

Post-Primate Society

**A New Look At The Human
Story**

By Paul Rosenberg



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*You already have the
information. All the names and
dates are inside your head.
What you want, what you really
need, is a story.*
-- V For Vendetta

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Overture

The dark ages still reign over all humanity, and the depth and persistence of this domination are only now becoming clear.

- Buckminster Fuller, *Cosmography*

The golden age is before us, not behind us.

-- William Shakespeare, *Simon The Zealot*

Humanity is just now hitting its stride, or at least we're threatening to. We approached it before World War I, then suffered through a long, ugly period. Over the past couple of generations, however, our leading edges have started to push through the thorns and weeds, and there's a reasonable chance that we'll make it this time. But even if this attempt fails, one of the generations that follows us *will* make it. Post-primate society is coming; it's only a question of when.

This much is certain, because the development of mankind - of the human race - has been nothing short of spectacular. We have risen so fast that any other conclusion must stand upon a demand for gloominess and depression. The long-term record is clear, and in fact it is shocking.

I'll go through the facts about humankind's meteoric rise in Movement One, but it's one of the more obvious facts to be seen in this world. In fact, the only way people avoid seeing mankind this way is to insist that mankind is not part of the natural world, but is some type of unspecified other, so we can be more harshly judged. Seeing the human as part of nature, there is no getting around the fact that our development spectacularly exceeds that of anything and everything else.

Whoever resents us proclaiming the exceptional nature of mankind (and many do), it's true all the same. Reality

doesn't bend to the demands of the pompous and the imposing.

It's also true that the fundamental drivers of our transition are already with us. One of those is the golden rule. This formulation has been used for thousands of years, by nearly every moral teacher of note, and is used by nearly all of us on a daily basis. If nothing else, we continually see it as, "He wouldn't like it if I did it to him."

I won't make this a treatise on morality, but the golden rule is crucial for two reasons:

- It is universal, comprehensible and effective.
- It leads us directly into post-primate life.

Contrary modes of life and morality are widely enforced, of course, and they, not coincidentally, support primate society rather than post-primate society. And so these contrary moralities chain us to a primate past, rather than assisting us into a post-primate future.

Again, there is more to be said on this subject, but this is not the best place to do so; we need to move on. But the importance of this should not be passed-up: Moving from primate life to an elevated and better life is not something to be sacrificed to loud and imposing voices. No matter how high and mighty the opponent of progress may be, he (or she or they) is to be ignored. Human ascent is far bigger than the potentate of the moment, whomever that may be and however they may glorify themselves.

It's also telling that *chosen* societies (arrangements that people build and maintain because they want them) flow directly into post-primate life. And likewise that enforced societies (with arrangements enforced by those sitting at the tops of hierarchies) are sustaining the primate model of life on this planet. Chosen society cultivates benevolence, confidence and competence, while enforced society generates fear, intimidation and compliance.

Post-primate society, then, is better for the organism, while primate society is better for the machine.

All of that said,, our development will continue into post-primate life, and the facts imply that it's even accelerating.

In this book we will examine the transitions of mankind: from where we started, to where we've come, to where we're going. You'll find a great deal of support for the ideas I've presented here, but first another point should be asserted:

We've already exited our primate phase and are presently in a hybrid phase. *We can't go back.*
Our choice is now between entropy and a kind of divinity.

To be clear, "divinity," as we're using it here, refers to the active and willfull transcendance of entropy, which is a core operation of advancing and advanced humans. But it also refers to the angelic characteristics that form within people who operate this way. However we choose describe these things (and we lack clear terminology), they are real, they are potent, and they are spreading within us.

(*Entropy*, to be clear, is a winding down of available energy: a battery losing its charge, areas of hot and cold becoming lukewarm, and so on.)

In fact, we've know for some time that good habits travel in clusters, reinforcing each other. This is true for things of the mind and things of the body, and for the links between them. For example, we know that exercise, will power and other good habits link together and strengthen one another.

With no way back to primate life, we face two choices: We can become angelic or we can slide into a deep stagnation: into brightly colored concentration camps with endless distractions and a perpetual sound track: where life isn't particularly nasty, only sometimes brutish, and not necessarily short... but where it's all illusion, all vicarious and all externally-derived: where life isn't really life at all.

But while some people will choose this type of entropy rather than divinity, that model will not dominate for very long, since people living that way don't do much except eat, immerse themselves in fantasies, and die. Such modes of life aren't sustainable.

One way or another, post-primate society is coming. It can be delayed (as indeed it has been), but it will not be stopped. And the people who attain it - whether it be us or our successors - *will* resemble angels when compared with peoples of the past.

We should additionally consider that post-primate characteristics are already with us; what we're becoming isn't actually foreign to us. Creativity, benevolence, tolerance, patience, a belief in human dignity, the ability to experience wonder and awe... these characteristics are indeed angelic, and we know them fairly well.

Furthermore, this transition of ours does not demand that we shed our blood, climb impossible mountains, and spend every last ounce of our strength. On the contrary, it requires that we stop wasting our strength on primate-model beliefs. Once we pull ourselves away from the habits that abuse us, our lives will become easier, more productive, more peaceful, deeper, and a lot less frightening.

The model of the primate, to state it briefly, is hierarchy, and the model of the post-primate is decentralized, voluntary interactions. We'll shortly deal with the intricacies of these descriptions, but they will hold. And aside from mankind's religious devotion to hierarchy, we all know that it's a flawed model: most of us complain about it, often on a daily basis.

And so we really are threatening to hit our stride. We have been moving away from dominance hierarchies and into decentralized arrangements that treat humans as primaries, not as secondaries. A great number of us have grasped that we shouldn't live as auto-reaction machines, prodded from one outrage to another.

The "leading edge" noted in our first paragraph refers to movements toward decentralization, and we've seen a long stream of them. We've seen businesses trying to "flatten" and reengineer, the Internet blasting through information bottlenecks, Bitcoin's radical decentralization, Abraham Maslow's findings that human health is inverse to control, Marshall Rosenberg's non-violent communication, free-market economics, the repeating failures of socialist (command) economies, and even the reluctant movement of historians away from the potentates at the tops of hierarchies to the people who grew, built and invented everything.

These and a dozen others are recognitions that decentralized interactions are far more central to human thriving than their hierarchical alternatives. Still more important, even crucial, is this fact:

Decentralized society rests upon human virtues, while hierarchical society rests upon human weaknesses.

If this is true at all (and it's clearly true in practice), it encapsulates our problem: Hierarchical, primate-modeled society requires frightened, confused and compliant subjects. And so, that is what it has cultivated.

Decentralized, post-primate societies require will, action, passion and endurance. And so that's what they cultivate.

Some generation is going to grasp this, and some body of people will enter a better age.

A great transition lies in front of us, and we are quite able to complete it. If we do, our futures will be better, brighter, and far less painful than what our ancestors endured. But in order to reach it, we'll have to overcome inertia, act on our own wills, and push through difficult barriers.

Here, to complete this Overture, is a passage from Ben Hecht's autobiography, *A Child of The Century*. Hecht was a hard case when it came to believing in human goodness; he had previously made a career of exposing and critiquing human stupidities. Nonetheless, Hecht was an honest observer, and he eventually saw that human trajectory was progressive, not regressive; running *into* a better age, not away from one.

Here's his account of that turning point:

A simple fact entered my head one day and put an end to my revolt against the Deity. It occurred to me that God was not engaged in corrupting the mind of man but in creating it. This may sound like no fact at all, or like the most childish of quibbles. But whatever it is, it brought me a sigh of relief, a slightly bitter sigh. I was relieved because instead of beholding man as a finished and obviously worthless product, unable to bring sanity into human affairs, I looked on him as a creature in the making. And lo, I was aware that like my stooped and furry brothers, the apes, I am God's incomplete child. My groping brain, no less than my little toe, is a mechanism in His evolution-busy hands.

* * * *

Paul Rosenberg

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Movement I

The Primate To Human Transition

The evolution of the brain not only overshot the needs of prehistoric man, it is the only example of evolution providing a species with an organ which it does not know how to use.

- Arthur Koestler, *The Ghost in the Machine*

What is man, that thou art mindful of him? and the son of man, that thou visitest him? For thou hast made him a little lower than the angels, and hast crowned him with glory and honor.

-- Psalms 8:4-5

Since “transition from primate to human” implies evolution of some type, and since discussions of evolution tend to become tar pits of dogma, this discussion will stay with the known fossil record and will ignore academic side-theories. And the fossil record is quite enough, showing a specific line of development leading to modern humans.

Before we address that, however, we’ll turn to the primates: animals that share a great deal of structure, body chemistry and even behaviors with us. Our DNA, depending upon whose number you prefer, is about 98 percent the same as that of a chimpanzee. That figure overly dramatizes the situation, but its point is solid: We inarguably share a great deal with the lesser primates.

And so we'll start with an examination of how primates live, and particularly how groups of them live together. It's important to make this as clear as we can, since it supports most of what will follow. And what we'll see is that primates have a clear and particular set of social arrangements – a specific set of ways they interact.

"Primate ways," as best we can tell, have been unchanged for millions of years. These behaviors are clearly rooted in primate chemistry, as we'll note from time to time. That is a chemistry that we humans have inherited.

Now, before continuing, I should address a few housekeeping matters:

- We're going to call groups of sub-human primates *troops*. Many names have been given to the different species' groups, but that's pointlessly confusing, and so we'll stay with *troop*.
- We'll also call non-human primates *lesser primates* or *sub-human primates*.
- *Society*, in the human context, will mean "groups of people who pass what they feel are important ideas through time." Culture will mean roughly the same, usually on a somewhat larger scale. Civilization will likewise mean the same, albeit on the largest scale.
- For ease of communication, I will sometimes use "man" in the collective sense: as "mankind," "humankind," or "the human race." In the same way I'll use "he" in the collective sense, for "they."
- The titles I'm using (Overture and Movements) are drawn from classical music. This was not planned, but was, rather, "just the way it came out." And so I went with it.
- Rather than clutter the text with supplementary footnotes, I've put all such notes at the end of the book. They are listed by page number. That way the text can be read without interruption, while those who wish to dig further can find the material they need.
- I strongly request that when you feel the pointed impact of something you read in this book, you stop reading for ten seconds or more, to let it sink in. It

takes that long for humans to absorb new concepts.
(Thank you.)

What Is Primate Society?

A great deal of time, money and intellect has been spent on observing primates, the goal being to discover their fundamental operating principles. And in fact we've learned quite a bit.

Here, then, is a list of basic findings, taken from *The Primate Origins of Human Nature*, by Carol P. Van Schaik. (Identical themes can be found in many other publications.) Each is followed by a short explanation or comment:

Animals in groups can often be ranked in a dominance hierarchy, based upon who can displace or attack whom and who must flee or acknowledge subordinate status.

This is the basic model of primate life: the *dominance hierarchy*, where a dominating male sits at the top, with all other members of the group finding slots in a sort of pyramid or Christmas tree arrangement beneath them. This hierarchy is enforced with violence. Members of the group may either obey the animal or animals above them in the hierarchy, or be immediately taken as a traitor and usurper. These animals cannot think *traitor* or *usurper*, of course, but their instinctive reactions exhibit that "judgment": they are immediately hostile and without a great deal of nuance.

When a dominant and subordinate both arrive in a fruit tree, the dominant will have priority seating, picking a rich branch and thus forcing a subordinate to settle in at a less rich part of the tree. If the subordinate reads the dominant's plans wrong and enters the branch earmarked by the dominant it will be threatened or attacked.

We see here that for everyone below the dominant, the ability to recognize status becomes a necessity for survival. The lower-level animal who failed to recognize status would receive one beating after another. The recognition of status is effectively hard-wired into lesser primates, and also into humans.

Dominance hierarchies can also be nepotistic, in that relatives tend to occupy adjacent ranks because they support each other in coalitions.

Primates make basic us-them distinctions, which are either hard-wired or some equivalent. They recognize outsiders very well, even those of the same species (*conspecifics*) but not the same local group. This preserves and takes advantage of the status hierarchy.

We also see from this that primates have a mechanism for making binary determinations, like us-them distinctions.

The benefit of being dominant is obvious:
improved access to the limiting resource....
Those higher in the dominance hierarchy gain fitness from their status.

Dominant animals are healthier than subordinate animals. Multiple and very clear studies have shown this. In particular, subordinate (lower-level) animals have higher stress hormones (glucocorticoids) and dominant males higher levels of testosterone. Additional studies have shown that it wasn't the healthiest animals who became dominant, but rather that the dominants became healthier once in their position.

Dominance style [among differing groups of primates], varies on a continuum from despotic to relaxed and egalitarian... It is a gradient in social tolerance by the dominants.

While the dominance model holds across all primates, there is a wide range of dominance styles. As with humans, an exception to almost any specific trait can be found among the lesser primates. Still, the dominance hierarchy holds.

Within seconds following an attack of A on B, B is seen to attack another individual in the group.

Primates pass-along violence and actively defend their positions in their troop's hierarchy. Once slapped down, they must act to reinforce their relative position, or else risk falling further, as well as follow-on attacks. Typically, the larger animals slap around smaller ones, who turn and abuse those who are smaller still.

In many species, females form nepotistic dominance hierarchies where matrilines compete for dominance. Interestingly, females of different high-ranking matrilines may cooperate in attacks on members of other matrilines that threaten one of them. This behavior is in the interest of the high-ranking females, who cooperate despite being mostly competitors, because it maintains the stability of the dominance hierarchy, and thus their high position.

While males assert their power individually and overtly, females tend more toward group actions. There have now been many findings on these actions, and while variations are seen, they hold closely to the model of competing groups. High-status females will exercise influence on dominant males, on their children (including and sometimes especially their male children) and on other females. They protect their family lines. Primate females will also trade sex to males for favors.

To minimize actual violence and to defuse potentially dangerous situations, there is an array of affiliative, or friendly, behaviors that serve to reinforce bonds between individuals and enhance group stability. Common affiliative behaviors include reconciliation, consolation, and simple interactions between friends and relatives.

