Quantitative Sociobiology

The Scientific Study of Society
Manuscript, Beta 1.4

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Chapter 1

Preface

1.1 What is Quantitative Sociobiology?

Sociobiology is the study of the biological basis of social behavior. When we slap "quantitative" in front of it, it means 2 things: 1) we are stressing that we are not interested in botanical approaches and evolutionary just-so stories; 2) we are trying to not be confused with E.O. Wilson's book, while retaining the label he created — we are talking about a field of research, not a specific text.

1.2 Why Quantitative Sociobiology?

I love politics, and I love problem solving. What, then, could I love more than starting a science of politics? While sociobiology might be the study of all human social behavior, in the beginning I tried to only focus on "exousiology," the science of power (exousia means "power" in Greek). But this was too narrow – I had mistakenly made assumptions about how powerful individuals could really be. Over time, I realized my assumptions had serious flaws, and power seems to come and take in proportion to what it has given. Consequently, I broadened my focus to *sociobiology.*

Above all, quantitative sociobiology is about seeking truth and creating a serious science of man and society. Sociology, political science, and economics claim to already do this, but they are in fact pseudo-sciences, because they are blank-slatist, and to varying degrees, non-empirical or non-quantitative. Over the last 50 years, behavioral genetics has laid the groundwork for a science like that envisioned by E.O. Wilson is his 1975 book *Sociobiology: The New Synthesis.* Meanwhile, data is easier than ever to collect due to websites like Prolific, and decades of published data have built up in journals, most of it written by blank-slate academics, leaving the potential for a non blank-slatist to come and parse it.

1.3 Outline

This book is meant as a comprehensive account of years of research. I have read hundreds of books in this subject area, perhaps more on this topic than any other person alive today, and I have separated the wheat from the chaff – and believe me, there is a lot of chaff. This fact confers value to this resource for that reason alone. More than that, I have performed that original research which can be performed on a small budget. Here, I will summarize my findings, tying them together with themselves as well as with that which came before.

These findings are, I believe, important for any practitioner of policy and politics. As I stated previously, I enjoy politics, and I won't hide the fact that my allegiance is against the "left." I see conservative pundits, politicians, and policy writers make a number of common mistakes, which impede the success and efficiency of conservative politics. In this book, I would like to proliferate the knowledge which corrects these mistakes. As such, a primary theme of this book is understanding, in particular, what leftism is and is not, and how to defeat it.

First, the book will begin with a chapter on the necessity of mathematics and data-driven empiricism in scientifically understanding any problem. This corresponds to the first mistake conservatives

make – the propping up of thought which is merely verbal. Such thought is imprecise, messy, and prone to flaws and the injection of fantastical notions, including the terrible blank slate. It has no value as predictive knowledge, unless it can be re-written as mathematics.

Then, we seek the nature of ideology and religion, which offers the key to the knowledge of understanding why the first mistake naturally occurs. Crucial to this chapter is wiping away the primitive notion of the "mind virus" or the "meme" – that is, the idea of an idea which exists unto itself. Ideas were crafted by evolution, and exist for the sake of the gene and its continued reproduction. There is no such thing as "cultural evolution," except in the limited sense of information proliferation.

After this, we study the true origins of leftism. It is genetic in nature, and has far deeper roots than modernity. It is, in some sense, a behavioral disease which accumulates in the genes of men in times of great wealth. There is only one way to stop this disease and interrupt the cycle of the rise and fall of civilizations, and that way is eugenics. This is why the leftist is the mortal enemy of eugenics. He cannot exist in a eugenic regime.

Finally, we study power, what it is, how to acquire it, and how to use it to defeat leftism and implement eugenics.

Chapter 2

Against Wordcels

2.1 To Solve a Problem with Information, it must be Understood Scientifically

Science is wonderfully promiscuous in including anything there's evidence for. That makes it really hard to create a body of knowledge that's distinct from science. If anything in your new body of knowledge is true, science just steals it. - Paul Graham

Generally, among curious people there is an inner circle of people who "get" math and science, and who therefore know modern "philosophy" to be mere verbal spew. Outside of this circle exists "philosophers", who do not get math and science, and who therefore do not understand why their methods are invalid.

For a while I have been interested in figuring out what is wrong with philosophers, and how to get them to understand that verbal screeds on things like "Being", "Justice", "phenomenology", and "metaphysics" are not an appropriate way to know the truth. Usually they demand verbal screeds supporting this idea and reject attempts to look at results or attempts to critique the capacity of verbal language to adequately describe reality.

But the people who are "in the know" know that results and the inadequacies of words are why "philosophy" is bunk. It is pretty easy to see why. Precise measurement is what enables precise prediction. Mathematics is how precise measurement is translated into precise prediction. Any verbal deviation from these decreases the precision of prediction.

2.1.1 Theorem: A Mathematical Statement is a Verbal Statement Optimized for Predictive Capacity

This leads to a theorem. For any problem, there is a mathematical answer. But there are many plausible sounding verbal answers which increasingly loosely map onto the mathematical answer. These answers are strictly less predictive than the mathematical answer.

To begin, we have asserted that all problems have a mathematical answer. Let us make this clearer, as it may sound incorrect to some readers. First, by problem we mean a situation wherein information may help an agent perform better. This should sound inexact, as our overall point would say – verbal language is a tool of jungle monkeys and is always awfully inexact. It is an illusion one must overcome, yet it remains useful for guiding its users to the truth as long as one grasps mathematical guard rails along the way.

If external information may help an agent to perform better, that information is predictive. There is variant performance in the task in part due to the distribution of information. Some participants have more information than others, or all participants lack information and act partially randomly. Information reduces randomness in their behavior, allowing them to make optimal moves more often.

The more precise the information, the better the prediction, and the more randomness is reduced relative to less precise information.

Now let us see an example. Say the situation is guessing how many seconds it will take a ball to land when it is dropped off of a roof with height d meters.

$$t = \sqrt{\frac{d}{4.9}} \tag{2.1}$$

The answer is above. Now imagine if the participants were provided with approximations either of the equation or of the information they need to use the equation. "The building is tall." What does tall mean? The building is 20 to 40 stories tall? That returns a wide range of possible times the ball could hit the ground. "The building is 100 meters tall, and the ball tends to take a longer time to hit the ground when the building is taller." Great, how long? Again, some range offset from my guess at, say 50 meters. "The building is tall, and balls tend to take longer to hit the ground when dropped from taller buildings". Great. My uncertainty may have just increased...

And this assumes the sentences attempt to gesture at quantity. Imagine if I instead philosophized about the ball. The ball falling must be *justified*. I could say that it stands to reason, that, given the tendency of Things Which Are (they have Being) to fall, it is the Nature of Objects to drop; therefore, the ball will drop when let off a roof.

That reads like philosophy! In fact, Aristotle attempted verbal physics and ended up with this:

> Whatever is moved of nature is borne either downward by its weight or upward by its lightness. No one of those things in the case with the stars, since they move in circular orbits. Nor can it be said that the stars are moved against nature by a greater force, for what force could be greater? It results, therefore, that the motion of the stars in voluntary.

Aha! But this solves no problem, for "knowing" that the movement of the stars is involuntary adds no predictive power to an individual's decisions.

Mathematical communication forces the relating of quantities. If you are describing the world with math, you are measuring it and relating those metrics to other metrics. You are observing things very closely by breaking them down into measurements, and you are predicting things by relating those measurements in a way that works. You are really, truly, going beyond the common sense of verbiage.

From this, I think you can begin to see a key heuristic I want to make wordcels get: if I open up a book and it's all words and no attempt at studying the natural world, then it is a waste of time for solving problems. Maybe it makes you feel good. But it does not empower you.

2.2   Conservatives need scientific theory, not words

A thinker who solves *problems* must be scientific. This is not to say there isn't a use for prophets and those who spread signals for collective action – we will discuss in the next chapter how many things which claim to be information are actually signals. Conservatives have produced many signalers, who claim to be problem solvers, but are in fact, not problem solvers.

The problem can be defined as the policy game. We want to know where leftist policy comes from and how to strike it at the root. Four major figures have attempted to provide answers to this question in the last ten years, but none of them have done so scientifically. As such, their answers rest on the border between meaninglessness and wrongness. These pseudo-thinkers are: Curtis Yarvin, Jordan Peterson, James Lindsay, and Richard Hanania.

2.2.1   Curtis Yarvin

Notice to the reader: some have held me to be the world's foremost scholar of Moldbug, a.k.a. Curtis Yarvin the Neoreactionary Writer. I have read *all* of his writings (a feat which perhaps none of his die-hard fans have achieved), and summarized many of them.

Curtis Yarvin has two main hypotheses regarding the origins of leftist policy and how to defeat it. The first is the *ultra-Calvinist* hypothesis. This hypothesis assumes a discredited model of memetic spread (see chapter 2) and states that leftism "evolved" from mainline Protestantism under the selective pressure of the separation of Church and State. The model posits an environment where a religion behaves like a replicating organism– a virus in the mind of a host, that spreads through text. Given the separation of Church and State in this environment, the mind-virus cannot have its infected hosts control the State, and if the virus includes references to God in its payload, then it will simply evolve

to drop God from its formulas. However, the separation of Church and State in his supposed "model" is, in fact, an uncritical given.

Yarvin claims that Protestantism evolved into "super-Protestantism" or "ultra-Calvinism," dropping God from the formula but keeping components of the Social Gospel that made it politically powerful. Everyone who is exposed to the virus has roughly the same probability of contracting it; there is no variance due to genetics or economic incentives in political behavior in his latent model. The mind-virus may mutate randomly when written down, like an RNA virus, and these mutations are selected on their capacity to increase the political power of the infected. Those that were infected with highly progressive, Godless payloads rose to power more easily than those who were not, as they were not deselected by the separation of Church and State. The Godlessness allowed them to invade the government, and the progressiveness allowed them to exercise their power, holding onto it and giving it over to more and more infected people, and ultimately increasing infection rates. The nature of "progressive" social policy, for Yarvin, is that it *is* the stuff of power itself, compared to Libertarian and Conservative policies. This is why Progressives win in the long run, hence his saying: "Cthulhu may swim slowly. But he only swims left."

