the mistaken idea that you will *experience* (in death) the painful loss of all that you have in this world. No, desire for life is much simpler and straight to the point. We desire to preserve life for the sake of life itself. I want my life and I will expend effort to keep it. That is all.

We direct desire toward a goal or object. Effort is directed *through* an action. Understand this difference and you will come to know effort more intimately. Effort magnifies and extends the activity at hand. It seeps into your actions and fires them up, puts them into hyper-drive, grows them in power and force until they come to completion or you are exhausted. Still, the goal of

effort is not completion of the action, even though that effort ceases once the action is completed. I may push hard, with effort, to open a stuck door, and obviously my effort will cease once the door flies open, so it is easy to confuse my effort with completion of a goal, but this goal was the goal of desire, the desire to open the door. Effort simply magnifies and temporally extends my pushing; its purpose is this magnification independent of any goals connected to the push.

Effort is the magnification of action and thought at the price of oneself—but this effort may also lead to a growth that equals or exceeds whatever portion of you is consumed. The body-builder who pushes a weighted barbell above his head again and again and again is tearing and abusing the muscles that do the work, but he hopes to be rewarded with greater strength in the future. The promise of strength and aesthetic musculature is likely desired and in part pulls the body-builder along, but few body builders get far without also enjoying the expenditure of effort, the pain of gain.

When effort is repeatedly directed through the muscles, we get muscular growth. Like the body builder, the distance runner who directs effort toward running grows in a way that facilitates running. These physical examples are easy to grasp, and everyone will see some truth in them, but should we not derive a similar growth when we direct effort through the moral apparatus? Through the mathematical faculties? Through efforts to express love to our fellow companions? Repeated effort may lead to a growth that depends upon how that effort is directed.

Many of us get frustrated in expending effort. We say that we have tried again and again to make progress in some aspect of life, but the effort always leads to a familiar failure with no benefit. I suspect that these sorts of failure of effort may, in part, arise from a loss of direction. For effort to be productive it must be channeled through a particular action. We cannot simply try hard to achieve some end, focusing our sight on that end while ignoring the specific actions that connect to that end. To run a marathon you cannot simply look 26 miles down the way and imagine yourself there; you must have a history of focusing on the movement of your legs and arms, the posture of your body, putting effort through those movements with each stride over days and months until the effort magnifies your abilities in the present. Putting effort into solving mathematical equations will not help you run a marathon, and I suspect that people who think they are putting effort into achieving a particular end, yet get nowhere but exhausted, are often channeling that effort through actions that are disconnected from the desired end. They are growing some aspect of themselves with effort, but not an aspect that will get them where they want to go. Without a clear picture of how your actions connect with your desired end, it is possible that your undirected efforts may even strengthen parts of you that prevent you from achieving that end—a condition that may lead to total despair.

Our culture promotes the idea of simply 'trying harder' for those who have been unable to achieve a desired end, and I see it played out pathologically in many of our youth. Our youth's fantastical belief in perfection coupled to well-meaning chants by adults to 'try harder' can create an abomination of suffering in the young. These children—and most of them have already achieved more than their peers—expend all the effort they can, but when they end up

unfulfilled and empty by whatever tokens of external validation they have accumulated, their only advice has been 'to try harder', to do more of the same. In response the child thinks, "but I have achieved only emptiness, are you saying that by gathering more tokens I will one day find happiness or at least relief?" But the child cannot find happiness in this way. The path from effort in action to happiness is not clear. We cannot simply effort ourselves to happiness or even contentment. The effort produced only emptiness, and trying harder will only strengthen the pathways to more emptiness. It's understandable—yet mistaken nonetheless—how this situation leads some of our young to see suicide as the only path to relief.