Primates are not without mitigating strategies; not all is denominated in violence. They habitually groom one another, strengthening the links between them and undercutting violence. In no species, however, has this eliminated violence. (Bonobos have come the furthest, but clearly have not crossed that line.)

It is worth adding that while this text will avoid the harshest passages in the scientific literature, readers should remember that primate behavior is often shockingly and disturbingly brutal.

Now, to round all of this out, here is a set of quotations from professional observers:

Anne E. Pusey, *Of Genes And Apes*:

[Male chimpanzees] strive for high rank and form a dominance hierarchy in which there is usually an unambiguous alpha male plus other males ranked as high, middle or low.

Taken together, observations of aggression to immigrant females, strong effects of dominance, and infanticide all suggest that competition is intense among females.

Dario Maestripieri, *Games Primates Play*:

The females that are born into a monkey aristocracy grow up to be more and more aristocratic thanks to the nepotism of their mothers and other relatives. Those that are born with low status prepare themselves for a life of misery.

Glenn E. King, *Primate Behavior And Human Origins*:

Conflict is prominent in many anthropoids (monkeys and apes) and it has costs apart from the risks of injury during a fight. The loser may be subject to further attacks by the winner and by others within the group.

[Among orangutans...] Forced copulations (rapes) occur and dominant males may provide protection from sexual harassment.

In the poorer habitats... male aggression and forced mating are more common.

[Among chimpanzees...] Serious aggression against highly dominant males emphasizes the importance of alliances and larger coalitions. Some cases display the flexibilities of males in changing sides.

All adult males dominate all adult females and females are sometimes victims of male violence.

[Among chimpanzees...] Female-female relationships, thought less violent, are also characterized by dominance. Rank affects reproductive success by influencing body mass, foraging strategies, and association patterns.

Dominant females travel together and support each other in food competition, which allows them to occupy prime feeding sites.

Every 10 to 20 days a party of 5 to 15 common chimpanzees, all or mostly male, moves quickly and quietly to patrol part of (the troop's) boundary and looks for signs of outsiders... Discovery of a lone outsider usually results in a prolonged attack that may be fatal.

[Among chimpanzees...] Coalitions of older males occasionally attack young adults who seem to threaten them in some way.

With that, we can fairly well put an end to our coverage of primate life, and by extension the basics of our primate inheritance. We'll mention other aspects in passing, but this is the core, and we needn't spend much more time on it.

And so we'll move on to the great moment of human development... the shocking change in the fossil record... the moment when man became man.

What Happened Two Million Years Ago?

Humans are utterly unique among all known species. And, shockingly, we can assign a specific moment when that uniqueness began: A bit less than two million years ago.

This fact, over the past generation or so, has become something which could not be ignored, even though it contradicts conventional evolutionary theory. Our progress has come far faster than it "should have," leaving evolutionary scientists perplexed. For example, here is a passage from Carel P. Van Schaik's *The Primate Origins of Human Nature*:

Even some non-cultural features of humans are sufficiently unique to leave our usual approaches to understanding their evolution close to ineffective.

Or, as Robert Sapolsky writes in his book, *Behave: The Biology of Humans at Our Best And Worst*:

Some of the time we are indeed just like any other animal... sometimes the only way to understand our humanness is to consider solely

humans, because the things we do are unique...
All species are unique, but we are unique in
some pretty unique ways.

Geneticists debate the reasons for this, but the fact that humanity is unique has become inescapable. Something special has been happening in us; something with no real analogs among other species. And so, however much human exceptionalism may be anathema in academic circles (and it often is), something very much like it has occurred, even as Van Schaik notes:

Whatever made us human must have been
something very unusual.

You can see this concretely if you examine ancient skulls and their reproductions at Natural History museums. You'll see that the pre-2 million BC skulls (*homo habilis* and prior) have ridges at the eyebrow level, and that the skulls go directly backward from there. That is, they have no foreheads.

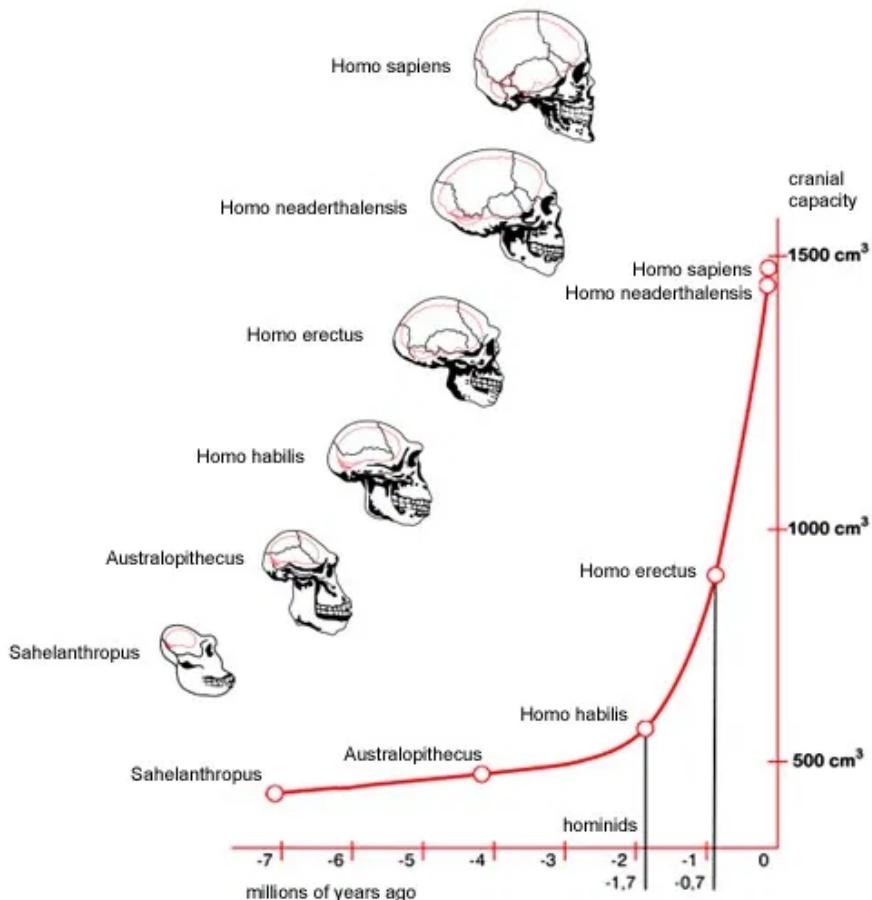
Beginning at *homo ergaster* and *homo erectus*, however – that being roughly two million years ago – the skulls begin to rise in the front. They don't get substantially wider or longer; they rise in the front.

The images below display the change well. Notice the low skulls turning into the modern skull at the top, featuring a high, spacious forehead.

Notice also the graph part of this graphic. You'll see that a long, slow increase in brain size takes off in a "hockey stick" pattern 2 million years ago. But as shocking as that may be (and for evolution, it is shocking) the more crucial factor is the way those brains became bigger. Not all of the brain became notably larger; *only one part did*.

Primate brains have a small (or perhaps *preliminary*) prefrontal cortex, but human brains feature an enormous prefrontal cortex. This is the structure that allows us to do all the advanced things we do. And this structure could not fit into our skulls without that high forehead; the prefrontal cortex fills precisely that new space.

So, please understand that this change in brain type is *the fundamental fact* of human evolution and human behavior.



For some reason, the importance of this very particular and surprising change in human brain size is passed-over in academic publications. (Some exceptions must exist, but I can't point to them.) But that oversight doesn't much matter, because the fossil record is very clear:

Beginning two million years ago, primate brain development took a sharp, upward turn. Old brains morphed into a different type, forcing major changes in the bone structure of the creatures carrying them.

As to what happened two million years ago to initiate this radical change, we simply don't know. Assuredly it would be nice to know such a thing, but just as certainly, we don't.

And what's more, we don't really need to know: So long as we can specify the *what*, we don't have to know the *why*. The knowledge of what happened, reasonably applied to subsequent facts, provides a surprising amount of illumination, and even of guidance.

Primates With Superpowers

As we noted earlier, our bodies share a tremendous amount of chemistry with primates. (Bonobos and chimps being the closest to us.) Because of that, we share a great number of primate influences, as well as associated brain routines. Nonetheless, we are also very different, and the seat of that difference is our prefrontal cortex, which I'll abbreviate as PFC.

And if there's anything in nature that might be called "superpowers," we are the ones who have them, and the thing that makes them work is our PFC.

The standard description of the PFC (again, *prefrontal cortex*, the very front of our brains) is that it "makes executive decisions." That's true enough, but it's also a thin description. The PFC *allows us to interact with ourselves*. Man is uniquely a creature who observes his own thoughts.

The acquisition of a large and very independent prefrontal cortex did more than allow us to process inputs better: It allowed us to process inputs far *differently*. It is crucially important to grasp this:

The PFC opened a new universe inside our minds. It gave us an internal universe.

We humans not only observe the world, we observe ourselves. We watch our mental processes, we change them, we feel good or bad about them, and so on. These are the actions of an *observer*, and that, so far as we can tell, was an utterly new thing.

We, then, are not the same as animals, we are more.

The prefrontal cortex gives us the ability to orchestrate thought and action in accordance with internal goals... in accordance with carefully chosen internal goals... not just in reference to external things, as animals do. Our prefrontal cortex allows us to be conscious of ourselves, which turned us into self-referential and inherently moral beings... into advanced beings.

Now, before I begin to address our new, internal universe, I want you to see what Robert Sapolsky notes, again in *Behave: The Biology of Humans at Our Best And Worst*:

The prefrontal cortex gives us the ability to orchestrate thought and action in accordance with internal goals.

Our Inner Universe

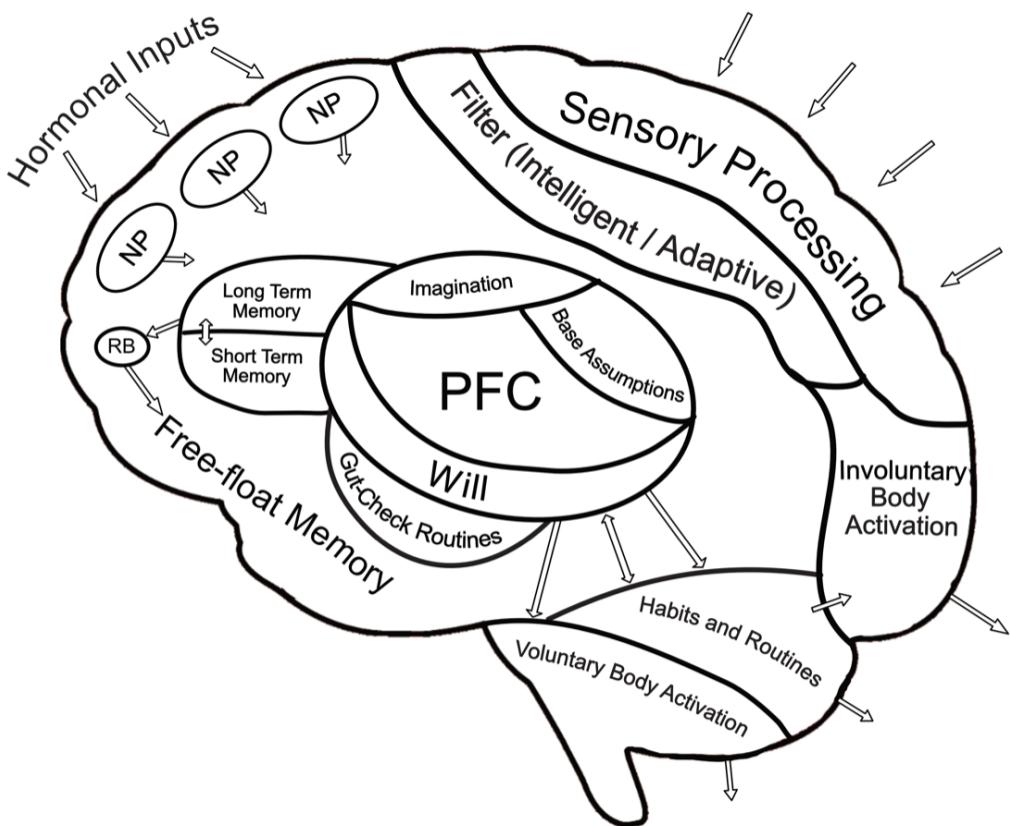
When we humans think – when we converse within ourselves – “we” are seated in our PFC. From there we refer to both our interior selves and to the outer world, even simultaneously. It is in this condition, and only in this condition, that we can do things like recall on demand and to purposely imagine with detail and depth.

This is also why we tend to react more slowly than animals: We add extra steps between observation and action. Playing with a dog, for example, it’s easy to see that their reactions are quicker than our own. This is not because their brains operate more rapidly, or that their muscles respond much faster. Rather, it’s because we process information in more steps; between more component parts.

But though we may be slower to leap, our ability to truly think (our superpower) far more than compensates. In fact, our PFC has brought humans to the place where we have no natural predators. More or less every other creature on this planet has some natural predators, but we don’t. There are the occasional “bear in the woods” stories, but those happen when we purposely leave our intelligently structured environments, and infrequently at that. And this, our elevation above predation, stands in spite of the fact that unlike nearly all other creatures, we are bereft of natural weapons: no claws, no fur, no teeth suited to fighting, and so on.

Below, to aid in understanding the internal universe, is a function diagram of human brain operations. Note, please, that this is a rough drawing (unable to find such a diagram, I was forced to produce my own), and it does *not* display brain structures correctly. The brain-shaped outline is merely to “set the scene,” and not to portray physical brain structures.

What this drawing does accomplish, however, is to display brain operations and their relationships.



Let's start by saying that the necessary component of our internal universe is the *otherness* of our pre-frontal cortex. It observes the other parts of the brain and mind, initiating operations such as finding a memory, running an imagination as if it were a film, or deciding to stop an operation like a looping fear.