His second hypothesis is complementary to the first one. It is the *Cathedral hypothesis*. The *ultra-Calvinist hypothesis* explains where leftist policy comes from. The *Cathedral hypothesis* explains how to strike leftist policy at the root. The idea that Progressivism is a mind-virus that spread by text and other forms of communication implies that leftists must mass-communicate in order to spread the virus efficiently to every new generation. In the US, they do this not through the State itself, but through the "Cathedral", which is a set of institutions comprising the mainstream media, academia, and education. If non-Progressives rid these institutions of Progressivism, or get rid of these institutions in general, leftists will no longer be able to spread their virus efficiently to new generations.
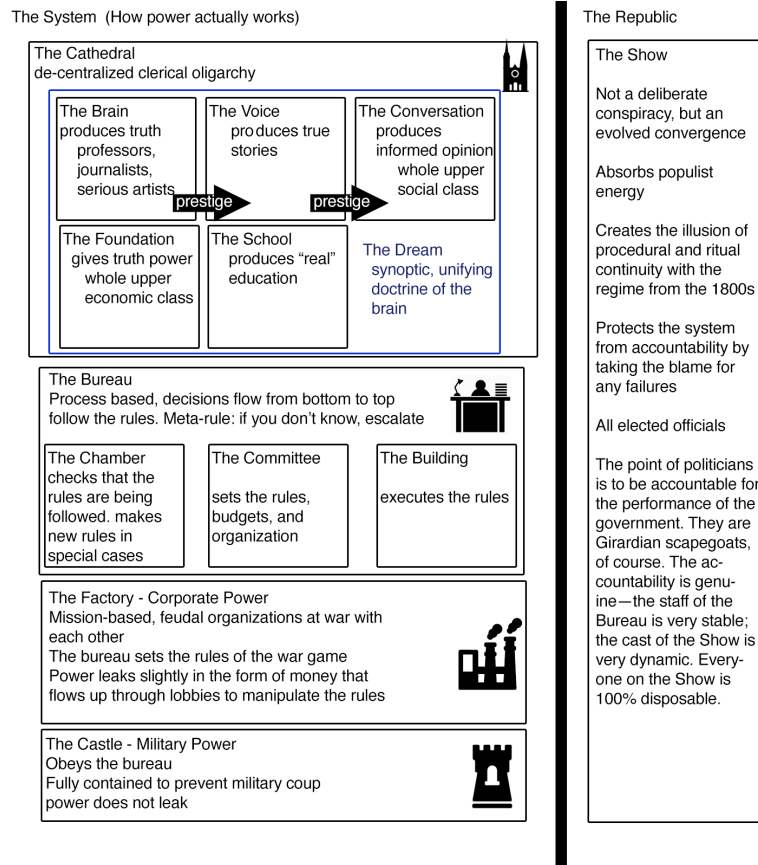

Figure 2.1: A diagram of how power works made by the then-Yarvinist Zero HP Lovecraft [1]

The ultimate policy goal which allows us to defeat Progressivism forever is to uninstall the Cathedral. Donald Trump and his Republican Congress have two options: a soft and a hard reset. Under the soft reset, the government locks up government employees for betraying secrets to the press. Education

and academia are defunded and degrees are banned from hiring decisions. In the hard reset, the entire Cathedral is nationalized, and all government and Cathedral employees are fired and replaced.

> In the Cathedral system, real power is held by the educational organs, the press and the universities, which are nominally outside the government proper. The minimum intervention required to disrupt this system is to withdraw official recognition from the press and the universities. However, any regime that has the power to do this also has the power to liquidate them, along with all other extra-governmental institutions. It is much safer to go this extra mile, rather than leaving the former Cathedral and its various satellites intact and angry. [2]

Yarvin, however, being non-scientific, offers essentially no evidence for this view which ultimately amounted to millions of words in blog posts between 2007 and 2011 (and I have stated it more clearly than he ever did – he is a very inefficient writer). The closest he got to "evidence" was citing the existence of the "American Malvern Conference," a conference of liberal protestant leaders meeting to discuss their preferred policies for dealing with Europe after World War II. This is not evidence because it does nothing other than rule out the idea that there were no liberal protestant ministers in the 1940s. What proportion of protestants were liberal, it does not say. Whether their liberalism was caused by mutational load, economic incentives, or a mind-virus, it cannot comment. The American Malvern Conference is not evidence for Yarvin's actual view.

This is bad because it suggests that his solution would not work in the long run. What it would amount to under the theory laid out in this book is a Bolshevik-style dictatorship. It would increase violence, counter to Yarvin's stated essential goal of "minimizing violence," and it would hardly be stable for three generations, after which an even more liberal, settled order would re-assert itself, because of the ongoing procession of mutational load in the background of the violence. In other words, Yarvin's plan would only wound the beast for a short time – it would continue to fester in secret coming back stronger later on.

This is precisely why scientific evidence is needed for this question. A failure to strike at the root will result in increased chaos, decreased quality of life for a time, with perhaps temporary conservative domination, but ultimately conservatives would be overthrown in the end, making it all for naught. (The rest of this book seeks to prove this and explain how to truly strike at the root).

2.2.2   Jordan Peterson

Jordan Peterson and James Lindsay would go onto agree with Yarvin about the fundamentals of his "theory" – leftism is the result of the spread of mind-viruses, so the way to attack leftism is to attack the mind viruses, and, if powerful enough, to attack their major centers of spread, academia and the mainstream media.

Yarvin was also known for his quip that "America is a Communist Country." Peterson's main diversion from Yarvinism was that instead of blaming Protestantism for being the root of Progressivism, he blamed Marxism while actively promoting Jesus Christ as a memetic counter. In line with this, he rebranded Progressivism as "cultural Marxism."

Cultural Marxism supposedly emerged in the 1970s when Marxist French Philosophers thought it would be better to abandon the Proletariat and embrace brown people and women for their plan to enact worldwide revolution. This turned out to actually be memetically adaptive, and so universities became culturally Marxist and cultural Marxism spread and now we have culturally Marxist policies like banning misgendering in Canada, which Peterson became famous for protesting against.

Conveniently, the cure to cultural Marxism is to help Peterson spread his counter-memes. Peterson, unlike Yarvin, became a millionaire from donations from his pundit career. Yarvin, meanwhile, only became a millionaire off of DOT COM era stocks and his 20 year start-up "Urbit." Some Cultural McCarthyism is also okay – exposing Marxists, firing them perhaps. Maybe even reducing the power of their institutions. In Yarvin's terms, Peterson wouldn't mind a moderately firm reset. All of this suffers from the same issues as Yarvin's solutions.

2.2.3   James Lindsay

James Lindsay's "theory" is very similar to Peterson's with a little bit of extra back-story. Lindsay goes beyond Marx to Marx's well-known influence, Hegel. When he's feeling extra esoteric, he complains

about 2000 year old gnosticism.

> Why are Gnostic cults so tempting? Why do people get sucked into them? It's not because Gnostics go around telling people they're wrong. It's because they go around telling people they're limited. Your beliefs, maybe in science, spirituality, Christianity, politics, or whatever, aren't wrong; they're low-level. The Gnostics hold themselves out as people who know more about whatever you're into than you do, and they explain their superiority as being "liberated" from the limitations "THEY" (your teachers, pastors, etc.) are placing upon your knowledge. They don't want you to know these secrets, but we do. That's the Gnostic temptation. [3]

Race Marxism is a gnostic cult, of course. Hegel and Marx were gnostics. This is the secret truth of the origins of leftism. The solutions here are very much the same as Peterson's. The memetic assumptions are the same as Yarvin's.

2.2.4   The Lindsay Fallacy

James Lindsay inspired me to name a fallacy after him. It is a special instance of the correlation does not equal causation fallacy where someone observes some philosophy books correlating with social change, and assumes the books to be the cause. I decided to bestow this honor upon Mr. Lindsay after watching the first hour of a video titled "Hegel, Wokeness, and the Dialectical Faith of Leftism", produced by Lindsay. The thesis of said video is that "the Hegelian dialectic is the operating system of the Left" and specifically that "you need to understand the Hegelian dialectic, their religion, to understand and predict wokeism."

An hour into the video, Lindsay has presented the following evidence: (a) a CRT textbook used the term "dialectic" (b) Marx was influenced by Hegel and used the term "dialectic" (c) The Young Hegelians were leftist and thought that the dialectic of the State was not yet complete.

I believe the following evidence falsifies Lindsay's hypothesis. (a) Lindsay himself mentioned this one: the Young Hegelians were opposed by conservative Hegelians who believed that the Prussian State was the Absolute Idea of the State, the completion of the dialectic. Hegel himself seems to have leaned this way – Russel states in his summary in A History of Western Philosophy that Hegel was a monarchist and supported the Prussian State. Russel also stated that Hegel said that he believed the dialectic could continue in the Americas via conflict between the Northern continent and the Southern continent, but Hegel was apparently quiet as to what he thought the new synthesis would look like.

(b) Fauerbach, and Marx, stripped Hegelianism of its core metaphysical substance, leaving the dialectic as an empty shell. This means that Hegel's original dialectic did not cause Marxism. Marxism and subsequent Leftisms merely aped Hegelianism and were not truly influenced by it. Hegel himself actually stole the dialectic from a demonstration in Kant's Critique of Pure Reason, where it was a tool that was used to demonstrate some hypothesis about space-time. The core to Hegelianism was, apparently, that the world is one Absolute Idea which is evolving. Everything is connected and our thoughts and political organization are determined by the knowledge of this Absolute Idea. Existence is but a thought and man exists so that the Absolute can observe its own thought. The logic of Hegel's dialectic is that the Absolute cannot both be one thing and be not one thing. It cannot be Just and injust, for instance. Just and injust are illusions and the truth is some combination found (imprecisely) by imagining their "synthesis." Political contradictions are also mere illusions which will resolve; time is an illusion as well. Fauerbach, and with him Marx, sucked all of the mystical-occult substance out of this "philosophy" and declared that everything is material, there is no absolute Idea, none of that stuff is true. Marx was an instrumentalist who declared that such abstract philosophy was silly, and that the point was to change things. Hegel, then, was just a skin for Marx, a camouflage if you will, a way to appear en vogue, and he moved away from it in his later years as Hegel's general influence waned. Yet the now-hollow phrase "dialectic" remained, the substance of which for Marx was that of class conflict and the apparent inevitability of Communism. These ideas were nothing like what Hegel thought and did not deeply rely on the "dialectic" aesthetic.