It occurs quite commonly that we attempt to expend effort in service to a goal yet this effort itself interferes with the desired end. We call this 'trying too hard'. In playing tennis, I may try to return the ball over the net, and I find myself rigidly concentrating on the ball and my arm and the course of my swing, imagining that my focused effort will enable me to return the ball with grace and direction, yet I instead launch the ball outside the court. As a novice player with limited practice and training, I have not developed the correct sequence and timing of muscular contractions that would enable me to direct the ball on the court, yet I mistakenly believe that by expending effort in the moment of play that I might somehow magically force this muscular learning that can only be developed over time. My effort in the moment magnifies actions that are disconnected from the goal of a clean hit, and I would have been better off casually swinging my arm which would not have produced a killer return, but would have perhaps kept the ball on the court.

We live in a culture of magical effort—the idea that we can accomplish anything simply by expending effort. But effort must be directed in the right way and at the right time in order for it to be beneficial. This is why coaches and trainers and teachers exist—to help us direct our efforts so that they are productive of our goals. True, many of us can figure out how to direct much of our efforts toward productivity on our own, but this skill varies in the population and all of us will at some point benefit from redirection. Effort does not make anything fruitful happen in itself; it simply magnifies actions regardless of the product of those actions. This is why mantras such as 'try harder' and 'give 110%' are empty without further clarification.

III. Totalitarian beliefs

How can you oppose my knowledge? Forged within the fires of sense and memory, I bring it forth as light, shining the path forward. It is mine. It is me. You cannot take it away, at least not without erasing my soul. My knowledge will burn across your face until you accept what I have seen as true, and if you don't, I'll whip you again and again with flames until you submit or bury your words deep below. I care not for your words. They do not touch me. We live in a world without contact, where the radiant flows of communication between us have gone out.

With time, dogmatic organisms may evolve—or degrade—into totalitarian species. Take what I have said about dogmatic organisms, their means of spreading and feeding, their resistance to questioning and ability to go unnoticed while roaming free in the wild, and add to this the inclination to actively suppress other beliefs and ways of living. While the dogmatic organism cares not for the particular beliefs of others—it simply wishes to feed upon whatever primordial belief remains—the totalitarian organism keeps a watchful eye upon others, carefully monitoring for opposing beliefs that must be squashed out. Numerically, dogmatic organisms seek to maximize their absolute numbers while totalitarian organisms try to maximize their relative frequency within a population, which it accomplishes through spreading and purposeful elimination.

It does little good to talk about totalitarian organisms without being able to spot them in the wild, yet how can anyone be taught to spot a species of belief? Those invisible creatures inhabit a landscape beyond the traditional senses, and should you deny the possibility of sensing things in other ways, or have already reduced all beliefs to neuronal firings, then I understand your refusal to explore further. I will briefly attempt to pin down totalitarian beliefs by their typical pragmatic consequences coupled to theoretical speculation, knowing that the consequences will never be enough to definitely spot these creatures. Thus I warn you. If you see the features I speak of, and conclude you have found a totalitarian creature, please be open to the chance that you are mistaken.

It is no surprise that dogmatic beliefs often degrade into an intolerance for conflicting beliefs. Unfortunately the concept of intolerance today carries too much baggage to be useful and is hardly easier to identify itself, so let us start by saying that by intolerance I mean forces that drive us to isolate, marginalize, and imprison opposing beliefs. It is the process that rejects and walls-off opposing beliefs simply because another belief already exists and occupies its place. The *beginning* of intolerance is roughly analogous to the process of transplant rejection by the immune system. When a new tissue is introduced into the host body, the host may identify this tissue as a foreign entity, and simply because of foreignness, the immune system attacks it. Most of us respond to foreign beliefs similarly. For both objects, belief and tissue, the rejection is a natural, automatic, physiologic response. At this early stage the situation does not involve morality, or justice, or fairness, or respect. For the sake of tolerance itself, I ask that you suspend whatever visceral and negative valuation of the meaning of intolerance you might have, and consider that these rejections begin quite naturally.