The PFC, however, does not stand alone. Our subconscious minds very definitely filter our sensory inputs, so we are not overloaded. As impressive as our PFCs may be, they are definitely not prepared to handle the ocean of sensory input our brains receive. That arrangement simply wouldn't work.

Here are a few notes to help you make sense of the image above:

- The hormonal inputs from our body are shown generating “NPs” into our brains. *NP* stands for neuropeptides, which are protein-like molecules that effectively transfer emotions through the body. That’s a simplification, but this and things very much like it occur as fundamental processes.
- “Gut-check operations” is a representation of something we can notice in ourselves, and which neuroscientists have isolated fairly recently. As neuroscientist Robert Sapolsky describes it, “The frontal cortex runs ‘as if’ experiments on gut feelings--‘How would I feel if this outcome occurred?’--and makes choices with the answer in mind.”
- “RB” stands for “Recovery Bot,” which illustrates the process by which we purposely call for old memories, which are held in what I’m describing as a “Free-Float” condition.
- The subconscious mind involves more than the brain. To begin with, our bodies carry a large Enteric nervous system (distributed mainly through our gut), so extensive that it has sometimes been characterized as a second brain. In addition to that, we have a very significant system of neuropeptides, cellular receptors and associated processes, as touched upon in our first bullet point. I didn’t include these in our diagram for the sake of clarity.
- *Base Assumptions* include the things we assume to be true, and how we expect the world to behave. These, perhaps similarly to “gut-check” routines, color our thinking and choices.

I’m repeating myself, but it’s important to re-state the importance of this interior universe. This is a basic and structural adaptation to consciousness. Our PFC, by being connected to the rest of our brain and yet separating itself from it, is able to use the rest of the brain as a partner and as a tool.

Here are some of the things that became possible to us with our new PFC:

Deferred gratification. We can imagine the scenario that will come to us if we bypass the moment's pleasure and work on with no immediate reward. This was essential, for example, for farming. The seed corn had to be set aside, even when the family was hungry and low on food. It's also necessary for thrift, exercise, education and hundreds of additional things.

Some creatures (notably those who hibernate) do something like this. At best, however, these are one-trick operations; sharply limited actions spurred by instinct rather than decided upon by deliberation. Our delayed gratifications are chosen, adaptable and limitless.

Morality. Self-reference (our internal standards, recall, and imagination) made us inherently moral beings. We are beings who can act according to our own internal standards, or can act against our internal standards. This reference to our internal standards - *and our fidelity to our own standards* - is precisely what the golden rule sets as the division between the moral and the immoral.

Humans run facts through their minds in the first person; from a purely self-interested view. Thus we form decisions on what we believe to be the best available evidence. By assuming others to be like ourselves and running "as if" experiments (*how would it feel if this was done to me?*) we extend our pure decisions to others, treating them as fairly as we treat ourselves.

This *is* morality, and we alone seem to possess it.

Furthermore, this is the engine that drives our massive cooperation. As just a primary proof, consider the things humans complain about: They cluster strongly around people doing to others what they wouldn't like done to themselves.

We are infinitely creative beings. This is true only because our PFCs have opened an internal universe to us. Humans, alone in the known universe, are able to reverse entropy willfully. That is so fundamentally true and powerful that it should be put on billboards.

As I write this, it is sadly common to hear people recounting the ways in which humans are deficient, even comparing us negatively with animals. A rough response might be, "Let me know, please, the next time a team of dolphins builds a hospital or a chimp writes a symphony." And while perhaps too harsh to be useful, this response illustrates the immense benefit we gained with our superpowered brains.

Creative beings, such as we are, are beings of a fundamentally different type.

The rest of our brain is now open to training, communication and we don't know what else.

This is an area where I believe a great deal lies in front of us. Our relative lack of progress in this area is likely the result of two things:

1. We generally had little reason to dig into this, being overburdened (as most of us were for most of our history) with our daily work, raising our children, dealing with difficult relatives, a lack of rain or shipments, and so on. Those of us who spent a good deal of time in spiritual endeavors have occasionally stumbled upon this, but usually indirectly.
2. Over the past few centuries, we've been led to fear our own minds. The phrase, "the depths of the subconscious," leads most people to expect dark, animalistic and embarrassing things.

That said, we've already learned to train our subconscious mind. Everyone who has created a new habit has done so. I like to use the example of folding your hands (interlacing your fingers). Undoubtedly, you do it one specific way, but that habit can be changed with four weeks of diligence. After that you'll fold your hands the opposite way, and probably for life. You will have used your PFC to train the rest of your mind to do this a new way, which will no longer require conscious thought.

We also see this in creativity. Creative people learn, mainly by accident, that if they feed needs to their subconscious, a solution will appear in their minds,

seemingly unbidden. This is another use of the subconscious, chosen and initiated in the PFC.

And so I say again, a great deal of fallow ground lies here.

Our Primary Posits

A posit, of course, is a statement that we propose for consideration... a statement that we intend to support and/or prove.

The two posits I am making here are simple, and they fit the observables. That's not full proof, of course, but it's a strong step in that direction. It's also the case, sadly, that properly proving things that began millions of years ago can be difficult. Nonetheless I will proceed, and will illustrate why these things, or things very much like them, have occurred and are occurring:

1. Humans behave precisely like primates who had a pre-frontal cortex dropped into them.
2. From this, we can identify human institutions and actions as direct effects of posit number one.

Taken together, these two posits illuminate not only a great deal of our past, but our future as well.

The Terror of Being Human

Thus far we've noted the immense abilities of our new species, and the tremendous possibilities in front of us, going so far as to call them divine, or at least quasi-divine. But that's not all we've been given. Our new abilities have also generated deep and serious problems for us.

Judging from the most outward appearances, we are clearly a super-species. And yet, many of us are miserable a great deal of the time. So miserable, in fact, that some number of us will end up killing themselves to escape from their advanced lives. Animals do not do this, because they lack an inner universe capable of producing that much pain.

As unpleasant as this may be, the fact of suicide is a telling one: To overcome the instinct of self-preservation, solely to evade internally-generated pain, requires a lot of force. And from this we see the strength of the internal universe... the incredible voltage it can generate.

Please consider the situation this way:

In a single stroke (by gaining an internal universe) humanity fell heir, not only to tremendous inner joys but to horrifying inner torments.

Having an interior universe means that we can imagine infinitely. And so we are able to imagine an endless stream of either good or bad outcomes. And it's also the case that dark imaginings come more easily to us than bright imaginings, again because of body chemistry we inherited. Upon seeing a distant and dimly-lit figure, it is far more likely that our first impression will be *bear* rather than *tree trunk*. We are, that is to say, hormonally primed (by something like a two-to-one margin) to recognize fears rather than opportunities.

And so, dark imaginations, if we allow them to, can run through our minds forever. That differs fairly little from traditional ideas on the torments of hell.

What the PFC gave us, then – in this area at least – was a gaping vulnerability... so great a vulnerability that it causes a significant number of us to kill themselves.

In the overall, the gifts of the PFC are far greater than the drawbacks (especially because it allows us to solve or mitigate those drawbacks), but there are significant problems with our gift: Along with new possibilities, entire new classes of vulnerabilities opened within us.

Man The Hybrid

Humans, if our first posit holds, are no longer simply primates: they carry primate influences, but those influences are now forced to operate within a different type of being. Humans, then, are hybrid beings: partly primate and partly more.

What we particularly see in humans, not surprisingly, is the *abstraction* of primate behavior. That is, human brains are able to process mental things as animals do real things. We can, and often prefer to, work with mental things as well as physical things.

As a first example, consider that humans love using metaphors, analogies and other figures of speech. We do something well and say, “I hit a home run on that one,” or

we make a notable mistake and say, “I guess that was a self-goal,” we are pleased to see that other people join us in “getting” the meaning. It makes us feel connected to them when they share the abstraction. (This plays a similar role to grooming among lesser primates.)

And here’s an example that runs deeper than conscious thought:

The brain region called the *insula cortex* is, in both humans and animals, the seat of disgust, as in the instinctive spitting out of bad food. In humans, however, it is also activated by disgusting circumstances... of innocents being abused and so on.

This, truly, is rather shocking. We are seeing physical areas of the brain responding to mental stimuli in the same way they respond to *corresponding* physical stimuli. In other words, our new brains recognize and respond to abstractions... *they get the meaning*.

If you examine this a bit, I think you’ll find it astonishing, and we’ll be seeing many examples of this going forward. It turns out to be a fundamental factor in human behavior.

Here’s just one more example:

Male primates get a testosterone boost from dominating other primates... from beating them in physical combat. But in humans, abstract dominance does the same thing. Winning at anything from athletics to chess to the stock market boosts our testosterone levels. Even your favorite sports team winning raises your testosterone levels.

(It is also worth noting that when the victory comes merely by luck, the testosterone rises little or not at all.)

The Binary

Earlier in this section we noted that primates are notably good at making us-them distinctions: *Our group* versus *not our group*, even among animals of the same species. Aside from male-female, this is the strongest and most specific distinction that primates make. And, importantly, both of these are binary choices: picking between one or the other, but not a third option.

Binary, of course, is the simplest form of distinction; the method of differentiating things which requires the least processing power.

And so, in another abstraction parallel, we see that the simplest, most primitive and easiest abstraction for humans to make is the *binary opposite*. This is seen very clearly in word association tests, where the fastest and most common answers – answers that require almost no thinking at all – go like this:

Hot. *Cold*.

Happy. *Sad*.

Hard. *Soft*.

Left. *Right*.

Wet. *Dry*.

We, then, are hybrid creatures, running primate impulses through more evolved systems. We operate in a hybrid way, partly as primates and partly as higher beings.

On one hand this can seem seems degrading, having so very much monkey circuitry in us. But on the other, it is massively elevating: If we can understand what's really going on in us, we can move forward much better, becoming advanced creatures more quickly than we had imagined. And, as you'll see further on, the fact is that we've been evolving faster and faster. Humanity is not the same as we were even a few thousand years ago... in some cases even a few centuries ago. *We are becoming better.*

The Trap

Humans, as nearly all of us have noticed, tend to feel threatened by new and different ideas... by that to which they are not already accustomed. Said another way, most people are biased toward stasis... toward *not* changing their arrangements, interior or exterior. It sometimes becomes trendy to uses phrases like “outside the box,” but such phrases are mostly for show; substantial change is routinely opposed... instinctively opposed.

Change occurs nonetheless, but it requires suffering and endurance on the part of whomever originates the change. (Not all the innovators and innovations make it.)

This is an old problem. Jesus had to fight it (“one doesn’t put new wine into old wineskins”), Thomas Jefferson noted it as an obstacle to be overcome (“ all experience hath shewn that mankind are more disposed to suffer... than to right themselves by abolishing the forms to which they are accustomed”), and forward-thinking people world-over keep running into it.

Humanity, that is to say, has a problem. In simple terms, they are stuck in a trap. And as it happens, that trap is built with primate materials and functions via primate influences.

An easy way to begin this conversation, and an entirely fitting one, is with another comment from Van Schaik’s book:

Among non-human primates, skew [in access to resources] arises because dominants take larger shares, either by force or by threat of force. In humans, similar processes ensue.

The primary organizing principle of human life, even in our technological age, remains the dominance hierarchy. That is, nearly every living human is held within one or more dominance hierarchies. Nation-states, to be blunt about it, are little more than elaborate primate troops. The facts are plain to see, provided that we’re able to see:

Primate life involves layers of status and privilege, with big animals at the top, punishing those who fail to obey.

Human life involves layers of status and privilege, with rulers at the top, punishing those who fail to obey.

As we noted in our Overture, some generation will summon enough courage to face this obvious fact; they’ll acknowledge the sameness of primate organization and human organization up till their time.

Escaping a recognition of that sameness (by whatever clever ruse) does not negate the sameness.

In more or less all human governance the primate model holds. If there is a monarch, he or she fills the top spot, followed by nobles as a second level, and others finding slots below. In a modern democracy, a small ruling group sits atop

the hierarchy, with associated groups below them and the general populace filling in the structure beneath.

This model has remained intact through monarchies, democracies, communist regimes, theocratic regimes, and indeed every variant of the few ruling over the many. Justifications for this primate model – everything from the divine right of kings to the assertions of Rousseau and Hobbes – change nothing: The fundamental operating statement of every “few” ruling over every “many” has been identical: *Do what we say or we’ll hurt you.*

That said, we’ll save the details surrounding this issue for Movement Two. For now we’ll continue with our explanation of the trap.

There are external elements to the trap, but they are useful mostly because they trigger more powerful, internal elements. The inner man, the inner life, is capable of producing tremendous levels of pain. (As noted above, painful enough to drive significant numbers of humans to suicide.) Keeping humans immobile, then, is better accomplished with the manipulation of their inner life than with naked threats.

Here’s something you’ve doubtless seen and felt:

For you to change your mind on an debated issue is to condemn yourself as having erred in the past.

We know what we said, of course, and we know to whom we’ve said it: perhaps to our children, or perhaps in public. Instantly, we feel the risks associated with changing such an opinion, leading us to escape the question altogether.

Here are some common examples of such risks:

- We feel that by changing, we’ll have to admit that we misinformed our children; that we’ll be responsible for the suffering they endured because of it.
- We recognize that an opponent will now be able to condemn us for hypocrisy, and to make us suffer for it.
- We fear we’ll lose standing in our own eyes, having prided ourselves on our rightness. We may also fear that we won’t be able to repair that loss of standing.

- We fear that the entire troupe may be turned against us by those at its top. We know that they can be powerfully influenced by those with status, and that a local crowd (or even the rest of the hierarchy) can be made to despise us. That, in turn, would disrupt not only our livelihood, but our mating success and our children's success.

The pressures generated internally, then, are profound, and they make exiting the trap a frightening process... a process that could turn the entire troupe into a weapon. Within this process, what would otherwise be simple, stand-alone errors, are turned into *self-protecting* errors.