(c) The Marxist dialectic is no longer the "driving force" of the Left. The textbook Lindsay cites for evidence mentions a racial dialectic. Marx never spoke of race conflict, so again the substance has been removed from "dialectic." What is "dialectic" with no substance? Merely "change" or "conflict." The Left is now at least twice removed from the actual meaning of "dialectic" yet Lindsay thinks it's

their secret operating system, when in reality it's just a skin passed down via Marx to people who have an in-born temperament that predisposes them to the bleeding-heart ethic that is omnipresent in his work.

What there is here with Lindsay, then, is a clear case of someone seeing an "idea" and blaming it on correlated social change. However, there are at least 3 different actual understandings of "dialectic," and wokeism is on the 3rd one only, and that understanding is not broached by Lindsay, because it is the understanding that "dialectic" is a shell filled with woke temperament on modern identity issues. The question as to where that temperament comes from is unsolved by Lindsay, because the answer is definitely not "from reading Hegel", or Marx, or anything for that matter.

Lindsay's lack of mathematical specificity and data have allowed him to build a whole career on what is essentially a fallacy.

2.2.5   Richard Hanania

Richard Hanania is different. He rejects *historical idealism*, the view, common to Yarvin, Peterson, and Lindsay, that ideas are the main drivers of history. He embraces something like *historical legalism*, the idea that the random, strategic outcomes of battles over policy are the true drivers of history.

As such, Hanania says leftism "comes from civil rights law." His argument as two central premises. The first is that logical contradictions in leftist ideology show that leftism is more of a result of "The Political," a complex, somewhat arbitrary process of acquiring votes and satisfying the material desires of special interests, than of "The Cultural," wherein allegedly important thinkers derive the goodness of leftism from the realm of ideas, convincing everyone to try a grand social experiment. On this, Hanania writes,

> In addition to the historical record, there is another reason to doubt that wokeness [(Richard renames Progressivism/Cultural Marxism to Wokeness)] is the result of deep philosophical currents ... we can understand that sex was included in the Civil Rights Act as a protected category for very strange and idiosyncratic reasons, placed in the bill through the machinations of a southern segregationist in the hopes of killing it. Nonetheless, within a few years, feminist activists were pushing for the executive branch to take the prohibition on sex discrimination as seriously as it took discrimination against blacks. Now as then, feminist activists have tended to be disproportionately career-focused, meaning they were the ones who determined the kind of "womanhood" that the law would cultivate and protect. To some, blank-slate notions of gender were appealing, as such ideas validated their own choices and inclinations. The fact that feminist and LGBT dogma contradict each other is a problem for logicians and political philosophers but not for the law or the psychology of true believers. Wokeness is rooted in neither a blank-slate view of human nature nor genetic determinism. It can force individuals to adopt one perspective on one issue and the opposite on another.
>
> The ideas associated with wokeness did not win in the marketplace of ideas. In many cases, it almost gives them too much credit to even be considered ideas in the first place. ... The whole project of seeking a grand philosophical explanation for wokeness relies on a conceptual mistake. ... [Wokeness] should be seen less as a philosophical doctrine with its own impeccable inner logic than as a political program that has emerged from a combination of factors such as interest group lobbying, mass emotional sentiment, and bureaucrats seeking to increase their power. [4]

His second premise is that the historical record clearly shows the arbitrary, political nature of leftism.

> The federal government has not only interpreted the CRA in ways that Congress could not have foreseen. In some ways, its interpretations have directly contradicted what legislators promised and agreed to. In his opening statement in the debate over the bill, Sen. Hubert Humphrey told fellow legislators that there was no chance that it would lead to reverse discrimination:
>
> That bugaboo has been brought up a dozen times: but it is nonexistent. In fact, the very opposite is true. Title VII prohibits discrimination. In effect, it says that race, religion, and national origin are not to be used as the basis for hiring and firing.

Further emphasizing the point, the future vice president told a skeptical colleague that if he could find "any language which provides that an employer will have to hire on the basis of percentage or quota related to color... I will start eating the pages." Yet Congress wasn't satisfied with such assurances. So the following text was also added to the bill:

Nothing contained in this title shall be interpreted to require any [employer or labor union] to grant preferential treatment to any individual or to any group because of the race, color, religion, sex, or national origin of such individual or group on account of an imbalance which may exist...

The text of the document and the legislative history agree on this point. Yet ultimately none of this would matter, and it would be used to justify proportional hiring by race and sex. In 1968, Clifford Alexander, the director of the EEOC, declared, "Our most valid standard is in numbers... The only accomplishment is when we look at all those numbers and see a vast improvement in the picture." A few years later, a Labor Department official would explain requirements for government contractors by saying that "affirmative action is anything you have to do to get results." [4]

The intent of the law when originally passed was significantly different from what it morphed into under the management of self-serving bureaucrats and noisy pressure groups. Hanania says this shows that there was no plan derived from the works of Herbert Marcuse and the Frankfurt School — it was all just politics as usual.

Hanania is absolutely correct, if brief, in his refutation of historical idealism. Where he fails is in conflating a collection of anecdotes with a theory of history. His "evidence" is essentially that the law emerged through the process of politics, and that the law is very powerful. He fails to explain why Cthulu swims Left and never Right. For Hanania, the solution is to simply overturn the right laws – Republicans had the federal government in 2018, if they had just repealed Civil Rights Laws, the country would be on its way to permanent healing from Wokeness.

As I show in the later parts of this book, merely overturning Civil Rights law, if even possible, is not enough to stop the decline the United States and the West as a whole, any more than the reforms of Augustus stopped the decline of Rome, which was in fact caused by the very same root as our decline, and which was marked by the same symptoms. Hanania, unlike Yarvin, discounts the depth, persistence, and severity of the problem at hand, while correctly brushing idealism to the side.

2.2.6 These Writers Demonstrate the Need for Quantitative Science

What do each of these "thinkers" have in common? All of them are unscientific and non-quantitative. Their lack of epistemic guard rails allows them to push self-enriching rubbish without the need to do real, difficult intellectual work, like that which was done for the creation of this book (this author read hundreds of studies, dozens of old books, and learned all of statistics).

We have thus demonstrated logically and empirically that wordceldom, the privileging of words over data, is deleterious against the acquiring of useful information for problem-solving. On the logical side, we demonstrate with a thought experiment the superiority of the quantitative method. On the empirical side, we show that the preceding thinkers on this topic have pushed fake solutions to the problem of leftism precisely because they are not bound by the quantitative method.

2.3 Being a Wordcel is a Mental Illness

If the empirical-quantitative method is superior, then perhaps it can provide evidence for its own superiority. In this section, we show that there is such evidence. Defining a mental illness Darwinistically as a psychological trait that is deleterious to fitness, we show that being a wordcel correlates with other mental illnesses, which tend to correlate with each other, indicating that wordceldom and other mental illnesses are associated with deleterious alleles induced by mutational load. Further, we show that in the extreme, wordceldom is as obviously deleterious to fitness as depression, schizophrenia, and other mental disorders.

2.3.1   What do Gays, Jews, and Women all Have in Common?

Q: What do Gays, Jews, and Women all Have in Common?

A: They all have increased rates of mental illness as well as increased likelihood of verbal tilt, i.e. diminished spatial intelligence with non-diminished "verbal intelligence."

What this indicates is the possibility that verbal tilt, i.e. wordceldom, is caused by the same agent as mental illness. Where more verbal tilt appears, more mental illness also appears.

The details of this are left to Appendix 1 and Chapter 2. Essentially, there is some evidence that certain mental illnesses, including ADHD and schizophrenia, are increased by mutational load. At the same time, homosexuality is increased by mutational load and correlates, phenotypically and genetically, with these mental illnesses. A genetic correlation means the same genes that increase the risk for ADHD and schizophrenia increase the risk for homosexuality.
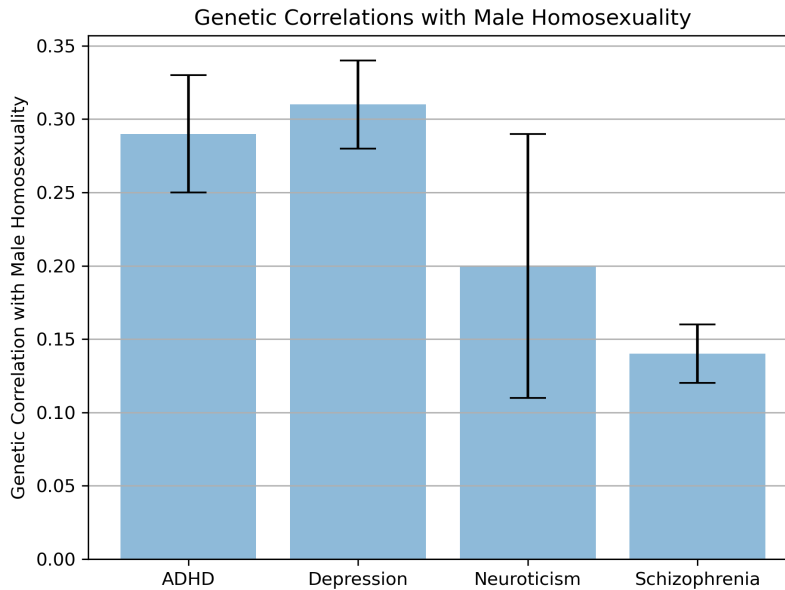
Figure 2.2: Error bars are 95% CI. [4]

Homosexuality also correlates with leftism, and there is evidence that mutational load increases leftism. Verbal tilt correlates with leftism, too. In fact, in universities it predicts field liberalness at $r = 0.71$.