I am not suggesting that all rejections are justified, nor that we ought never reject opposing beliefs, and I am led back to the difficulties in explaining, with words, how to identify an action associated with totalitarian species as opposed to something else. There exist right now eloquently spoken women and men, educated in the ways of reason and science who, nonetheless, harbor totalitarian beliefs. They speak smoothly, with or without passion as the situation demands, appeal to curated lists of facts, and convince us to oppose other beliefs as they do, even though they reject those beliefs for the sake of rejection itself, automatically at first and then with totalitarian desire. Upon initial exposure we quite naturally reject other beliefs that conflict with the ones we already possess—I see no weakness in that. Ought we

accuse our deep tendon reflexes of dysfunction? Our possessed beliefs can, however, become totalitarian when we notice this initial rejection, and rather than step back with curiosity and wonder about the nature of this automatic response, we embrace the reflex as necessary while seeking reasons to support it. Still, how then do we separate reasons that justly urge us to reject opposing beliefs from those reasons that simply justify an automatic, reflex rejection? I know not the answer, but the question seems helpful.

Intolerant rejection arises through at least three processes. First, the rejection begins as a physiologic reflex, natural in the sense that the automatic rejection of foreign beliefs occurs for purposes that generally sustain the organism. If we did not protect, or shield, our current beliefs in some way; but rather automatically accepted all incoming beliefs as suitable replacements, then it is difficult to imagine how we could maintain the stability required to navigate the world in a consistent manner. Our beliefs could then change throughout the day, vacillating in response to our latest conversation with those who believe different than we do. Recent past actions, taken out of beliefs that we have just forsaken, will strike us as now wrong or incorrect, and move us to act in ways that undo those wrongs; yet these corrections may quickly be seen as mistakes, too, should our beliefs change again.

In the next process, the natural automatic rejection, which is not initially a moral action—at least no more than tissue rejection is a moral action of the immune system—becomes morally charged. The automatic rejection may become a righteous rejection, done for the sake of the good. It is one thing to reject a belief simply because you already have a belief that fulfills a similar purpose; it is another to claim that rejecting a belief is the right thing to do. The moral charge, through the passions, adds an addition force of rejection independent of the automatic response. Lastly, and quite after the fact, the intellect constructs reasons to justify the rejection that began as a mere reflex. Not only is the rejection quite natural in a physiologic sense, not only is the rejection the right thing to do; the rejection can be justified with the intellect in a way that appears unrelated to the first two processes, even though the intellect does not kick-in, or at least has no reason to move until after the first two processes transpire. A totalitarian rejection arises from a physiologic response that becomes morally charged and then co-opts the intellect to justify itself—but this is still not enough to identify a totalitarian belief.

One might expect that totalitarian beliefs stimulate a desire to annihilate opposing beliefs, and I suspect they do, but the situation is more complex than a straightforward kill directive. Totalitarian beliefs, in some way, thrive upon opposition and need other beliefs alive to feed upon. I cannot easily justify this claim with empirical data, but you will notice in the rhetoric of totalitarian believers frequent references to opposing beliefs. The need for opposition can be seen, for instance, in the dogmatic atheist who never misses an opportunity to ridicule belief in God; and in the dogmatic theist who needs nonbelievers to go to hell.

In totalitarian systems we will find an identified maligned group made the focus of negative attention. Totalitarian believers see the maligned group as an illness or defect in a system that requires medical attention. They gather around the maligned group, isolate it, and concentrate it in an attempt to prevent the spread of its influence, and imagine that containing this group

will somehow cure their suffering. In opposing the group, the totalitarian believers join together with shared purpose. This process also mirrors an activity of the immune system, this time abscess formation, where a foreign object becomes the focus of an immune response that organizes a new, dynamic tissue structure in the body. I ask that you reflect back on this analogy, and take the abscess to be an organized entity itself, something that strives to persist in the only way it can. Totalitarian belief is a living abscess, and without the foreign object to oppose, the abscess would not be.