There is a great deal of clinical evidence for all of this. Perhaps the clearest piece was Solomon Asch (with many successful replications) proving a strong tendency for humans to conform with high-status individuals.

Social critics have noted the same, as in Simone Weil's comment that "conscience is deceived by the social."

Beyond that (more than enough by itself), there is another major aspect of the trap, one that runs even a bit deeper: The instinctive, even hormonal, cost of leaving the troupe.

Not only have we inherited primate chemistry that reflects ten thousand generations of primate life within a troupe, where breaching expectations leads inexorably to being beaten or primed for a beating, but humanity has likewise spent a couple of hundred generations under very similar conditions. We understand, on at least some level, that "the nail which sticks out gets hammered."

Whether or not they've ever analyzed this, people understand that there's a *troop-not troop* line, and they usually have a clear understanding of where it is. As they see themselves stepping over it, they are all but certain to receive a surge of stress hormones... the same hormones that affect primates.

By all of these influences, humans are held within the trap.

And so we see that the human, despite his advanced abilities and even as a consequence of his advanced abilities, is in a difficult position. He is at the same time far better and far more vulnerable.

And Yet, We Rise

The trap is a problem, to be sure. That's been especially true over the past century, as entire classes of professional manipulators have used scientific research and new technologies to maximize their power.

And yet, our trajectory remains forward. We remain creatures who willfully create. Consider this observation from a business consultant named Gary Hamel:

As human beings, we are the only organisms that create for the sheer stupid pleasure of doing so. Whether it's laying out a garden, composing a new tune on the piano, writing a bit of poetry, manipulating a digital photo, redecorating a room, or inventing a new chili recipe - we are happiest when we are creating.

Mr. Hamel is quite right, and this characteristic is not abating.

We are less tolerant of brutality than we used to be, and even our brains are more powerful than they used to be, having increased in size by 15 percent since the black plague of 1348 AD. That's an astounding figure, but it comes from direct evidence. And this is merely our short-term trajectory.

Long-term, as we noted in our Overture, we've come so far that we can't really go back. The fact is, that at some point in the distant past, good triumphed over evil in the human species.

This is not to say evil has vanished, but among the vast majority of humans, evil is unable to win an open confrontation with goodness. And this triumph holds. Humans, aside from a very small percentage, will not openly do evil, or even contradict themselves very deeply. When they do evil, it is because they were *tricked* into it.

In order to be reliably used, humans must be convinced that their actions serve goodness. Even the worst agents of destruction upon Earth - from Stalin to Hitler to Mao to whomever is next - presents their plan as a good thing, necessary to protect children, the motherland and so on. This illustrates a powerful fact: The human morality

mechanism (built on self-reference) isn't even being challenged... that challenging it no longer works.

Evil in our era can succeed only with confusion, misdirection and illusion. Like the work of a stage magician, it relies on smoke and mirrors... and the house lights are coming up.

Once an understanding of the things we've covering here roots and spreads, our present epoch of confusion will end, and resoundingly.

And just in case this entire argument may seem too new and different to be true... that our behavior couldn't really be that affected by primate stuff... I'll conclude with a brief comment from neuroscientist Robert Sapolsky, penned as promotional copy for a book called *Games Primates Play*:

At the end of the day, there is no social interaction of humans that does not bear the imprint of our being a species of animal, of primate, of ape.

So, yes, it really is that way. But once we see it, the tricks that have kept us within primate structures will stop working. The trap will break and we'll be free to move forward.

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Movement II

The Tumult of The Hybrids

I decided man was operating on a fundamental fallacy: that he was supposed to be a failure and therefore had to prove his right to live. I decided that man was, in fact, designed to be an extraordinary success.

- Buckminster Fuller

Having covered the deep past and a preliminary explanation of why our world is the way it is, I'd like to move into some greater detail. I am doing this for four reasons:

1. To establish the points made earlier.
2. To illustrate how primate characteristics were affected by the prefrontal cortex, spawning hybrid characteristics.
3. To give you a deeper understanding of the forces affecting you.
4. To establish our trajectory forward in more detail.

Our era, and indeed all of the historical era, has been a time of better and worse influences, mixed up and swirling around one another. And, of course, this could have been predicted long ago. "If you're going to drop a prefrontal cortex into a group of primates..." an intelligent observer might have said two million years ago... "If you're going to give them an inner universe, then you can expect a long,

sloppy transition from the ways of apes to the ways of angels.”

And that, of course, is precisely what we’ve had.

Now, before we get to the meat of this Movement, I want to make an important point about dealing with the choices we’re implying here. And the essence of it is this:

The purpose of all this is *not* to setup a moment of conversion: leading people to condemn their past lives and to surrender to something better.

Rather, this is about *renovating* our lives, building insight and intelligence into them.

And so, nothing in this book should be seen as assuming conflict and dominance: that’s precisely what we’re walking away from. The model of improvement this book seeks to establish is one of organic growth: *First the blade, then the ear, and then the full grain in the ear.*

Our old ways are things to transcend, not things to bemoan, and not things to punish ourselves over.

Our job is to be honest and to recognize, as Eric Hoffer put it, “some unlovely things about ourselves.” But rather than condemning ourselves or blaming others, we’ll do far better if we merely sigh, shrug and even laugh at the absurdity we’ve come to grips with, then go about to improve ourselves.

We cannot help that we inherited certain unlovely characteristics: we were born into this. But we also have magnificent characteristics. Our job then, is to recognize, appreciate, engage and improve our transcendent characteristics. Yes, we’ll also recognize some primitive characteristics, but our labors will not be to shut them down, but rather to make them obsolete.

Our Progress

We’ll begin by looking at our progress. The changes that occurred in the first first 1.9 million years from the birth of the prefrontal cortex are fairly opaque to us, and having already occurred, are not direct concerns of ours. And so we’ll focus on more on recent times. Still, we should take a moment to appreciate the depth and scope of the progress we were gifted from the ancient days.

These were such wonderful gifts that I feel my words are insufficient to describe their import. We have a tremendous amount to be grateful for, which we're just now starting to recognize. Here are what I see as the key pieces:

- **The PFC gaining what appears to be a final form, and especially its otherness to the rest of the human brain.** It seems that our PFCs continue to grow, but are no longer changing form. We can't be certain of that, but so it appears. The PFC becoming "other" to the rest of the brain was another essential and monumental step, but we simply don't know how and when that happened.
- **The PFC gaining complex routines.** Looking back to the brain function diagram from Movement One, you'll see a number of brain operations: Memory recovery, the initiation and control of imaginations, gut-check routines and so on. Again, these were essential and monumental steps, but we simply can't tell where in the process, and how, they came about. There are probably many of these routines (and probably associated routines spawned in areas outside the PFC), but so far as I know, no one has gone about to study them.
- **Language.** Humans are pre-wired for language. How this happened, we don't know, but it was clearly in an ancient era. (We do know that our thoraxes had to change so we'd have the breath control required for speech.) Think for a moment on the consequences of language; they are immense. In order to share our advanced inventions and operations with others, language is all but essential; nothing else would be half as effective.
- **Hyper-variability.** *Hyper-parallellity* might also be a good term for this. Humans can function within a large number of groups simultaneously. We are hyper-cooperative, and can function as parts of multiple groups at the same time... even groups that oppose each other to a very large degrees. We don't know what caused this or when this began, but the fact that we can cooperate with and in multiple hierarchies at the same time makes us resistant to the hard, binary

groupings that leave primate troops (and especially at the borders between troops) in permanent states of war. The more parallel, variable and cooperative we are, the more primate characteristics fall away.

- **The enjoyment of brain activation.** Regardless of the facts that brains use a tremendous amount of energy, and that nature prefers avoiding energy expense, humans get a tremendous degree of pleasure from brain activation. When listening to music, for example, the involvement of more brain areas corresponds directly to our enjoyment of the music being played. The same happens when we're drawn into a mystery, or in the thrill of discovery. Somehow, we've come to enjoy deep brain activation, which biases us (and strongly) toward further growth.
- **Moral sensitivity.** Human infants, it has been studied and learned, have a bias between moral failings of commission versus omission. Again, how and when eludes us, but we have inherited this.
- **The ascent of self-reference.** As we noted in Movement One, the human mechanism of morality – our unique and ever-active self-reference – has become so determinant that it is no longer directly challenged, even by the most purposeful and intelligent manipulators of our race. Naked inducement to destruction simply doesn't work on the vast majority of us. Humans can still be tricked into vile action, but there needs to be some kind of deception involved (most commonly a combination of confusion and fear), but directly challenging morality no longer works.

These things comprise what we might think of as our solid base; our secure (and thus no-going-back) foundation. There remains some two percent of the populace that is short or absent effective self-reference, and there is certainly quite a troubling amount of effective manipulation afoot, but our foundation itself is solid.

Now, having arrived in our own era, here are several additional areas of progress:

- **Benevolence unbound.** Humans enjoy tremendously loving and benevolent relationships, not to mention very long-term relationships. Long-term, male-female mating (marriage, regardless of legal recognition) is a human universal. Humans pair-up, despite sometimes powerful propaganda and incentives that oppose it.

Further, it is clear that the vast majority of us are both happier and more productive in such a relationship. Married people, among other things, have more satisfying sex lives, live somewhat longer than those who don't (particularly if they have children), and so on. And they certainly tend to have a more satisfying old age.

On top of this, families powerfully engage our internal standards. We know that, to a very large extent, we can trust members of our family. (Despite our sometimes legitimate gripes.) Inside our families, we interact with a great deal of consideration, or at least loyalty, which massively reduces the entropy of our lives. We know that we can trust an older sibling (or aunt or grandparent) to take care of our infant. And so on, at length. Because of this, we can enjoy the benefits of high-trust cultures, where the enforcement of norms can be taken for granted, rather than enforced at great expense.

Concurrent with unbound benevolence (and again, how and when it arose are open questions), have come major differences between pre-human and human primates. Our faces are more open and far more expressive. Our bodies are built for endurance rather than strength. Our sexuality is continual rather than seasonal, human women (alone among primates) experience menopause, and so on. We've become physically different.

- **Reciprocity and reputation.** There is reciprocity among lesser primates, but at a fraction of the scale of human reciprocity. Moreover, humans regulate this reciprocity with something entirely foreign to lesser primates: reputation. Our minds are quite sufficient to retain, sort and update reputations, which lesser primate brains are not. And we do a tremendous amount of this.

Reputation guides a great deal of our thinking and choosing, and we put a good deal of care into the maintenance and sharing of reputations, and for good reason: Reputation is a sort of distilled trust. And trust allows us to be hyper-cooperative without the debilitating mental overload of hyper-vigilance.

- **Open grouping.** In our Overture we mentioned the contrast between chosen society and enforced society. Primate life features strictly enforced groups: you're in or you're out. And if out, you're likely enough to be killed. Humans, on the other hand, are hybrid beings: if left to their own devices, they prefer chosen society to enforced society. Forced grouping exists, of course, but mainly as few-ruling-many, top-down operations (where they are accompanied with poor results). Absent the imposition of enforced grouping, humans prefer open and chosen grouping; it's simply easier and more pleasant... and is accompanied by better results.
- **Cumulative culture.** Human culture is cumulative: our discoveries spread, are remembered, are improved upon, and endure over hundreds of lifetimes. Consider metallurgy: It began in earnest at least six thousand years ago and has never gone away, despite the fact that only a tiny percentage of us have had a hand in its development. The knowledge was passed down, and very successfully.

There are myriad examples of this, of course, and it's an utterly unique human characteristic. Because of this, each new surge of human creativity builds upon a better base: We are continually moving forward and upward, to the point where we are, to a quite significant degree, taking part in our own destiny.
- **Individual rather than collective religions.** The early religions - of the Sumerians, Babylonians, Romans and so on - tended to be collective. What this means is that the god, when insulted, would punish an entire city at once. This, of course, embodied the model of the primate troupe: thinking of a hierarchical and collective unit with thousands or millions of people as a single entity, to be rewarded or punished.

Beginning with the Hebrews (and perhaps a few others), individual religion took shape, where only the person who had sinned would suffer, not an entire city. By 500 BC this idea had become strong in what was now Judaism, from whence it passed into Christianity, now the largest religion in the world.

Individual religions tend to subvert dominance hierarchies (the Hebrew God spoke to the powerless, and *not* to the powerful) and establishes individuals as the essential unit in the eyes of God.

This concept (and the related “justice stands above the ruler”), freed men’s minds to perceive more directly and to create with far less fear. When your new and better idea isn’t pre-authorized by the beliefs of others – and with otherness being suspect – to pursue it places thousands of people at risk rather than just yourself. And regardless of whether the creator believes this, those around the innovator will restrain him or her, in ways ranging from subtle to violent. And so, humans freed from those impositions have created more than those remaining bound by them.

- **Productive values.** Among modern humans, *values* (ideas and behaviors we believe in and expect) arise from two primary sources: from dominance hierarchies or from productive individuals. Values spawned by dominance hierarchies serve those dominance hierarchies, while those spawned by creativity and production serve creativity and production.

Values spawned by production treat humans as primary and essential, while those spawned by hierarchy treat humans as secondary and expendable.

Production... effective work... requires broad-spectrum and uniquely human activities: continuous cooperation, holding in mind what others are doing, and working toward shared, final goals. It requires long chains of decisions, made by and remembered by individuals. It moreover requires that all these things are accomplished “on the fly,” without stopping the work flow. These are highly advanced processes, but

humans (and recall our point above on the enjoyment of brain activation) feel a great deal of satisfaction from having done this.

Production-based values, then, set up a virtuous cycle. This is a *post-primate* arrangement, spawning further virtues, such as persistence, dedication, reliability and endurance. By partaking of this, we further learn responsibility, because if we fail to do the hard things, dozens or hundreds of people may be affected.

By these virtues, we earn and learn self-pride; we see that we are beneficial and necessary beings in the world.

- **Initiative.** Taking action based upon one's own judgment of needs and possibilities is an essential form of post-primate living. The primate troop operates in precisely the opposite way: a certain number of actions are allowed, and whatever is not pre-endorsed is forbidden.