Ashkenazi Jews are more leftist, mentally ill, and verbally tilted. They also have far higher rates of left-handedness, which is associated with mutational load, as well as other disorders. It is possible that living in urban conditions in Europe for longer than most gentiles led to higher Ashkenazi mutational load, causing their leftism, verbal tilts, and other traits.

Women are more susceptible to mental illnesses, and have higher rates of leftism and verbal tilt. It is possible that their lack of a Y chromosome somehow exacerbates the effect of mutational load in these dimensions. Women have more risk variants for depression, for instance, meaning mutational pressure can exacerbate female depression more easily. This is probably also the case for the verbal tilt and leftism.

All of this suggests verbal tilt may be a mental illness exacerbated by mutational load. We also have some direct evidence that the same genes that contribute to mutational-load induced mental illnesses also contribute to a verbal tilt.
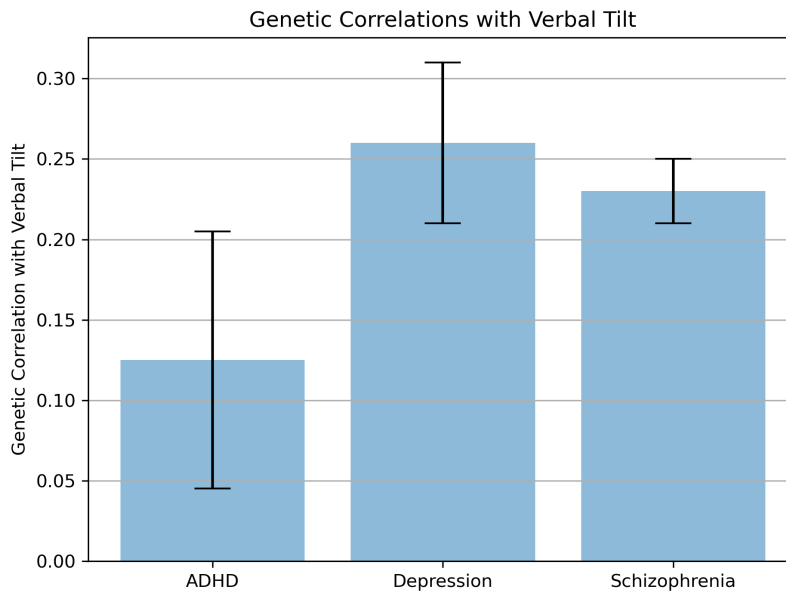
Figure 2.3: Error bars are 95% CI. [6]

So it would seem verbal tilt is in part caused by the same gene variants that cause homosexuality, leftism, schizophrenia, ADHD, and these variants tend to be increased by mutational pressure, i.e. they are unfit and the result of entropy, and were selected against in the past.
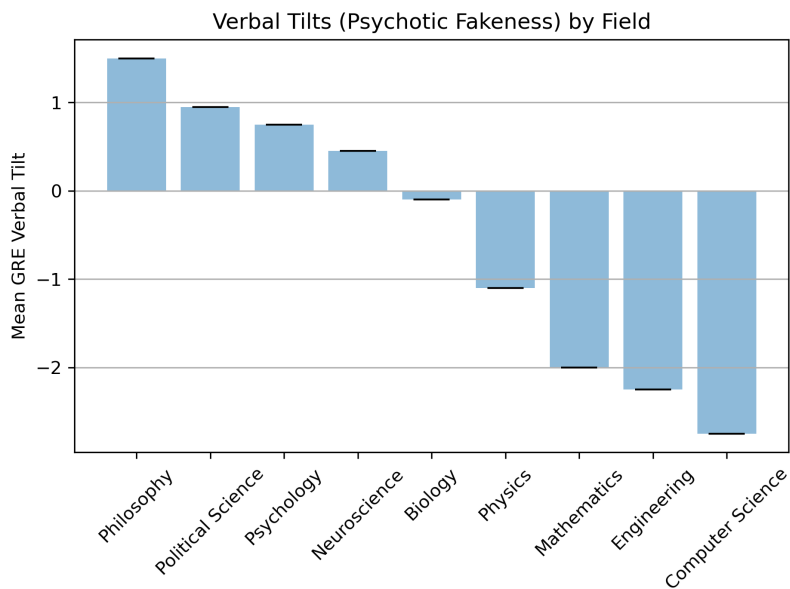
Figure 2.4: Error bars are 95% CI. [7]

Philosophy and political science are highly male, and highly verbally tilted. In males, verbal tilt is associated with being gay, Jewish, schizophrenic, and ADHD. Thus, philosophy and political science are gay, Jewish, delusional, and low attention span. Being a wordcel is a mental illness. QED.

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Chapter 3

Memetics and "Cultural Evolution"

3.1 Summary

Memetics and "cultural evolution" are two names for essentially the same idea: the study of how the human informatic environment impacts and causes differences in human behavior. In this chapter, I will argue that the creation and centering of these two discourses was motivated by political blank-slatism. I will show that the "memetics" variant of the discourse is non-mathematical and unscientific. While the "cultural evolution" variant attempts to bring mathematical modeling into the fold, such modeling has failed to be sufficiently empirical, and the designers of such models commit egregious fallacies during data interpretation used to support their models' dubious blank-slatist assumptions. I break down these assumptions into two components: low genetic bias and time consuming informatic spread. Then I review the existing literature and some newly collected data and conclude that these assumptions have been falsified. Next, I propose two variance component models involving memetics and genetics, one for a single time and one for analyzing through-time behavior shifts. I argue that we should understand the importance of memetics in the context of the model parameters m^2 and m_t^2, the proportion of variance of behavior explained by informatics at a time and through time. Finally, I argue, based on the data, these parameters are near 0 for modern political behavior (i.e. the right-wing vs. the left-wing).

3.2 The blank-slate origins of memetics and culture

The full argument of this chapter is self-referencing. We will begin with the blank-slate origins of the discourse around memetics and "culture." We will then suggest that, in essence, "culture" is "not real." Given the culture is not real, the discourse about "culture" must be driven by blank-slatist genes, which will be the focus of Chapter 3. This means that, ultimately, we are here arguing that leftist genes cause "culture" discourse, that this discourse is not really informational but rather is just a complex way to signal disagreement and opposition to a truly biological science of politics and society.

Before "cultural evolution" came memetics. The label "memetics" originated with the British pop-science writer Richard Dawkins. He introduced the in his 1976 book *The Selfish Gene*. In this book, Dawkins used the term "meme" to describe a unit of information that spreads from person to person within a population.

Critically, Dawkins invented the term due to its phonic similarity with the term "gene." He did this because he posited that information, or memes, are *mind viruses* that exist onto themselves and which are subject to natural selection, like nucleotide viruses. How else, as a blank-slatist and militant atheist, was he to explain religion? Dawkins could not explain religion by saying it was true. But he also could not claim it was primarily adaptive and hard-coded into human brains, as an opponent to organized religion and as a blank slatist. Therefore, it had to be a virus which replicates for its own ends. This explains why religion is a great plague which causes all war, racism, oppression, and so on.

> Consider the idea of God. We do not know how it arose in the meme pool. Probably
> it originated many times by independent 'mutation'. In any case, it is very old indeed.

> How does it replicate itself? By the spoken and written word, aided by great music and great art. Why does it have such high survival value? Remember that 'survival value' here does not mean value for a gene in a gene pool, but value for a meme in a meme pool. The question really means: What is it about the idea of a god that gives it its stability and penetrance in the cultural environment? The survival value of the god meme in the meme pool results from its great psychological appeal. It provides a superficially plausible answer to deep and troubling questions about existence. It suggests that injustices in this world may be rectified in the next. The 'everlasting arms' hold out a cushion against our own inadequacies which, like a doctor's placebo, is none the less effective for being imaginary. These are some of the reasons why the idea of God is copied so readily by successive generations of individual brains. God exists, if only in die form of a meme with high survival value, or infective power, in the environment provided by human culture. [1]

This would be elaborated on more clearly by verbal theorists in the 90s and 2000s. A continuum of positions emerged: hard-core blank slatists debated with gene-culture coevolutionists. Susan Blackmore laments the bigots who think genes still matter for explaining differences in human behavior, through time and at one time:

> Perhaps Boyd and Richerson (1990) come closest to treating the cultural unit as a true replicator. However, they still view "genetic and cultural evolution as a tightly coupled co-evolutionary process in humans." ...

> Dawkins is clear on this issue when he says "there is no reason why success in a meme should have any connection whatever with genetic success." I agree. I am going to propose a theory of memetics that lies at the far end of this continuum. I suggest that once genetic evolution had created creatures that were capable of imitating each other, a second replicator was born. Since then our brains and minds have been the product of two replicators, not one. Today many of the selection pressures on memes are still of genetic origin (such as whom we find sexy and what food tastes good), but as memetic evolution proceeds faster and faster, our minds are increasingly the product of memes, not genes. If memetics is true then the memes have created human minds and culture just as surely as the genes have created human bodies. ...

> Human consciousness ... is itself a huge meme-complex, and a person is best understood as a certain sort of ape [with neurological uniformity untouched by evolution in the last 10,000 years] infested with memes [which create behavioral differences]. [2]

Obviously, their blank slatism is absurd, and, as we learned in Chapter 1, enabled by their lack of mathematical specificity and data. This discourse eventually rotted into what is now called "cultural evolution," where the median position seems to be gene-culture co-evolution, with "culture" being very important for "short term change", where short term is defined by feelings. There has never been any attempt to empirically verify or mathematically model memetics, something which is very epistemically dangerous.

3.2.1   Culture as Blank-Slate Obscurantism

We now turn to the idea of "culture." This is a concept that has been found to have over 160 different meanings [5], which can be grouped into three major categories: group phenotype, group memome, and population or race. An example of the first type of definition might be found in the statement "it is Asian culture to study hard for tests." The second definition is most commonly used in "cultural evolution" models, where culture essentially refers to the set of information possessed by a group. An example of the third meaning might be "we must save Western culture" or "there are vast differences between the cultures of Israel." Culture most closely serves as a euphemism or synonym for population or race in this formulation.