Totalitarian believers may latently wish to annihilate opposing beliefs, but doing so would destroy the nidus that organizes and grows the totalitarian belief. The totalitarian harbors a paradoxical relationship; it is born of contradictory desire. Intolerance passionately demands the eradication of the conflicting belief, yet without the enemy belief, the totalitarian has difficulty solidifying into definite form. It stabilizes itself by feeding off the negative potential in opposing the other, and without opposition, would dehisce and fall apart. Although early stage totalitarian believers generally avoid direct annihilation of the nidus group, late stage totalitarian believers will resort to killing once they have extracted all of the living energy from that group.

Not all opposition is totalitarian. Many of us oppose the beliefs of others, yet we do not hunger to annihilate those conflicting beliefs, nor do we preach to others to change their views, fearing the world itself will fall apart if others do not see things as we do. And sometimes we must fight for the good and the right. Opposition accompanies both open and totalitarian thinking, and most us cannot see the organizing forces that allow us to differentiate the two. We cannot identify the totalitarian based upon passionate opposition alone—and attempting to do so will likely breed the totalitarian within oneself. Rather, try to see the contradiction.

For some reason I am hesitant to talk about this next feature of totalitarian belief, even though for me it is the most salient and easily recognizable. I call this feature qualitative elevation, and I suspect all totalitarian belief displays it. It is the contented, self-satisfying way a person takes a belief to be the best of all possible competing beliefs. It does not matter how the person arrived at the qualitative elevation. Some people will have been indoctrinated into the belief and told by masters what is best. Others will have researched a topic for years, and after rigorous study decided for themselves that a particular belief is the best. It makes no difference. Once a person has qualitatively elevated a belief, both the indoctrinated and the learned have moved the belief to place beyond honest critical evaluation.

Qualitative elevations are born and sustained through a positive feedback relationship. Some beliefs, for whatever reason, fulfill us like eating enough of a favorite meal. Simply contemplating these beliefs permeates us with a *feeling* of understanding, regardless of whether we understand anything more or not. The world makes more sense to us. It is the feeling that accompanies knowing, deep within, that something is right or good. This sensation of epistemic fulfillment is not unlike the fulfillment won through good sex, food, or personal accomplishment; and as such, we place a positive value upon it. And just as we value food as good or bad, or say one food is better than another; we automatically apply a similar sort of

valuation to our beliefs with respect to our hedonistic or aesthetic enjoyment of them. Although we logically talk about particular beliefs being true or false, beliefs affect us through feeling and emotion, and pragmatically direct our actions; while the truth of a belief does not influence us at all.

A belief that brings with it a positive sensation—and I grant most of the time these feelings of fulfillment will be rather slight—will be deemed good and better than a competing belief that does not give rise to the same feeling. We may begin to think in terms of better and best with respect to competing beliefs, and imagine that we, through our own valiant efforts and exceptional understanding of the world, possess the better belief. Owning the finest belief, like possessing anything superior, can unleash feelings of pride. The self-satisfying pleasure associated with simply possessing the best belief adds to our innate epistemic fulfillment when contemplating the belief, which reinforces the positive assessment. We might say, although I am remiss to do so, that the content of the belief gives us pleasure; causing us to value the belief above others, which releases feelings of prideful ownership that are partly attributed to the content of the belief, and so on...

We cannot easily challenge a belief caught within the cycle of qualitative elevation. Why would anyone wish to destroy a personal source of unending pleasure release? Rather we protect and nourish these sources. Qualitative elevations in thought take the appearance of worship and devotion in action, and may be accompanied by an unquestioning attitude about the belief's truth and a lack of sustained criticism. We often associate qualitative elevations with the practices of religion, but they are found in all fields of thought.

By itself, a qualitatively elevated belief need not be totalitarian, and we may worship a belief while remaining open to the beliefs that oppose it, yet for many people, elevation leads to a totalitarian transformation. Nonetheless, I do not oppose all ranking and claims that some beliefs are better than others. Be wary, however, to carefully consider what is meant by the better belief. Always ask, "On what domain is this belief better?" And even if one belief is better than another along some domain, this does not imply that the lesser belief has nothing to offer.

Nothing enters the world prepared. Nothing leaves finished. That is the way of this.