Initiative presumes that the individual is capable of seeing and understanding the world surrounding him or her, and is capable of changing it directly.

Compared to the dominance hierarchy, it multiplies the number of active and creative entities. And so, within a cumulative culture (see above) initiative leads to a massively larger number of inventions: social, technological and otherwise.

Initiative pre-supposes that individual humans are and ought to be primary entities, not derivative entities. Every instance of initiative extends this supposition and sows its seeds.

- **Free commerce.** Commerce, no matter how maligned by dominance hierarchies and those beholden to them, improves human life far better than any rigid hierarchy ever has or ever could. Market commerce engages not only human needs and creativity, but human virtues. There is a great deal to be said about this, but others have done that job and I won't repeat it here, save to say that free markets – mechanisms of exchange without executive control – provide an environment in which human virtues can thrive with a minimum of opposition. And again,

within a cumulative culture this leads toward escalating progress.

- **Individuality.** Born into the world by the otherness of the PFC, individuality – a sense of one's self as a complete and primary unit rather than a partial or derived unit – is a sharp departure from the troop, where nearly all animals are sub-units, and where even the dominant animals could not exist as they do without the troop.

We see human individuality in all of the ways mentioned above, but also in making things sacred to one's self ("This I believe and will act to preserve") and in the taking of personal responsibility.

Taking responsibility (purposely assuming the responsibilities of parenthood, etc.) is openly heroic. And again it's a step directly out of primate life and into post-primate life. More than that, it is a confirmation of individual worth rather than collective worth.

Heroic responsibility combined with holding things sacred is seen when people are courageous enough to stand against a crowd and to say "No, what you're doing is wrong." That is one of the most counter-primate actions a human can take, and it carries a particular euphoria with it. (Which we particularly feel once the stress of the action subsides a bit.)

It is also the case that the usual *alpha-beta* (dominant-subordinate) model of primate life has become an *alpha-beta-gamma* model among humans. Many of us step out of the old alpha-beta model (hence *gamma*), wishing to be neither lord or serf, separating ourselves and living as free agents upon Earth. This again is a step into post-primate life.

Midlings And Variables

Before moving into the problems we live with in hybrid society, there are a number of middling issues that are worth covering. This is a rough collection of in-between effects of the long-term process we're in.

- **Expectations.** Humans are very sensitive to the expectations of others. This is the result of having

brains capable of holding complex images of many people at once. We're each capable of holding deeply detailed images of at least one hundred people, and perhaps two hundred. And when I say "deeply detailed," I mean that I can hold an image of "Suzy," that contains my understanding of what she thinks of her children, her husband, how good she is at a variety of things, what kinds of food she likes, whether she's an early or late riser, and so on at length.

Further, we are deeply affected by what other people expect of us; we pick up those expectations subconsciously and frequently bend toward them subconsciously. This runs deeper and more powerfully than we've generally understood. I've yet to see a clear explanation of how this works, but it clearly does work. Studies conducted in schools showed students scoring as much as 27 percent higher on tests when their teachers had been (randomly) told they were exceptionally bright. What the teachers expected was how the children performed.

- **Mythology.** Defining mythology can be difficult, but the kinds of complex stories we tell are far beyond anything primates can do, and of considerable effect. It's interesting that the stories of the earliest religions mirrored the dominance hierarchy quite closely, with terrifying gods who needed mostly to be obeyed. After the old tyrannical rulerships were rejected, however, differing mythologies arose, notably from the Greeks and Hebrews. These feature something outside a hierarchy to look to.

Precisely how these changes have affected us, and how they are changing over time is an unexplored subject, as best I know, but a worthy one in my eyes.

- **Self-stories.** Clearly primates do not do this, but we tell ourselves a great many stories, and endlessly. Again this is a little-studied subject, but at a minimum we tell ourselves stories to help balance ourselves internally. And that can be a very healthful thing, or a fairly bad thing, depending upon the quality of the stories we use and how repetitively well tell them.

- **Affiliation Signals.** Affiliation, to lesser primates, is a life or death issue. For us it is generally far less dangerous, but it is still something we notice. In subtle ways, we identify ourselves as friend or foe to certain ideas (political ideas being among the most common in our time). We do this to comfort others, to let them know that they're not going to step into an argument with us, or in still other ways.
- **Play.** Primates play after a fashion, but they have nothing like sports, and they very certainly have nothing like team sports. Only humans do those things. Team sports, especially, involve complex mental process and complex, continual adaptation. Here again we see the enjoyment of multiple brain areas being active at the same time.
- **Internal complexity.** Simple, we are not. And so human nature is not one thing – as in good or bad – but many things, all mixed together and forever sorting themselves. The common comparisons of people to machines... seeing humanity as a thing or things mechanical... is much mistaken. We are hyper-complex, self-adjusting organisms, not machines.

Vulnerabilities

With two sets of powerful influences running in us at the same time, it should be no surprise that they have caused conflict in us, opening vulnerabilities. Here are some of them:

- **Finding refuge in abstraction.** We have powerful minds that not only think abstractly very well, but also enjoy it. When that's combined with a primate's compulsion to stay safe firmly inside a hierarchy... to attain safety by remaining within a collective and not angering its dominant members... we get hybrid beings who find refuge in abstractions.

Consider also that we are self-referential beings, observing our own thoughts and actions; additionally with a need to feel good about our actions. That again leaves us vulnerable, because simply bowing down to power brands us as cowardly, and we're too intelligent

not to notice. In this predicament, taking refuge in a set of abstractions saves us from a frightening choice:

If we simply cower before the dominator, we condemn ourselves, because we're no longer primitive beings: we're already fairly advanced, and on our way to much more. Moreover, the seed of that advanced state is already within us.

If we accept consciousness without apology, we won't just anger power, we'll anger every other person who's seeking refuge from power: we'll make them look like cowards.

Finding refuge in abstraction, then, is a respectable-looking middle way: Still problematic, but far less dangerous.

This, to be honest about it (and I'm taking the risk of writing without safety filters), is a fundamental problem. But again, the condemnation of cowardice is wrong: it's what we feel, but it isn't fair. We were born into this situation, surrounded by people slightly less developed than ourselves, certainly more confused about the world, and who were stuck deeply in the trap. This isn't properly our fault.

Nonetheless, getting out of the trap *is* our problem, and so we can benefit by recognizing what has been happening to us. And so we'll continue.

- **Authority.** Authority is the more acceptable name for "the scary dominator." The word is sometimes used differently, but this is probably the most common use. In actual application, authority (a very abstract term) is an outsourcing of our thinking. Once authority speaks, our mental processes stop and we prepare to act as it dictates. This disrupts our advanced processes and locks us within abstraction... within hierarchies built of abstractions. And please note that this is greatly empowering to those at the tops of hierarchies; in particular it allows them to escape the difficulties of making reasoned (and analyzable)

arguments: Authority compels that which cannot be compelled by reason.

In this we also see why humans are so quick to see power as legitimate. They require a reason for their ongoing compliance that goes beyond “they’ll hurt me if I don’t.” Again, this is because we are self-observing and self-comparing beings. And so people are quick to grab justifications for doing so: the necessity of the god-king in the ancient era, the divine right of kings in the middle years, and a wide variety of modern variations. All are of dubious quality, but all have been needed.

- **Rules.** Rules are the voice of the abstract entities: authorized voices with power behind them. This is a difficult concept in our present age, since we’ve been trained to see rules as saviors: that without them all would be chaos and death. But that’s a subject I’ve written about in other places, and so I’ll pass over it here, save to say this:

Humanity has been seeking
improvement via rule-keeping, very
assiduously and for a very long time.
If it worked we’d be angels by now,
but we’re not.

Rules flow right into the fundamental problem we opened this section with: When we delegate our judgment to a set of rules, they stand as the responsible party, saving us from exposure: we kept the rules, and so it’s not our fault.

More than that, rules displace our usage of the golden rule, which engages our consciousness, places it in a position of central importance, and in the process calibrates us internally.

- **Separation anxiety (fear of aloneness).** Having the advanced characteristic of a tremendous imagination, as well as the primate characteristic of seeing dark possibilities with double the intensity of bright possibilities (as we noted in Movement One)... also carrying the influence of a thousand generations of group living... people have what seems to be an inordinate fear of aloneness.

Certainly a fear (or concern) over physical aloneness was a very practical matter for the whole of primate history and the bulk of human history. That, however, is not the fear of aloneness we're addressing here: This is a fear of separation from the tribe: a deep and biting anxiety of being without a tribe.

For the reasons covered above, humans are overly-attached to their abstract entities, and suffer a great deal because of it. They are willing to suffer tremendous amounts of abuse (see the Thomas Jefferson quote in our Overture) rather than leaving the hierarchy that punishes them. Being outside feels far worse to them than suffering on the inside.

I won't examine this in detail, but I think we've all seen it: People are deprived, tortured and killed, and yet the hierarchy that did it receives the benefit of every doubt: It must be one rogue agency, a few bad apples, and so on. Blaming the troop itself would be a step too far, calling to much into question. And so they go on suffering.

But this bias has another set of effects: It confirms to the dominants (the power-holders) that they can get away with almost anything. And so they proceed boldly. It also confirms, to those employed in such things, that the group they enforce rules for is "the great one;" that malcontents are merely noxious swarms. Within *that*, malice appears as duty and loyalty. Soon enough they can kill, thinking that they are doing God a service.

- **The Stupidities of Success.** Dominance is subject to its own unique feedbacks. In particular, being held as a great one distorts our character structure, by separating us from the rest of humanity and sometimes from reality itself. There is, to put it in illustrative terms, a certain rush that comes from power and/or standing, and we carry a vulnerability to it.

The saying that power tends to corrupt is quite true, but it's true in smaller ways as well as large ones. Being overly lauded - being placed in a category above - affects even the best of people poorly. In

particular, it induces a belief, not in just one's superior ability in one area, but a belief that our abilities in many areas must also be higher.

Given that we can operate within many hierarchies at the same time, and given the great number of specialties in the modern world, quite a few of us have experienced what I call "the stupidities of success." Fortunately, most of us recover our balance fairly quickly.

- **Abstracted stress.** Stress is the great opponent of both primate and human health. In primates it is almost entirely a result of physical stressors. In humans, it's primarily the result of imaginary stressors.

Since imagined fears are infinite for us, and since fear is stress in one of its most potent forms, humans are deeply vulnerable to damaged health via stress. The glucocorticoids that destroy the health of baboons under the rule of direct violence also destroy the health of humans under imaginary, vicarious or overly-hyped fears.

Unlike the great apes, however, stress uniquely affects our PFCs... our crucial prefrontal cortices. Here, to make the point, is a set of quotes from the aforementioned neuroscientist, Robert Sapolsky, in his book *Behave*:

Stress weakens the PFC's hold over the amygdala. (The amygdala being the brain area that allows us to restrain fear, etc.)

Stress compromises other aspects of cortical function. Working memory is disrupted; in one study, prolong administration of high glucocorticoid levels to healthy subjects impaired working memory into the range seen after frontal cortical damage.

During sustained stress, we're more fearful, our thinking is muddled, we assess risks poorly, and act impulsively out of habit, rather than incorporating new data.

Stress weakens connections that are essential for incorporating new information that should prompt shifting to a new strategy—while strengthening connections with habitual brain circuits.

Under sustained stress we process emotionally salient information rapidly and automatically, but less accurately. Working memory, impulse control, decision-making, risk-assessment and task shifting are impaired.

And so we see that the abstract, imagined stress that currently overflows in our world had deep consequences... and begs the question of how much better we'd be without it. It further begs the question of how many of our world's systems could not continue without this overflow of fears.

In very real ways, stress negates the operation of the PFC, which may also explain various crowd phenomena. But at a minimum, an overload of stress directly attacks the exercise of human will.

- **Idolatry.** Humans are, as we've said, hybrid creatures, working their way from one model of life to another. Because of the tumult and difficulty of this situation, they often find themselves unstable, particularly in youth.

Humans, in this in-between phase, are metastable. *Metastable* (a useful term, even if exotic) refers to a system that isn't entirely stable in on its own. Without some type of exterior support, it would collapse or unwind, whether immediately or slowly.

Metastable humans require something to look to or cling to. To put it bluntly, they require an idol of some sort. This, in our hybrid condition, seems to work itself out over time: The young, metastable person holds to a few non-malicious heroes (innocuous idols) during their youth, then builds enough connections within themselves to become stable on their own. But in other cases, they develop long-term dependencies: emotional connections to “things larger than themselves;” to nations and systems, to Napoleons

and Nimrods. Without them, they feel they would fall apart.

- **Shame.** As we've said many times now, humans are self-referring beings; we watch ourselves carefully and continually. And in so doing, we continually judge ourselves as true or false to ourselves. We have all sorts of ways to justify questionable actions, of course, but the process runs continuously. Shame is the overloading of this process with a powerful external assertion of our essential wrongness: not that we *did* bad, but that we *are* bad.

I see this as a high, external voltage applied to sensitive circuitry, burning through it and causing permanent damage. Other analogies, however, may also fit.

The outer evidences of shame are that eyelids drop, eyes are lowered, and movement slows or ceases. These, however are merely echoes of the inner reaction: A cloaking and withdrawal of consciousness. The person in shame pulls back from sight, from perception, from consciousness.

Shame is paralyzing to the post-primate mind, and many people have spent their lives seeking shame-avoidance positions, a terrifying waste of their abilities.

- **Word formulas and triggers.** Above we noted that humans find refuge in abstractions. It's also true that our great tool of communication (including a great deal of our self-conversation) is words. And so, abstractions borne in words is a powerful thing for us. And that opens vulnerabilities in us.

Words are not perfect and complete representations of reality. We get as close as we can, but there's often some incompleteness and inaccuracy involved. That leads us into a problem area: Treating these abstracts as if they were concretes. We do this particularly with formulas composed of words. Rarely are the words precise enough to function as well as we imagine they do.