It is the widespread usage of the second meaning, and its conflation with the first meaning which is of interest to us here. This word, being so definitionally slippery, is often used to imply subtly a position known as info-determinism. This is a position which holds that all within-group and between-group differences can be explained by differences in memomes. This trick often takes the following motte and bailey form. First, it is asked, "Why do Asians do well on the SAT? Why do blacks do

poorly?" It is answered: "It's just their culture." When there is pushback, the pusher is treated as if he is insane, for the statement is analytically true! Any difference is culture, by the first meaning of the word. This is the motte. The bailey is that the groups differ because of mere informatic differences, as opposed to genetic differences. Exactly what information the groups are supposed to be missing is left vague. As we will argue, it is highly unlikely or even impossible that a group could be missing useful information, because information exchange is so cheap, easy, and efficient. For example, people of every color have full access to all test preparation material at the same price, which is often free on the internet or costs at most a few hours work at minimum wage if not. The knowledge of the existence of this material can be transmitted in seconds, in one or two sentences.

For these reasons, we question the validity of the concept of "culture," and with it, "cultural evolution."

In the beginning, the idea of culture was largely pushed by blank-slatists to muddy and mix the purity of the concepts of race, practices, and knowledge. A race became a Culture, and Cultures had culture, which included but was not limited to "custom, practice, knowledge, habit, art, food, morality, and religion." The concept of culture is precisely a war on the scientific sorting of causes of group behavior into various precise bins. This is, of course, generally waged by blank-slatists, because most group behavior is determined by genes.

Kevin MacDonald recounts the rise of "culture" as a part of Boasian anthropology [6]. "Culture" was used to obscure race and biology. Before, differences between populations were thought, in the academy, to be related, at least in part, to evolved race differences. After the invention of "culture", all differences were ascribed to "culture".
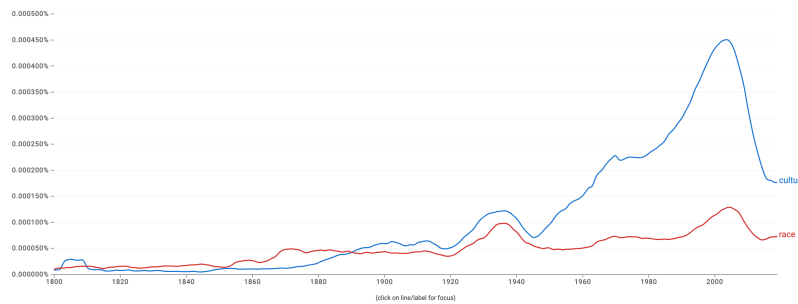
Figure 3.1: Mentions of Race and Culture over Time

The concept of race was dominant over culture from 1820 to 1890. After that, until about 1950 culture came to slightly dominate. Then, in the 1950s and 1960s, "culture" exploded and came to massively dominate over race.

This is the same story of the 1960s that has been told before, the one that ultimately comes down to mutational load, except it is clear here that "culture" is on the side of mutational load and blank-slatism.

3.2.2 Cultural Evolution as the Penetration of Culture into Biology

Biology remained based and ignored culture until the 1980s. It could do this because it stayed away from social behavior; culture had infested sociology and anthropology, absolutely destroying what scientific rigor they had in the 19th century.

Because they were non-scientific, in 1975 E.O. Wilson suggested a revival of the biological science of society called sociobiology. This enraged the blank-slatists [7].

They formed a group at Harvard called the Sociobiology Study Group. This group was run by figures like Richard Lewontin, creator of Lewontin's fallacy, and Stephen Jay Gould, a fraudster who lied about Morton's skulls being fake, among other things.

Lewontin used his New York Times connections to manufacture controversy, and the group published several heavy-handed letters denouncing the immorality of sociobiology. Needless to say, this only backfired.

The blank-slatists needed another plan. So they invented the idea of cultural evolution in biology. The term "cultural evolution" was already floating around in the blank-slatist pseudo-sciences, but

biologists never took it seriously because it was vague, fake, and non-mathematical, like most "cultural evolution" stuff today.

In 1976, Richard Dawkins published his verbal tract against group selection titled The Selfish Gene. In it, he sowed the seeds of cultural evolution in biology, giving it a unit of evolution known as the "meme." blank-slatists began working to formalize this idea mathematically.

In response, E.O. Wilson set to work with Charles Lumsden, creating their own mathematical models ultimately culminating in the book Genes, Mind, and Culture, which defined the "culturgen" as the unit of culture. They attempted to show that genes keep "culture" on leash and that "the tabula rasa is unlikely". Sadly, however, they did not go far enough, and still allowed for some form of gene-independent "cultural evolution." It's clear even their idea of "culture" is a big spook: "a relatively homogeneous set of artifacts, behaviors, or mentifacts." What even is a mentifact?

But even this was too much for blank-slatists, so they finally struck back with *Cultural Transmission and Evolution*. It was co-authored by a man named Cavalli-Sforza.

According to an article published in *The Economist* [8], the work of Cavalli-Sforza "challenges the assumption that there are significant genetic differences between human races, and indeed, the idea that 'race' has any useful biological meaning at all". The book illustrates both the problems of constructing a general "hereditary tree" for the entire human race, and some mechanisms and data analysis methods to greatly reduce these problems, thus constructing a fascinating hypothesis of the recent 150,000 years of human expansion, migration, and human diversity formation. In the book Cavalli-Sforza asserts that Europeans are, in their ancestry, about two-thirds Asian and one-third African. This is anti-white, of course, because Asians and Africans exist but not Europeans in this formulation. Europeans just become a combination of races that actually exist.

In their book, they literally just commit the sociologist's fallacy and define culture as everything. For example, they claim that people get more "culture" from their parents than others. They have to say this so that there is any variance in culture. If cultural transmission is uniform, everyone will be exposed to the same culturegens and there will be no behavioral variance due to culture. So cultural transmission becomes heterogenous in the exact same way genetic transmission is. What is the evidence against the default hypothesis that similarities to parents are genetically transmitted as opposed to "culturally" in a world of massive free information flow?

> A more mundane example [9], analyzed in some detail, is the transmission and random-sampling drift of Italian surnames. The methods for estimating model parameters are well illustrated by data on the religious, sexual, and other preferences of Stanford University students and their parents. If nothing else, this example shows surprisingly high correlations between preferences of parents and children, illustrating that even in our modern, media-dominated society, social transmission is highly structured

Lol. This is the sociologist's fallacy.

Decades of twin studies have evaporated the blank-slatist claim of vertical cultural transmission inducing large amounts of trait variance, by the way. Shared environment explains hardly any differences in various behaviors. Instead, heritability is usually high and after that unshared environment, which could contain horizontal "cultural" transmission (but probably doesn't). This discredits models that focus heavily on "vertical transmission."

Finally we get to the 1985 Boyd-Richerson dual inheritance model. First, they are both Californian; the first is an anthropologist, and the second is an environmental scientist. Based on data concerning leftist by field, it is likely they are both blank-slatists.

They begin their argument with defining culture. First, they note the existence of a 1952 book showing there are no less than 164 definitions of culture, with 3 major categories. These categories are the genetic dogwhistle ("save Western Culture (white people)"), mass phenotype ("it is Asian culture to be good at the SAT") and information ("Cooking is a cultural adaptation to overcome food poisoning").

The authors go with the informatic definition: "Culture is information that affects phenotypes, acquired from others".

This is great, this is the same as my definition of memetics minus the arbitrary "acquired from others" requirement. Certainly the authors will not commit the sociologist's fallacy and will instead consider informatics as a variance component that explains some proportion of trait variation in a population, right?

Wrong! Next they motivate their models with the sociologist's fallacy.

We will briefly review four different lines of evidence that we believe combine to make a strong, although certainly imperfect, case for the importance of stable, slowly evolving cultural variation in explaining human behavior:

1. Laboratory experiments show that humans learn from others with great facility. Social learning theorists have shown in some detail how an individual can acquire a very large cultural repertoire.

2. Studies of socialization in more naturalistic settings have shown that child-rearing patterns are correlated with behavioral variations in children.

3. A large body of psychometric and sociometric studies measuring correlations among offspring, genetic parents, and various classes of potential cultural parents provides ample evidence of cultural transmission despite an inevitable tendency for the effects of genetic, cultural, and environmental variation to be confounded.

4. Historians, sociologists, and anthropologists have found a number of striking examples of cultural inertia, situations in which cultural ancestry is important in changed situations or where traditional cultural differences persist in similar environments.

Figure 3.2: The Sociologist's Fallacy, Part 1

First they establish that people can learn! This is trivial. This doesn't say how much of X trait variance is due to informatic variance. We can call treating this as binary as the "infinitesimal effect size fallacy." This is a fallacy where blank slatists (or others) say some cause is really important because they found a non-null effect size. It goes something like this [10]:

Abstract

An individual's level of education is increasingly significant in explaining their political attitudes and behaviour, with higher education proposed as a new political cleavage. However, there is limited evidence on the causal effect of university on political attitudes, due to self-selection into educational pathways. Addressing this gap, this article estimates the change in political values that occurs within individuals who graduate from university by applying longitudinal modelling techniques to data from the 1970 British Cohort Study, overcoming the selection problem by accounting for time-invariant confounding. It provides the first causal estimate of higher education specifically, finding that achieving a degree reduces authoritarianism and racial prejudice and increases economic right-wing attitudes. This has important implications for the study of politics: as populations become more highly educated on average, we should expect continuing aggregate value change towards lower levels of authoritarianism and racial prejudice, with significant consequences for political behaviour.

Figure 3.3: TThis Finding is Very Important

"We found an effect size where increasing education causes liberalization. Therefore, increasing education has significant consequences on political behavior. It explains the increase in liberalism. No bigoted genetic theories needed!"