And so, by being overly-committed to abstracts (by thinking in relation to other thoughts, rather than in reference to the real world), we open ourselves to many errors. We may further build automatic triggers for thoughts and feelings inside ourselves.

- **Cultured sociopathy.** One step forward in our time has been a recognition of sociopathy: a profound lack of empathy, found in a small percentage of the human species. How this arose is something that remains unknown, but the understanding that it is, and that it causes great damage, is growing daily.

What's more relevant to our coverage here, however, is cultured sociopathy. This type of sociopathy occurs in normal humans (humans who do have empathy). But under external pressures, these people *disaggregate* their consciousness. An early psychologist named Boris Sidis termed this, "opening a gash in their minds" and the Bible calls it "searing their conscience," but the point seems to be the same: people can be conditioned to bypass self-reference. It seems that either powerful or protracted influences can accomplish this.

It further seems that rulership (dominance) is precisely one of those situations that disaggregates consciousness in humans.

- **War fever.** Primates, definitely including chimps (one of the closest to us) have powerful war instincts. And, sadly, we seem to have inherited them. With chimps, however, a type of war fever comes over them they are physically engaged in it. With us, it is far more often vicarious. This has been covered by others, and so I won't spend time on it here, but war engages collective instincts, driving identification with dominants, a welcoming of propaganda and a strong sense of togetherness. Needless to say, these can be problematic, even if they do tend to burn themselves out over a handful of years.
- **Status.** Unfortunately, we are wired for the recognition of status. After 40 milliseconds of exposure to high status and low status presentations – faster than the possibility of conscious thought – humans divide

between them accurately. This is both an relic of troop life and a powerful support for the continuance of troop life. It's also foolish, because humans all differ in many ways. There are always people who are superior in some ways, to even the healthiest, brightest and most talented.

Clever beings like us, however, can find creative ways to use this to our benefit. One of these ways is to take a subordinate position in a hierarchy (and this works in almost any type, from the family to the nation-state), making it subtly clear to the level above ours that we'll support them in their higher position, but they'll have to provide some charity to us too. If they do not, they'll risk the loss of their standing.

The “poor one,” (or sick one, or whatever) is thus *entitled* by accepting the lower rung.

A notable problem spawned by this strategy comes to those who wish not to be in it, or who seek to leave their established role. (Especially if they wish to improve in some way.) In that case, the placeholders immediately above or below them are directly destabilized, and those adjacent to them as well.

It is also the case that those of higher status are healthier than those of lower status, as a research paper from 2014 noted:

Thus, in human populations, socioeconomic status is found to be the dominant predictor of individual health, far outranking differences of access to resources or differences in lifestyle.

The real factor at play here is probably not increased health (in the dominant), but decreased health (in the subordinate. As Sapolsky noted in *Behave*:

For every step down the socioeconomic status ladder, health is worse... it's not about being poor. It's about *feeling* poor.

Finally, it's crucial to understand that status is entropy incarnite and automated conflict. Status, after all, is *a person's condition, position, or standing*

relative to that of others. It automatically creates division and conflict, and always will.

Status forces us to think in terms of position, hierarchy, and dominance, and can't possibly do otherwise. It is a massively unhealthy thing, no matter how used to it we may be. It poisons both our inter-relationships and our self-image.

Given this, it's almost amazing that we haven't had even more wars and murders. However flamboyant it may seem in the present environment, I think this little saying is worth remembering:

More status, more stress, worse life.

Less status, less stress, better life.

- **Troop life, troop characteristics.** Humans, held rigidly within primate models, take upon themselves more and stronger primate characteristic. These are not permanent changes, but while held in this condition they are real and damaging.

In 1931, a developmental scientists and his wife raised their son with a baby chimpanzee. They had expected the chimp to mimic the child, and so to display advanced development. They particularly hoped that the chimp would learn to speak (or at least begin to); which, of course, he never did. What actually happened was that the boy mimicked the chimp. He acquired the habits of knuckle walking, chewing on shoes, and so on, including grunts and barks.

This strange experiment, among other things, established that humans can fall into primate patterns. We see this notably in prisons and schools, where people are forced into hard, hierarchical relationships, enforced with punishments. In our non-ruled life - where we are guided by our internal morality and more or less by the golden rule - things tend to be quite different.

- **Beta pride.** As noted earlier, a large number of people find safety by taking a subordinate spot in a dominance hierarchy, in return for certain obligations from those whom they slide below. That is, by doing

this they gain and hope to secure *rights* to themselves.

As could easily be predicted, dominants and wannabe dominants have seized upon this tendency for the sake of their own power. They spin philosophies by which the betas (the subordinates) can think of themselves as inherently noble, usually by lampooning a middle group (the nobility, the rich, etc.) as inherently bad.

This is and has been a significant problem, oddly uniting the very top of the hierarchy with the bottom layers, and turning the bottom against the middle. And it has been very successful.

A core problem is that the betas - the *little people* - need a reason to feel good about themselves, and that a plain dominance hierarchy robs them of such a thing.

The truth, however, is that working people (often the bulk of the "little man" class) has every reason to feel great about themselves. They, after all, are the people who transmit civilization to the next generations, keeping a hundred generations of progress alive. Moreover, it is they who can (and sometimes do) create habits of excellence that are passed down from generation to generation. These are not trivial matters: The future rests almost entirely upon them, and the people who've been sold meaning and nobility as little people should rather find meaning in this way: It is legitimate and it is large.

Everything that everyone does changes the world, and if nothing else, even the very meagerly talented can do things that make it possible for others to excel. This also is a form of greatness, and not a minor one.

Last Words

The exceptional man and woman are not wild outliers, they are merely those who had a good enough combination of luck and experience to get somewhat closer to where they should be. They are not to be lauded or envied; they are merely to be learned from and improved upon.

Moreover, the primate model that tries so hard to impose itself upon us will not endure forever. Like all the Pharaohs and Caesars of history, it will fade into obscurity, and it will not be missed. *If this happens is not in question, only when.*

And once the enforced primate model does evaporate, we'll improve faster and farther than we expect.

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Movement III

Reason To Believe

Genius is present in every age, but the men carrying it within them remain benumbed unless extraordinary events occur to heat up and melt the mass so that it flows forth.

- Denis Diderot

If it's harder for humans living in a dominance hierarchy to exhibit post-primate characteristics like creativity (as we have been asserting), then we should see some evidence for this. In fairness, it doesn't seem that a lack of hierarchy *drives* our evolution (whatever it was that happened two million years ago is responsible for that), but still, the anti-progress effects of hierarchy should have some noticeable effect. And so we'll look at that in this Movement.

We'll begin by briefly listing and explaining cases of stasis accompanying strong hierarchy and improvement accompanying loose or absent hierarchy.

- **The benefactors of European agriculture.**

Beginning in about 7,000 BC, a group of farmers moved from Anatolia into Europe and spread farming all the way to Ireland by about 4,000 BC. There was very little agriculture in Europe at this time (just after the end of the ice age) and these people brought not only farming technology, but wheat, peas, lentils, barley, plums, hackberries, pistachios, almonds,

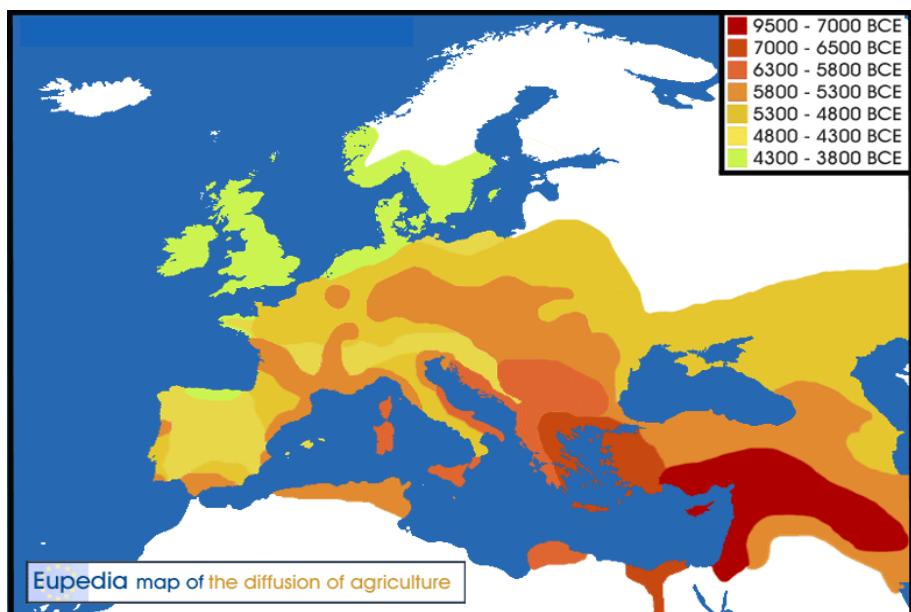
sheep, goats, and even cattle. They filled Europe with agriculture, and it has never left.

The people were very definitely non-hierarchical. Their large city, a place now known as Catalhoyuk, was devoid of any trappings of hierarchy. So much so that the archaeologist leading the unearthing of the city, wrote this:

It is hard to imagine that 10,000 people, minimally 2000 families, were going out and doing their own thing, but that is what we see.

It takes a lot for a modern archaeologist to admit such a thing, but the artifacts of Catalhoyuk leave no option. These people were clearly non-hierarchical, and were they arguably the greatest benefactors the West has ever known.

Here is a map showing the spread of agriculture through Europe. You'll see that it shows precisely what we've noted.



- **Stagnant Egypt.** Ancient Egypt was a rigidly contained, rigidly stratified civilization. Because of the

geography of Egypt, any king who could control the river (with boats and thugs) could take whatever he wanted from any farmers living near the river. There was nowhere to run away to except stark and forbidding desert.

People wax romantic about Egyptian monuments, but those were simply glorification of the dominants, by the dominants. Beyond that and a few curiosities like mummification, and despite a very long run, Egypt has furnished posterity with very little.

- **Greece.** Greece, because of its geography, was hostile to the centralization of hierarchy, and had fairly little of it for a long time. As a result (and I'm greatly simplifying), the Greeks gifted us with myths wherein men challenged the gods and sometimes won... with drama, comedy, geometry, the correlation of science and mathematics, and much more.
- **The Hebrews.** We've noted the gifts of the Hebrews earlier - individual religion, God preferring the humble to the powerful and justice above the ruler - but it's also necessary to understand that these were non-hierarchical people. Even when they were able to secure a prime location on the Mediterranean, the continued with almost no hierarchy at all for centuries. And when they finally took a king, their most famous religious leader of the time railed against it.
- **The Phoenicians.** Like their cousins the Hebrews, the Phoenicians were a highly decentralized group. They were the originators of a great many things: the alphabet, metalworking and artistic techniques, units of weights and measures, and musical instruments. Even the first "Greek" philosopher, Thales, was half-Phoenician. The Phoenicians built and maintained a tremendous commercial empire with very little violence. Rather than trying to conquer their neighbors, they wanted to conduct business with them.
- **Post-Roman Europe.** After the Western Roman empire collapsed, power devolved across the

European continent. (In other words, Europe became non-hierarchical.) That period used to be called *the dark ages*, but unfairly and inaccurately. It was actually a crucial time of reset and improvement.

To pick just the most notable example: Europe inherited some 15-20 million slaves from Rome, and – for moral reasons – went on to eliminate slavery over the next few centuries. And so thoroughly, it must be said, that slavery has never returned to Europe.

- **The outbreaks of the 17th century.** The 17th century (1601-1700) was the beginning of the modern age; when men (or at least a noticeable number of them) stepped forward into something new. The previous order had fractured and the Christian world began to re-form in two distinct parts. Gutenberg's new printing technology was fracturing hierarchy's information dominance, and virgin continents were available to any who dared to go. Hierarchy was fractured in ways it hadn't been for a very long time, and the new territories were almost entirely free of hierarchy, save for very small outposts.

With in this situation, science arose (featuring the slogan, *Take no one's word for it*), laying a foundation for the progress that has come to us. At the same time commercial innovations exploded: newspapers, steam engines, champagne, ice cream, coffee and tea, the practical use of electricity, opera (to be followed by symphonies) and much more.

More could be written (and in fact I have written a great deal more on this topic), but I think this is a nice set of examples from the pages of history.

A Further Sanity Check

Now, since the things we're covering in this book differ so widely from the conventional wisdom of our time, a different type of "sanity check" (as we used to call such things) seems reasonable. And so here's just that, coming from another angle:

A powerful reason to believe this is the story of Robert Sapolsky's baboon troop. Briefly, what happened was that

after ten years of observation, all the dominant males in the troop Sapolsky was studying ate tainted food, contracted tuberculosis, and died. That is, the troop's hierarchy was forcibly removed, in a single stroke.

Following this event, the health problems of the subordinate, dominated baboons disappeared, and their conduct improved. Sapolsky said this about the event:

The males who were remaining were... nice to the females... socially affiliative, and completely transformed the atmosphere of the troop... It takes these new guys (new males joining the troop) about six months and they assimilate this style. And this troop has very low levels of aggression and high levels of social affiliation, and they're doing that twenty years later.

Do these guys have the same problems with high blood pressure? Nope. Do these guys have the same problems with brain chemistry related to anxiety and stress hormone levels? Not at all.

If baboons can shed dominance traits in an undominated environment, attributing similar changes to humans is no stretch at all.

So, we're passing our sanity check quite well.

We have further evidence from psychologist Abraham Mazlow, who studied the healthiest humans he could find. Here are a few of his characteristics of interior human health, followed by my annotation:

Centered on reality. *Seeing as an individual, rather than through a "group colored" lens.*

Problem-centered. *Thinking as an individual, rather than thinking "group-accepted" thoughts.*

The enjoyment of solitude. *A rich and coherent interior life.*

The enjoyment of autonomy. *Rejecting the idea that autonomy is an insult to others.*

Maslow's list was longer, but it continued in the same vein, indicating that it is individual operations and characteristics, not collective, hierarchical ones, that are found in healthy humans.

Certainly a few of these statements could be nitpicked - "Maslow used a subjective definition of health" and so on - but they paint the same picture as Sapolsky's, and from yet another vantage point.

And so I think we've passed our sanity test quite sufficiently.

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Movement IV

The Path To Homo Novus

I have said, you are gods.

- David, *Psalm 82*
- Jesus, *John 10*

Now that the industrial revolution is on the way to solving the problem of means, and we can catch our breath, it behooves us to remember that man's only legitimate end in life is to finish God's work - to bring to full growth the capacities and talents implanted within us.

- Eric Hoffer, *The Ordeal of Change* (1963)

We are, and quite clearly in my view, on the road to *homo novus*, the new man. We are becoming a nobler band of God's children.

It is, perhaps, a small confirmation of this that some of the most forward thinking humans (notably St. Paul and Friedrich Nietzsche) have spent a great deal of energy on trying to produce a "new man" or a "superior man." And while the methods they proposed didn't pan out, they weren't wrong that humans could and should become much better.

Where most *new man* advocates erred was that they wanted humanity to improve by conforming to an external standard of some type. That is, they took obedience, conformity and an assumption of inadequacy as a starting point. In this they were mistaken.

The path to the homo novus, as it happens, requires us to use that which is already in us, not to grasp at something external or to convince some super-dominant entity to elevate us. The correct model, as Jesus worked so hard to establish, is to *grow* into it. And I've always loved this passage from the Torah that makes the same point:

For this commandment is not too hard for you, neither is it far off. It is not in heaven, that you should say, 'Who will go up for us to heaven, and bring it to us, that we may hear it and do it?' Neither is it beyond the sea, that you should say, 'Who will go over the sea for us, and bring it to us, that we may hear it and do it?' But the word is very near you; it is in your mouth and in your heart, so that you may do it.

There is a great deal to say about our evolution, but we can distill much of it down to this: Our ascent is actual, it's well underway, and we're finding new tools to distinguish between that which aids our development and that which hinders it.

Precisely what we are becoming isn't yet clear, but judging from our progress, we still have a long way to go. Measuring such things involves guesswork, but we understand primates quite well, and we have a fairly good understanding of how much primate stuff remains in us. If, then, we project a finish line (or at least a tentative one) at the point where primate dominance has been eliminated from us, we are something like halfway to our finish line.

That, of course, is a gross simplification and a "back of the envelope" estimate at best, but it does, at least, give us a preliminary perspective... a view "through a glass, darkly," as St. Paul put it.

Here, then are some scattered glimpses through that dark glass:

Our Efficiency Is Dramatically Increasing

Physically, we've come quite some distance from the great apes, but when it comes to progress in reference to the apes, our inner changes reach toward infinity: the primates are (or seem to be) inherently limited, while we seem to be inherently unlimited. We can create willfully, after all.

A first issue concerning our efficiency, and one that has soaked up the vast majority of human time since the beginning, involves survival, and especially comfortable survival. It is only when we have unclaimed time, and a practical ability to focus it, that we can do the more important things. And here we've come a tremendous distance over recent centuries.

At this point, we know quite well how to provide every human being on this planet with the basic necessities of life: for each of them to have plentiful food, clothing, housing and transportation. We've had that practical ability, in fact, for thirty years or more. The primary obstacle in our way are the dominance hierarchies that have been regulating cooperation on our planet. This they have done, in almost an unchanged form, since the bronze age at least. Julian Simon devoted a long career to questions of precisely this type, and wrote the following in 1988:

We have technology in our hands now, without even inventing anything else, that will allow all the people on this Earth, and many more times the number of people on this Earth, to have the same high life expectancy that we have in the United States, and Europe and Japan, to have the same affluence that we do in the rich countries. To have all the good things in life that we have. All we need is a social and economic organization that will allow this to happen. Not to bring it about, but just to allow it to happen.

The fact is that billions of us have gained tremendous amounts of free time. Said another way, time for devotion to higher things than mere survival is no longer scarce. There are reasons why this seems to be untrue for many people. Raising children, for example, makes great claims on one's time, but that should be called "more important things," since what we're talking about here is creating and training the next generation of humanity; that's of enormous and continuing importance. Mostly, however, that time has been wasted. This is something that Clay Shirky (in *Here Comes Everybody*) noted memorably, back in 2002:

Starting after the second world war, a whole host of factors, like rising GDP, rising

educational attainment, and rising life-span, forced the industrialized world to grapple with something new: free time. Lots and lots of free time. The amount of unstructured time among the educated population ballooned, accounting for billions of hours a year. And what did we do with that time? Mostly, we watched TV.

Shirky termed this *cognitive surplus*, which is a fine term, but I look at it as *replacement scarcity*. The fact is that most Westerners, and now a huge percentage of the world in general, don't know what to do with their extra time. And so they've been pulled into novel addictions like Facebook: hacks for which humanity hasn't yet built an immunity. Smoking seems to be fading away (finally), and this is hopeful, but the fact is that people trained in the ways of the regime (of hierarchical, primate society) don't fundamentally believe that they are active agents upon this planet. They've been taught to find a slot in the big hierarchy, identify with it, find meaning within it, and service it.

People acculturated into the system, that is to say, have no idea of what to do with their free time.

More than that, nearly all humans carry a sort of addiction to scarcity. Without it, how would we show prospective mates that we're more valuable than the next guy or girl? We feel we have to stand out in some way, and possessing scarce things is the traditional way to do that. It's what we know.

And so this is just another trap, and it too will also pass away, not to be missed.

How that will happen remains uncertain, but since it's such a large thing, it will likely go the way of slavery in Europe. Describing that, historian Chris Wickham wrote, "These are developments which could only occur when the state had fallen." The end of replacement scarcity will come, but it's likely that a major cultural reboot will be involved.

Nonetheless, cultural reboots occur from time to time, and once the next one comes, silliness like working harder to appear good than actually becoming good (as if the prospective mate is unable to tell the difference) will fade away. Whatever the catalyst for the cultural overhaul, habits that don't actually make sense will wind down.

That will be a moment when, as we used to say, all previous bets will be off, and daily lives will change, mostly for the better.

Post-Primate(ish) Religions

Another pregnant area for progress involves religion, something that never seems to fade out of human life, much as many would like it to (mostly for their own aggrandizement).

In this text I have written fairly positively of Judaism and Christianity, and I stand by my characterization of them holding post-primate characteristics. That said, I'd properly have to call them post-primateish, and I think both are due for upgrades.

Upgrading is not a fundamental problem for either of these religions, since they've both changed radically since their beginning. Moreover, Jesus, as he taught from town to town, endlessly planted post-primate concepts. (Christianity considerably less so.) Judaism is fairly well in favor of post-primate living, save where politics has infiltrated (this is a complex subject). It's also the case that there are relatively few primate-model stories in the Judeo-Christian body of scripture.

Considering that Jesus and Christianity are of considerable importance to several billion people, this could turn in a very useful direction. But again, this is a very large thing, and some type of catalyst may be required.

Brain Size

We mentioned this earlier, but it's important to note that the increase in human brain size seems to be continuing, and at a surprising rate.

In 2006, a team of researchers examined 30 skulls recovered from people who died in the black death of 1348, as well as 54 from a shipwreck in 1545. They compared them with modern Englishmen. The comparison skulls showed a marked increase in the size of the cranial vault, on the order of 15 percent. And again, the growth involved the area of the prefrontal cortex.

Other studies have had similar results. So, something is happening to us. In particular, we know the most overt driver of the entire process is continuing.

So, we know good things are proceeding, even if we're not clear on how we and the world will change from it.

Accelerated Evolution

We have, as it turns out, good examples of accelerated and specific evolution. As first examples, there was no such thing as blue eyes ten thousand years ago. And almost no one carried the gene that allows us to digest cow's milk properly, which a great many people now have, especially northern Europeans.

But the most striking example of accelerated evolution is that of the Ashkenazi Jews: European Jews. Because of their unique and persistent cultural situation, they developed a significantly elevated level of intelligence over mere centuries.

More than a few paragraphs would be required for a proper discussion of this, but it was a painful process. European Jews suffered endless persecutions and newly-spawned genetic diseases along the way. At the end of it, however, we find that Ashkenazi Jews have developed IQs that are 12-15 percent above average, and very consistently. This difference did not come from old and slow genetic processes, but was driven by very specific cultural forces, such as the necessity of intellectually-intense jobs.

There is, by the way, no evidence of these people having higher IQs all along: In older times they were noted as herdsmen and even as good fighters, but not as notably bright.

And so, we are definitely able to accelerate our evolution – our upgrading – if we select the right living conditions. The fact that this is possible is stunning, but it's true. I'm certainly not interested in being persecuted for the next several centuries, but I am interested in incorporating... nay, *seizing*... conditions that make us better, faster.

This process of intentionally accelerating our evolution... our development... turns largely upon the *locus* of our decisions: the point at which those decisions are made. That place must be internal to us, if we wish to improve internally.

External, made-by-others rulesets stand in place of self-judgment, and route around the processes that spawn development.

What people are required to do, they find a way to do, and by it (over time) they alter their genes. The Ashkenazi Jews were forced to think hard and adapt early; they had no alternative except suffering and death. But at the end of that process, they emerged with newly intelligent brains. And so purposeful development requires us to do things like relying upon one another rather than offloading cooperation and reliance to dominance hierarchies.

When we rely upon hierarchies, we stagnate. When we are required to be self-reliant and inner-driven, we morph toward *homo novus*, a post-primate humanity with significantly increased ability and judgment.

In short, progress requires each of us to think and to judge. We need to do the hard things, not the easy things. That is the way of improvement.

Seeking A New Formulation

Generations of forward-thinking psychologists, writers and philosophers have been groping for a new and better way forward. And, as humans tend to do, they have come up with some useful bits and pieces. Here is a sampling of them:

The way of the higher realms is with you now.
Change your minds and believe this good news.
(Jesus)

First the blade, then the ear, then the full grain in the ear. (Jesus)

Clean first that which is inside. (Jesus)

The things which pass through our daily life should be valued according to whether or not they enrich the inner cistern. (Abraham Joshua Heschel)

The essence of man is not in what he is, but in what he is able to be. (Abraham Joshua Heschel)

What is the nature of this human evolution? Its essence lies in man's emergence from incestuousness ties to blood and soil, into

interdependence and freedom. Man, the prisoner of nature, becomes free by becoming fully human. In the biblical and later Jewish view, freedom and independence are the goals of human development, and the aim of human action is the constant process of liberating oneself from the shackles that bind man to the past, to nature, to the clan, to idols. (Erich Fromm)

Nobody can say where man ends. That is the beauty of it. The unconscious of man can reach God knows where. There we are going to make discoveries. (Carl Jung)

In every creative conception there is an element of primeval freedom, fathomless, undetermined by anything, not proceeding from God, but ascending toward God. (Nikolai Berdyaev)

Our highest endeavor must be to develop free human beings who are able of themselves to impart purpose and direction to their lives. (Rudolf Steiner)

Don't ask yourself what the world needs. Ask yourself what makes you come alive, and go do that, because what the world needs is more people that have come alive. (Howard Thurman)

Every one of the great revolutionists, from Isaiah to Shelly, have been optimists. They have been indignant, not about the badness of existence, but about the slowness of men in realizing its goodness. (G.K. Chesterton)

I can certainly say that descriptively healthy human beings do not like to be controlled. (Abraham Maslow)

Man has come to love freedom as he never has before, and he demands freedom with extraordinary persistence... Man has grown more compassionate than before. He cannot endure the cruelty of the old days... Man is more eager than ever before to create... And

yet the striving for freedom, compassion, and creativeness is both new and eternal. Therefore the new ethics is bound to be an ethics of freedom, compassion and creativeness. (Nikolai Berdyaev)

The creative act is an escape from time; it is performed in the realm of freedom, not of necessity. (Nikolai Berdyaev)

The Post-Primate vision that has slowly been forming maintains that we are the incarnators of life into the world, by the actions of our wills... that, as Jesus might put it, we are fit incubators for the kingdom of God.

Particular Changes

As we move from hybrid life to post-primate life, we can expect to change. The question that leaps to mind of course, is, *How will we change?*

Let's begin this answer by repeating that we have nothing to be ashamed of for being primate-influenced, hybrid beings. It's what we were born to, without our request. That said, here are some things we can expect on our road forward:

We will think more in concepts and less in words.

Concepts cannot be directly communicated (at least thus far), and so we will not walk away from words. Nonetheless, concepts are purer and are almost certainly more useful to us internally. Einstein, for example, actively used this mode of thought for developing his theories.

We are likely, over time, to develop a somewhat different sense of identity. It may be for good reason that the concept of gaining "a new name" has continued through time.

We will presume ourselves to be fertile on the inside. The undominated, post-primate personality will understand that great things can and should grow out of his or her inner self... from his or her soul. We will believe that we are, and have been, magnificent creatures.

We will expect to birth life into the world. By this I'm not referring to children (though that would also

qualify), but activating our wills by doing what we believe is good. The euphoric effect of such action mirrors the joy of infants, when they discover that they can cause things.

We will focus on our abilities. The post-primate personality will recognize its assets and abilities, rather than neurotically comparing itself to others, then fixating on the ways it might come up short. This difference will allow earned satisfactions to remain, and not be swept away but each new guilt or trauma *du jour*.

We will experience much less stress. The combination of not holding ourselves blamable for our origins, not ascribing any moral authority or importance to primate hierarchies – not taking these things too seriously – and coming to see ourselves as fit moral beings, our stress levels will plunge. Not only will this make us healthier and happier, but it will make us smarter.

As we noted earlier, high glucocorticoid levels (aka, stress levels) impaired human working memory “into the range seen after frontal cortical damage.” In other words, *high stress is equivalent to brain damage*. Removing this burden from ourselves will carry a wide range of benefits. Everything from cognition to intuition will become more effective.