When the reality is with this paper, after controlling for stuff like income, they found very small effects of attending college on leftism, in between 0.1 and 0.2 SDs. This means if in 1955 nobody went to college, and then everyone went in 2020, we would expect leftism to increase by 0.1 to 0.2 SDs. How much of the generational increase in leftism can this explain? Well . . . If you use the authoritarian metric, which is not what leftism is, this would explain 6% of the generational gap. If you use the better race metric, increasing education would increase leftism by about 0.01 SD over the last 40 years. But there is a 0.3 SD generation gap to explain. So increases in college education can explain **about 3% of the increase in leftism over the last 2 generations!**
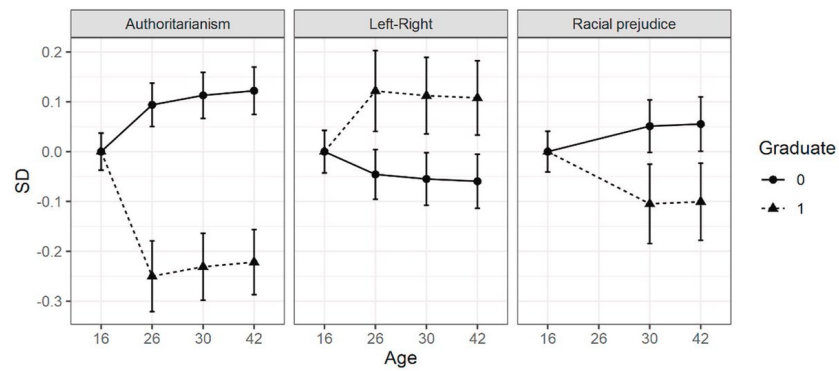
Figure 3.4: The Effect of Education on Leftism, Upper Bound
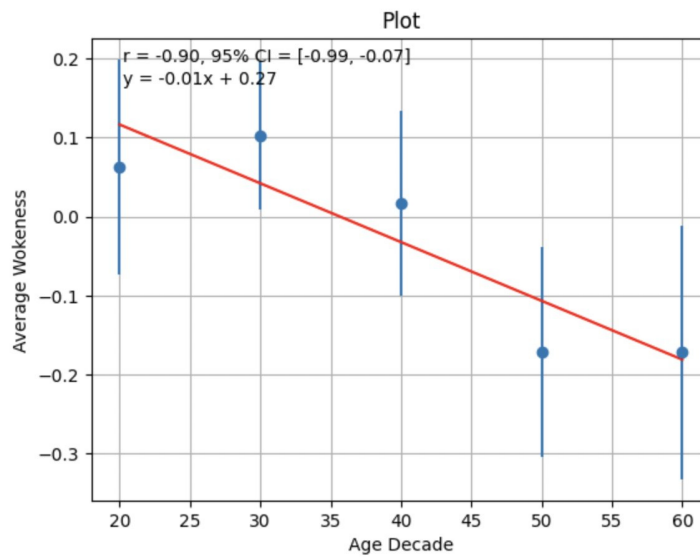
Figure 3.5: The Gap in General Leftism between Generations

Back to culture. Points 2 and 3 have been definitively debunked by twin study research. None of the studies control for genetics, so they fail to overturn the default hypothesis that parent-child similarity is genetic.

Table 3.1 Studies showing effects on children's behavior of parental rearing practices

Ahlstrom & Havighurst (1971)	Compared to controls, boys with persistent delinquency and failure to respond to work-study opportunities lacked competent male role models and lacked family support for scholastic activity.
Bacon et al. (1963)	Socialization practices in 48 mostly preliterate societies confirm patterns of association between child-rearing practices and frequency of theft and personal crime. Lack of a male role model for young children and excessively authoritarian child-rearing practices lead to more criminal behavior.
Hetherington (1972) Hoffman (1971)	Father absence has a subtle effect on the socialization of females, and a more substantial one on males. Daughters lack skills in interactions with males, whereas sons tend to suffer a wider range of deficits when a male role model is absent.
Lesser and Kendel (1969)	Danish and Americans show different frequencies of child-rearing patterns resulting in different patterns of adolescent independence. However, the same patterns of child rearing within each country have the same results.
Hoffman and Saltzstein (1967)	Parental child-rearing styles or techniques explain much of the variation in children's moral development.
Lynn (1974 and 1979)	Reviews of the role of father's child-rearing practices on children of both sexes, and a similar review of both parents' effects on daughters. Antecendents of sex role typing, achievement motivation, vocational choice, delinquency, personality, and other traits.
Maccoby (1980)	Sex identity can be assigned by parents (review of several studies) at least in cases where physiological sex is ambiguous, without apparent problems. This despite the apparent role of biases in the formation of sex identity. Other evidence indicates a substantial role for parents, particularly fathers, in teaching sex-typed behavior to normal children.
Maccoby and Jacklin (1974)	Children learn sex-appropriate behavior in part via parental socialization.
Simpson (1962)	Parental influence on career aspirations and prospective upward mobility are strong.

Figure 3.6: The Sociologist's Fallacy, Part 3

Table 3.2 Studies showing evidence of vertical transmission

Bachman (1970) Bachman et al. (1978)	Longitudinal study of males from high school to young adulthood. Most of the personality variables, attitudes, and attainments studied were related to family background. Stability from high school age to young adulthood of most variables considerable.
Blau (1965) Duncan (1965) Lipset and Bendix (1964)	Sons tend to have the same occupational status as their fathers in industrial countries. Net upward mobility is substantial, but both upwardly and downwardly mobile sons tend to rise or fall to a status close to their fathers'.
Block (1973)	Variations in sex role conceptions within and between societies appear to reflect patterns of socialization that replicate parents' role conceptions.
Cavalli-Sforza and Feldman (1981) Cavalli-Sforza et al. (1982) Chen et al. (1982)	Surveys of college students and their parents used to obtain data on parent-offspring resemblances for a number of traits. Transmission matrices displayed and analyzed.
Coopersmith (1967)	Children with high self-esteem have parents with high self-esteem. Parents whose self-esteem is high also tend to be models of effective techniques to deal with everyday problems.
Glass and Hall (1954)	Mobility between occupational roles in Britain, as later found in the U.S., is far less than a perfect mobility model predicts. Sons are typically of the same or similar status as their fathers.
Flacks (1967)	Politically active students of the 1960s tended strongly to have liberal to radical parents, compared to nonactive students.
Hagman (1932)	Children's fears of dogs, insects, storms, and so forth are significantly related to mothers' fears. The number of mothers' and children's fears were correlated at the 0.67 level, and mothers and children showed a significant tendency to have the same fears.
Jessor and Jessor (1977)	Maternal ideology had a reasonable correlation with frequency of problem behavior in high school students. The children of traditional, religious, and tolerant mothers were less prone to marijuana use, alcohol abuse, sexual activity, and activism than children of other types of mothers.
Kirkpatrick (1936)	Modest correlations between mothers' and children's attitudes toward feminism ($r = 0.38$–0.34); insignificant relationships between fathers' and children's scores. Sharply higher values reported for parent-offspring correlations for religious attitudes.
McCall (1977)	Offspring attained adult education and occupational status correlated with parent's education and occupational status ($r \approx 0.6$). No independent effect of IQ.
Newcomb and Svehla (1937)	Parents' and children's attitudes toward church, war, and communism are correlated, ($r = 0.4$–0.7).
Rice et al. (1980)	Estimates of heritability of IQ from family resemblance data indicate that approximately 30 percent of the variance in IQ is due to cultural inheritance.

Figure 3.7: The Sociologist's Fallacy, Part 4

In some cases it seems like it is simply assumed that political similarities can't be inherited, even though political views are over 70% heritable under some estimates. In other cases, the author claims all environmental variance is cultural variance, but this is fallacious. Remember culture is defined here as informatics. The Rice et al. citation is an example of this. How can informatics even influence IQ? That makes about as much sense as informatics influencing height.

After this they basically just paste population-genetics models but instead of genes you have, I kid you not, "cultural alleles." There is really nothing of significance here because all of this is built on the infinitesimal effect size fallacy and the sociologist's fallacy. These models have never been verified because no one can measure a cultural allele, because no one knows where it is or what it looks like. In other words, their models concern molecular informatics and not estimating how much variance informatics explain. Molecular informatics does not exist like molecular genetics does.

3.2.3 The Three Problems with "Cultural Evolution"

We can conclude that there are three problems with "cultural evolution". The first is that it is used to distract from genetics when the empirical fact is that heritability is much higher in general than memetability. Cultural evolutionists ignore the need to measure memetability while adopting unverified assumptions about informatic spread that weakly imply memetability will be high.

The second problem is disinterest in verifying their informatic assumptions. One of these is the assumption of low informatic bias. Informatic bias is the extent to which genes select for fitness maximizing information efficiently. In general, the higher the informatic bias the lower the memetability (variance of a trait that is due to variance of information). I have attempted to discredit the idea of low informatic bias by demonstrating empirically the low gullibility of people in general.

Another assumption is the assumption of time-consuming informatic transmission. The more time-consuming the transmission, the more vertical transmission will dominate and the more informatic heterogeneity between families will dominate. Basically, when it's more time-consuming, people are exposed to less information which will increase informatic variance due to exposure variance. Low shared-environmentability refutes the assumption of time-consuming informatic transmission. Informatic transmission should be rapid and efficient, meaning everyone gets exposed to the same genes-exogenous set of behavioral information throughout their life.

In general, it is these assumptions that warrant the title "evolution." If informatic transmission is rapid and bias is high, what you have is no variance of informatic exposure and, if there is variance of informatics at all, there is an extremely high gene-informatics correlation, because differences in important hard-coded biases determine variant information acceptance. This isn't cultural "evolution", this is just transmission where the information people have is strongly determined by their genetics. Selection on information will also be selection on genetics, in other words, which is just evolution.

The third problem is the vagueness of the word "culture." We are lucky when we are dealing with a mathematical text that is defining culture as informatics, at least mentioning variance components and explicitly defining their assumptions about informational transmission. Most work in "cultural evolution" studies conflates the phenotypic notion and the informatic notion of culture, letting "culture" be this blurry edge between stuff people just do because they're vibing, and the stuff they've learned explicitly.