We'll become more passionate. Leaning toward direct experience rather than vicarious experience, and to internal justifications rather than external approvals, we will be far less restrained, and far less distrustful of ourselves. We will be freer to feel and to act.

It will be easier for us to repair ourselves.

Assuming ourselves to be fertile on the inside, and with our assets prominent in our minds, the terror of shame will pull back, allowing us to accept our glitches and to go about repairing them. Said another way, belief in our inner capacities will allow us to address our problems from a position of strength.

We will face the world as primary and potent beings.

We will attain far more moral clarity.

We'll have a much greater capacity for joy... for wonder and awe.

We'll have increased capacities for pleasure and love.

We'll view life as a long and rewarding adventure game.

Practical Suffering

All the above being true (and I truly believe it will be), old ways die hard and we must accept the possibility of suffering during the transition.

Dealing well with suffering is something that comes with experience... with painful experience. That said, we can also learn from the experiences of others, which is, in my opinion, much preferable to the hard, scarring type of learning.

The first practicality for suffering is simply to be prepared for it. That is, not to be shocked by it.

At present, most people habitually contrast themselves with others. If such a person hears you proclaiming something outside of their ideological framework... outside what is accepted by their collective... they will brand you as "other," and will reflexively find fault in you. Unintentionally, you'll be threatening their "refuge in abstraction," as we covered in Movement III.

This, sadly, is more or less unavoidable. It's hard to tell precisely where and when it will come, but it almost certainly will. Such contrasts are resented, and especially if your idea is better.

So, angry responses are likely to come. And if they do, try to remember that you're part of a long and noble effort to improve the world. You are, in fact, continuing the work of prophets and sages.

A second practicality relates to larger persecutions, and that requires that we become very active in helping one another.

Jews, out of long necessity, became very good at this. They coped with harsh suffering by cloistering and by creating

strong traditions of cooperation and assistance. Here are some of them:

If ten adult males lived within commuting distance, they were expected to meet regularly.

As soon as 120 lived within commuting distance, they established a community and a court for disputes between themselves.

Every community was to create a school, and provide free education to the poor and to orphans.

Jews were expected to support themselves, so no one would go to a government for support.

Every Jew was his brother's keeper. If one of them was enslaved (as sometimes happened on distant trading runs), their community had seven years to buy them back.

There is no virtue in suffering itself, but there is virtue in suffering for the good, when no other option exists. And so we must be prepared.

The Deep Assumptions

There is no more potent engine of progress than love, the hunger to bless. It is the central path to human improvement. Actual loving reorganizes us on the inside. It can be troubling in that it exposes and displaces certain things, but it works. And one of the primary reasons that loving works is this:

Love carries in itself the most potent of self-assumptions: The desire to bless assumes that you are *able* to bless.

Assumptions appear to be the direct path to the core of our beings. These deep beliefs - things taken for granted - can either set walls around the divine seed in us, or else can draw upon it. (We speak of these things figuratively because we cannot speak of them precisely.)

Consider how differently we see each other under this model: When our friends and family members mess up - but if they truly are the kind of being that can incubate the kingdom of God - their errors cease appearing as offenses

and become, instead, the locators of not-yet-developed virtues.

Another central assumption is both simple and profound:

We believe that the good, useful and beautiful can grow in us. We believe it so firmly that we're building a culture around this one concept.

By doing this, we're creating a place where a post-primate man - *homo novus* - will be able to develop.

The Enthronement of Consciousness

Ancient civilizations produced a stream of desperate humans appealing to gods and rulers for enough food to eat. But that's no longer a serious issue; we grow more food than there are people to eat it, and we could grow still more. And that change was driven, not by hierarchy, but by the ideas, strategies, experiments, tests and practices that arose from productive people... that grew out of us. Engineers, inventors and mechanics are not creatures of hierarchy.

We productive people... we farmers, carpenters, drivers, nurses, moms, grocers and many others... *we* have solved scarcity upon Earth. And so, a fact that we must grasp is this:

The progress of the race grows in and emerges from *us*, not from overlords.

Cultivating growth in ourselves, then, is not something to be taken up once we get past some great barrier; it is for us right now, and *as a first option*. We have the ability, and in fact we've had it since birth.

We are primaries rather than derivatives. We have as much right to act in the world as any overlord. The state of mind we want to grasp and hold is this:

The world doesn't happen to us, we happen to the world.

Said a slightly different way, our inherent creativity is the "fixing machine" for everything. And so our model is to engage it as our default.

Post-primate life will not come **to** us, it will come **out of us**.

Post-Primate Society

Trying to outline something you've never seen isn't particularly easy, but in the case of a post-primate society, we have a good deal to work from. We know, after all, what primate society is like, and we know how our present, hybrid society differs from it.

We also have powerful proof that what we've been doing has worked. That is, pulling away from dominance and submission has spawned, helped spawn, or allowed to be spawn, more or less all our forward development... astounding forward development.

Not only do we know what we've come from, we also know which direction we're moving. And we further know that this direction has been astonishingly useful.

Speculating on post-primate society, then, require little more than projecting our present line of development forward. We'll begin with our biological selves.

We can probably expect our brains to continue expanding. How much is hard to say (foot-high foreheads seem ridiculous), but a bit more would probably be useful.

The internal operations of our brains have also improved, though we haven't the ability to check on that directly. But given their increase in size, coupled with the fact that humanity seems to be getting cleverer rather than less clever, that seems at least likely.

Socially (our manner of living with others) we see that while decentralization would seem to be the path forward (certainly it is the direction away from primate life), our results so far have been mixed: On the personal and family levels, we're getting less hierarchical and somewhat healthier; on the levels of large numbers of people, things have changed very little in thousands of years.

One possibility for this would be that the few will forever rule the many; that our species cannot do otherwise. The problem with this is that not only have we done just fine during eras when dominance broke down, but that notable developments were spawned precisely in those times. It's also the case that individual religions have worked far better than centralized ones for assisting human progress.

And so we're left with the option that we must continue to exit from enforced hierarchy, even though the imposers of hierarchy - our versions of the alpha chimpanzees - refuse to release their grip. In my opinion, this is the option that conforms with the reality I've been observing for many decades now. (You will form your own opinion.)

We can, if the above is substantially true, say quite a few things about post-primate society: not only how it will operate, but how it will feel. And so, here are those conclusions:

- Post-primate society will be primarily decentralized, and will function around the golden rule.
- To purposefully manipulate will be considered very bad manners. A nice analogy for this would be the old Victorian ethic that there were certain things "a gentleman will not do." Misleading, purposeful confusing or using data analysis to prod actions... all such things will be seen as stains upon one's character.
- Scarcity and its follow-on effects (like grabbing for anything labeled as "free") will fade away.
- Needing endless shots of validity (dopamine, as through social media) will be considered unsightly.
- Using status to make one's self known or liked will become a shameful thing.
- To purposely shame someone will be seen almost as poisoning them.
- To hold someone within a single role in life will be seen as a low and ugly thing.
- It will be 'normal' for people to passionately hold things sacred. It will likewise be normal for them to feel good about the good things they've done... to admit they feel good about it, yet not to use it as an excuse to assert superiority.
- People will guard their expectations; they will protect and nurture their deep beliefs about life. (After first learning how to recognize them.)

- People will think about what they are; they won't punish themselves over what they aren't.
- During the transition to post-primate life, the first to enter will not be fighting against the old ways and their champions. Rather, they'll move quietly into the new and leave the old to its own devices.
- Rather than looking for reasons to see things as "good" and "bad," people will identify their benefits and harms, then act accordingly.
- Embarrassment and shame will be seen as separate from mistakes, and more or less pointless.

More than anything else, I hope, post-primate people will learn to love one another... not in form, not from obligation, but to actually and really love one another.

Post-primate people will also carry specific assumptions of life, in addition to the deep assumptions noted above. From these, more or less everything else will sprout and grow.

Here is a list of those assumptions:

That it is normal for us to experience wonder and awe... that upward swellings of the heart lift us above mere existence;

that we are a species of the *creator*, not merely the created... that we are, properly, beings;

that we must be careful *how* we see and hear... that how we perceive determines how we will develop, ultimately determining our fitness to partake in better situations and better worlds;

that our internal standards form us... that external standards distract us;

that every choice we make ripples through our lives... that we can counter any mistakes we make, but that our progress will be slowed in the process;

that our fundamental choice is to cultivate life or to spread entropy;

that we are not to merely observe and appreciate works of beauty and genius, but to

seek and absorb their essence... to find and grasp the seed that created them;
that somewhere, even though we know not where, the nobler beings of our universe are hoping for us to open our eyes, to recognize our unlimited nature, and to believe what we see.

A Last Thought

The post-primate person is, or in our case will be, a being who reverses entropy willfully, and who hungers to bless. Such a person will be on a clear upward trajectory, rising through creation and toward its creator. They will know, in their gut, that they are capable and worthy of such progress.

And so, for the sake of the future and for ourselves, we need to move past the present, hybrid age.

I will leave you with a line I very much like, and which I'd very much like you to remember. With it, I bid you adieu:

We must learn to *be*, without apology.

End Notes

Page 4

On hitting our stride before WWI, you can start with Stephan Zeig's *The World of Yesterday*. You'll also find interesting snippets on the subject from the great scientists of the early 20th century, as well as from writers as diverse as Freiderich Hayek and Virginia Woolf.

Page 6

On good habits travel in clusters, reinforcing each other, see *Willpower*, by Roy F. Baumeister and John Tierney.

Page 12

In addition to the books I've noted in the text (from Van Shaik, Sapolsky, Anne E. Pusey, Dario Maestripieri and Glenn E. King), there are others. Here are two that I found useful:

The Tree of Origin, Franz B.M. de Waal, editor.

The Bonobo And The Atheist, Franz B.M. de Waal

Hard-wired into humans: See Know Your Place: Neural Processing of Social Hierarchy in Humans, *Neuron* 58 (2008): 73. Also see Sapolsky's *Behave*, chapter 3.

Page 13

Subordinate animals have higher stress hormones and dominant males higher levels of testosterone: See Life at the Top: Rank and Stress in Wild Male Baboons, Laurence R. Gesquiere et al., *Science* 333 , 357 (2011)

Page 22

For Sapolsky on gut-check operations, again see *Behave*, chapter two.

More than the brain: I am using *brain* as is commonly understood, a physical organ. I'll use *mind* as the brain plus

the many routines (think computer programming routines) that operate within it.

Page 23

On the golden rule, it's worth noting that this model is both obvious and universal. It is also accessible to any healthy human. Having been central to more or less all the great moral teachers of history. It was taught, in slightly varying forms, by Thales, Buddah, Hillel, Jesus, Confucious and many, many others.

Page 25

Only humans commit suicide: The closest cases in animals involve microbes, aphids and ants that allow themselves to be killed in the defense of other members of their species. They do not, however, act solely to end their lives.

Page 26

Dark imaginings come more easily to us than bright imaginings: Winning at anything from athletics to chess to the stock market boosts our testosterone levels.

Page 27

Abstracted disgust: See European Journal of Neuroscience 24 (2006): 2355

On the rise in testosterone, see Fielden et al. 1994

Winning by luck: See Mazur & Lamb 1980, McCaul, et al. 1992

Page 32

Increased brain size since 1348 (also noted on page 68): See W.P. Rock, et al., "A CalphometricComparison of Skulls from the Fourteenth, Sixteenth and Twentieth Centuries," British Dental Journal 200 (2006): 33-37

Page 37

Brain areas when listening to music: See NeuroImage Volume 218, September 2020: 116512, Gordon CL, Cobb PR, Balasubramaniam R (2018) Recruitment of the motor system during music listening, and many others.

The moral sensitivity of human infants: See *Just Babies: The Origins of Good And Evil*, by Paul Bloom.

Page 38

People with children living longer: See *Journal of Epidemiology and Community Health*, 2017 May;71(5):424-430.

Page 41

Whatever is not pre-endorsed is forbidden: This implies that civil law is primate stuff and the common law is post-primate stuff... that positive rights are primate and negative rights are post-primate.

Page 43

On holding complex images, you can see the work of Robin Dunbar, and particularly Dunbar's Number.

Studies on teacher's expectations: See *Pygmalion in the classroom: teacher expectation and pupils' intellectual development*, by Robert Rosenthal and Lenore Jacobson. This work has been criticized, but I tend to see the critics as needing to hold an educational hierarchy inviolate. That said, I haven't had the time to dissect the argument sufficiently, so please form your own opinion.

Page 51

On cultured sociopathy, see the Free-Man's Perspective newsletter, issue #25.

On War Fever, see *War Is A Force That Gives Us Meaning*, by Chris Hedges.

Page 52

Those of higher status are healthier than those of lower status: See *Self-Image-Incongruence Theory of Individual Health*, Rancourt.

Page 53

In 1931, a developmental scientists and his wife raised their son with a baby chimpanzee: See <https://allthatsinteresting.com/gua-experiment> among other accounts.

Page 56

The benefactors of European agriculture: See see the Free-Man's Perspective newsletter, issue #73.

Page 58

The Hebrews: see the Free-Man's Perspective newsletter, issue #68.

The Phoenicians: see the Free-Man's Perspective newsletter, issue #81.

Post-Roman Europe: see the Free-Man's Perspective newsletter, issues #52 and 53.

Page 59

On slavery: See see the Free-Man's Perspective newsletter, issue #70.

On the outbreaks of the 17th century: See *Production Versus Plunder*, chapter 7.

Page 60

On Sapolshy's baboon troop: See *Stress In The Wild*, Scientific American, January 1990. (And others.)

On Mazlow's work, start with *The Further Reaches of Human Nature*.

Page 67

On accelerated evolution, including the Ashkenazi Jews, see *The 10,000 Year Explosion*, by Gregory Cochran and Henry Harpending.

Page 75

On the continued increase of our brain size and the operations of those brains, it would be nice to know if the skulls and brains of Ashkenazi Jews have increased relative to everyone else's. From general observation it seems not. And so the path forward may not be so much in size as in quality of operations.

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