No more of this. For these reasons, I urge truth-seeking scientists to consider "cultural evolution" to be fake. The term is loaded with the three issues we have just discussed. Instead, we should speak of informatic transmission. This abolishes the "culture" slight of hand, forces clarity which makes it obvious that we need to understand memetability as a component of phenotypic variance, and leaves conceptual room for high informatic bias and easy informatic transmission, which seem to be true based on the data.

3.3 Testing "Cultural Evolution"

3.3.1 The data on vertical transmission falsifies time-consuming transmission

We will now clarify our argument on vertical transmission and time consuming transmission, and how this relates to data and the validity of "cultural evolution." If information transmission is not time consuming, differences in information should be small, and therefore would explain very little of the differences in behavior (this is the same as saying m^2 will be small – see the modeling section). In other words, there would be no variance in informatic exposure. The more time-consuming transmission is, the more spacially concentrated the differences in infosomes, and the more potential for variance due to informatic exposure there is.

Furthermore, if transmission is time consuming, we would expect a lot of transmission to happen between parents, local schools, and children. The "culture" theorists call this "vertical transmission," because several of their most popular models, including the Boyd-Richerson model, simply assume that "vertical transmission" is very important, and accounts for a significant chunk of the heightened behavioral similarity of parents and children relative to the general population.

Luckily, we have a lot of data on vertical transmission. As you will see, it shows that vertical transmission is not real. Thus, by modus tollens, transmission is not time consuming, and by modus ponens, m^2 is low-to-null.

The data comes from twin studies. Under the classic design using the ACE model, vertical transmission is contained within shared environment, which is a combination of several environmental effects that all affect children growing up in the same family. These can be 1) vertical downstream (parents to kids), 2) vertical upstream (kids to parents), and 3) various horizontal effects (siblings to each other) [11]. Consequently, an estimate of c^2 is an upper bound on vertical (i.e., parent to child) informatic transmission. This means if c^2 is very low, vertical transmission must be low-to-null.

Generally, the effect of shared environment on traits is small. The "Plomin Consensus" states [12]:

> A second crucial discovery is that the environment works completely differently from the way environmentalists thought it worked. For most of the 20th century, environmental factors were called nurture because the family was thought to be crucial in determining environmentally who we become. Genetic research has shown that this is not the case. We would essentially be the same person if we had been adopted at birth and raised in a different family. Environmental influences are important, accounting for about half of the differences between us, but they are largely unsystematic, unstable and idiosyncratic—in a word, random. ... The nature-nurture war is over. Nature wins, hands down.

But we also have several studies that try to explicitly measure the effect of vertical transmission. We will focus on those which concern political phenotype here.

The first comes from the 1986 and is titled "Transmission of social attitudes." [13]. It begins with discussing the fact, as we have shown, that until the 1980s, only genetics was scientific. "Culture" existed as a non-scientific alternative:

> The facility with which humans learn and their great investment in mate selection, parental care, and education make the human species a model system for the study of cultural inheritance. Until comparatively recently, however, genetic models for family resemblance such as those devised by Fisher were superior to cultural models because the former were quantitative and led naturally to statistical estimation and hypothesis testing. The emphasis of theoretical analysis has changed over the last 10 years, with the formulation of many quantitative models for the contribution of cultural inheritance to individual differences and family resemblance. Such models have explored vertical transmission between parent and child, horizontal transmission between siblings, and one-to-many oblique transmission between teacher and students.

The next paragraph discusses how vertical transmission is a baked-in feature of the new "cultural evolution models," and how the only evidence the authors had was the sociologist's fallacy, i.e. interpreting data that is explainable by genetics as having nothing to do with genetics, with no evidence that it does in fact have nothing to do with genetics:

> This seminal theoretical work on cultural inheritance has not been matched by the collection of informative data. For example, Cavalli-Sforza et al. illustrate their models of vertical transmission with data on interests and attitudes from a small sample of nuclear families and pairs of friends ascertained from Stanford University undergraduates. The authors themselves admit that the nuclear family design, comprising only parents and children, may illustrate models of vertical transmission but is incapable of resolving biological and cultural inheritance. Thus, while their study focused on measures in which the a priori likelihood of cultural inheritance was greatest, the power of their analysis was constrained by their experimental design and small sample size.

The study went on to directly test, using an extended family design, the relative contributions of genetics and "vertical culture" to the variance of social attitudes. This is possible because, in an extended family design, not just twins but rather multiple generations of families, including parents, siblings, and extended relatives are examined. When vertical cultural transmission increases, extended family members become more similar. When genetics are predominate, the family varies more in similarity as individual relatedness declines.

Social Attitudes Variance Components (Martin et al 1986)
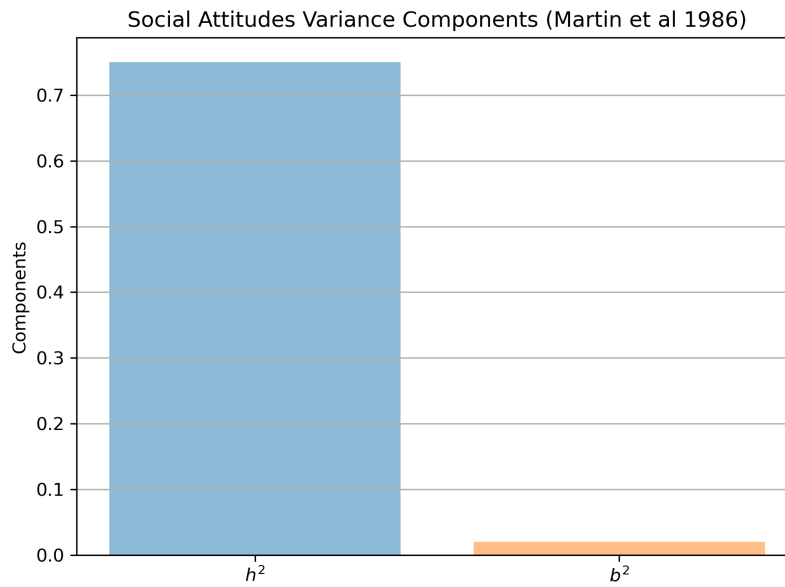
Figure 3.8: Heritability and Vertical Transmission

The results of the paper were that b^2, the variance component for vertical transmission, was less than 0.02 while the heritability of social attitudes was 0.75.

Further studies have backed up this finding thoroughly. In 2010, one study [14] found the following for variance components of Wilson-Patterson Conservatism:

Variance Components of Liberalism-Conservatism
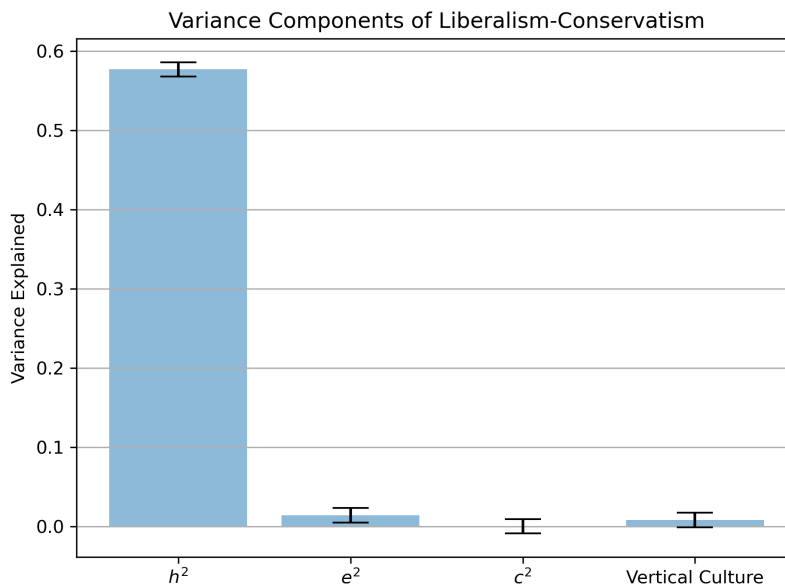
Figure 3.9: Heritability and Vertical Transmission of Conservatism

All components but heritability were negligible. The rest was measurement error.

In 2016, Kandler [15] again corroborated this general finding.
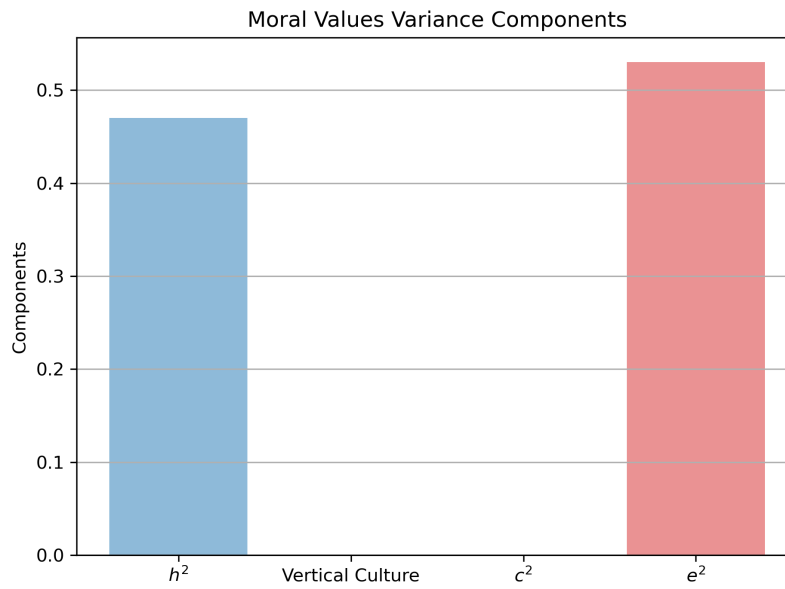
Figure 3.10: Heritability and Vertical Transmission of Moral Values

Kornadt 2018 found the exact same thing for political participation: [16]
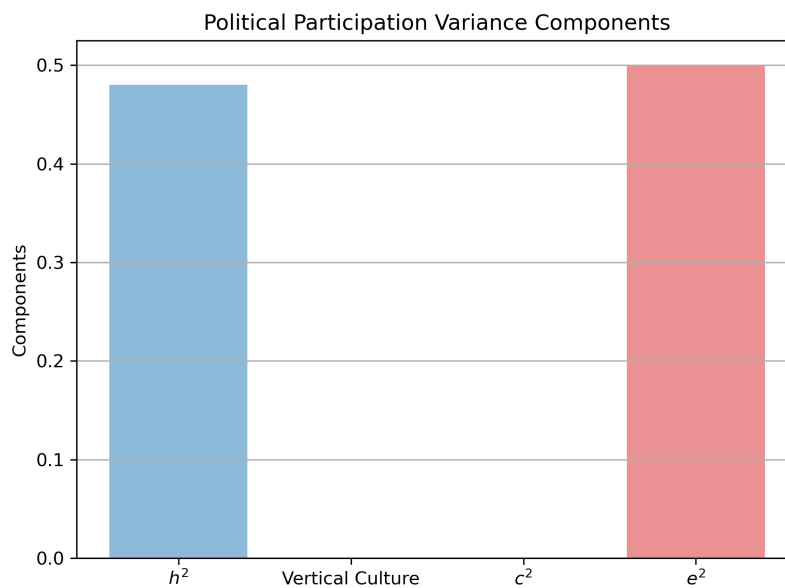
Figure 3.11: Heritability and Vertical Transmission of Political Participation

And finally Bell et al 2018 [17] found yet again the same thing:
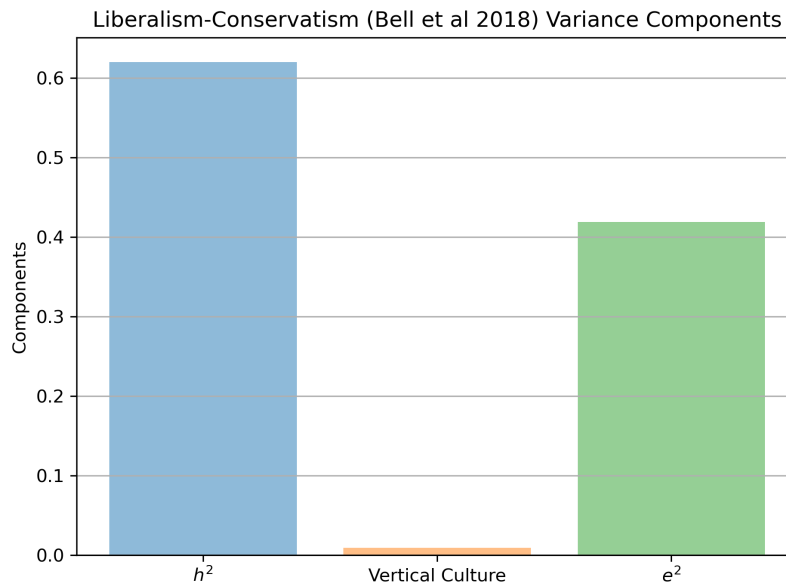
Figure 3.12: Heritability and Vertical Transmission of Liberalism-Conservatism (Bell 2018)

In general, vertical transmission explains nothing and genetics explain more than half of variance of political ideals.

3.3.2 Genetic bias, or: Gene-driven vs. Meme-driven

Can ideas have an exogenous impact? We suspect true and useful ideas, like technology and science, can have an exogenous impact on social behavior, while lazy, false "ideas", like the idea that race is not real, cannot. This is because "genetic bias" is high. In other words, what someone claims to believe is heavily correlated with their genes. It is not random or exogenous to their genes. Insofar as there is any variance in a population, it will be correlated with, and causally driven by genetic variance. This means while the lack of time consuming transmission means overall variance is low, what variance remains will likely be driven by genes and not "memes."

This notion is supported by evo-psych postulating. People would be very fragile if they were susceptible to significant behavioral manipulation via dumb ideas like "the black-white IQ gap is entirely or mostly environmental in origin." For people to hear this, with no evidence, and then to pass the Civil Rights Act, engage in race-Marxist forced bussing of white children to black schools, and to continue this for decades in the face of the policies not working, and all the scientific evidence showing their primary assumption is wrong, makes no sense. Such people should be immediately controllable with any command phrased as information. In other words, such people are very guillible. They harm themselves based on un-verified, non-authenticatd strings of information. Would evolution produce such a fragile system with no memetic security? If so, that's low genetic bias. People randomly uptake whatever memes they are exposed to. If not, people are genetically primed to only accept memes when it suits their genes. There is high bias, and differences in memotypes will be in large part due to differences in genotypes.

We suspect that people should have high levels of "memetic security," (i.e. bias) using only information that is well-verified and authenticated, and continuously rechecking the utility of information as they use it. In other words, they should tend to update their priors rationally, throwing away bad priors where needed, trusting better priors that pay off more and more.

High levels of memetic security implies people are not duped into what appear to be "bad beliefs." They do not seriously believe ideas which are wrong. Instead, they are engaging in some sort of *signalling*, likely for the purposes of collective action. When leftists claim to believe in the blank slate, we expect them to not act on this in costly ways, because they should have too high memetic security. Instead, they are signalling that they support race-Marxist policies for other reasons, secret reasons that are beneficial for them.

Memetic security is precisely the gene's defense against the parasitic meme. The more security the genome has against bad information, the more ideas are gene-driven, actively manufactured by the genome for the genome's benefit, not spreading against the will of the genome like a nucleotide virus.

If ideas are predominantly meme-driven and there is low genetic bias, we should see evidence of parasitic memes that causally reduce fitness upon exposure. This is what we see everywhere with nucleotide viruses.

3.3.3 The data on gullibility falsifies the meme-driven, low-bias mind virus view

How do we find out if parasitic memes exist? Mind virus people naively and unscientifically reason circularly, assuming any behavior they think is deleterious *is* deleterious, and that it must be caused by memes. But they have never produced scientific evidence for either of these assumptions. They could just as easily reason that COVID is caused by miasma.

We want to look closer. We want to see if people who are exposed to memes some imagine to be viruses are actually made to exhibit fitness-reducing behavior. If exposure has little to no effect on costly behavior, memetic security is high. People only use information they rightly verify to be beneficial to them. On the other hand, if the meme-centered view is true, we would expect to see that people are very guillible, exhibiting costly behavior frequently after being exposed to wrong information, like a little child (children are stereotyped to have lower memetic security than adults).

It would seem that, overall, the data suggests that people are not very guillible in this way, indicating strong genetic filtering for information. In general, about 1% of people exhibit some guillibility. We can compute the percent of people with guillibility with the following procedure across multiple domains: first, measure a costly behavior probability $p_1 = P(C|N)$ among people who have not been exposed to suspicious information. Then measure the costly behavior probability of those who have been exposed, $p_2 = P(C|Y)$. Now, we are interested in the proportion of the control group would flip to the costly behavior upon exposure. Assuming random exposure, this can be estimated with:

$$p_s = \frac{p_2 - p_1}{1 - p_1} \tag{3.1}$$

I have collected a number of p_s statistics. They all tend to be very low, and we can just average them all together to try to approximate a general sensitivity to mind virus infection. I have thrown the full details in the appendix. Here, I will present a chart summarizing the results.
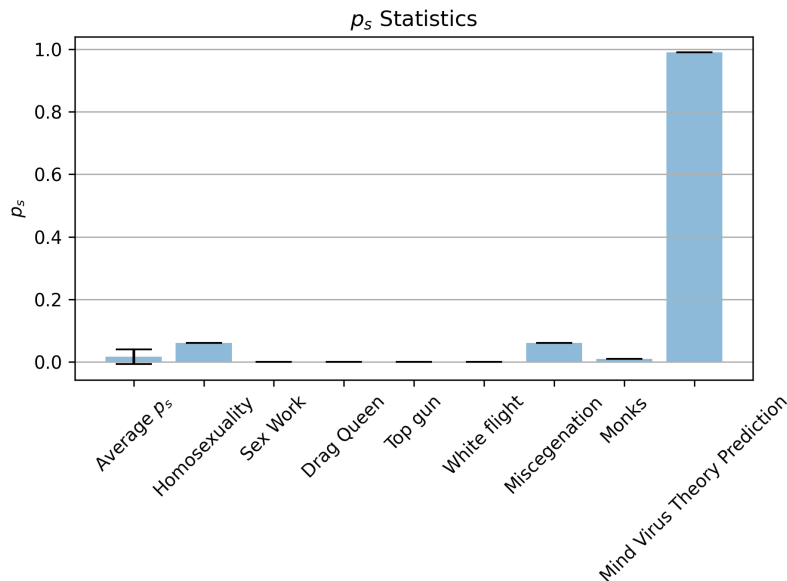

Figure 3.13: General Guillibility is indistinguishable from 0

In addition to this, there is also extensive work by Hugo Mercier documenting the same finding with cognitive science literature [3] [4]. I will summarize his arguments here.

3.3.4   Some beliefs aren't really beliefs

Mercier distinguishes between real beliefs and what amount to collective action signals. Naive spectators of politics and history may think that beliefs cause behavior, which can often be costly, but the reality, based on the data Mercier reviews, seems to be more that sayings that appear to be beliefs are actually collective action signals, which indicate loyalty and the willingness to engage in coordinated, collective action at the right time.

He calls real beliefs "intuitive," meaning they help drive intuitive behavior, and "reflective," meaning they are just words that do not drive behavior.

A common argument posits that misbeliefs directly lead to specific behaviors. The humoral theory of disease, which suggests that illnesses arise from imbalances in bodily fluids, seemingly prompted the widespread practice of bloodletting. At first glance, this misbelief appears to be the direct catalyst for this costly medical procedure.

However, a deeper dive into the data offers a more layered understanding. Bloodletting, as Mercier, highlights, was a therapeutic practice in various populations, many of which did not adhere to the humoral theory (low p_s!). This cross-cultural prevalence indicates that other factors might be driving the behavior, with the humoral theory serving more as a justification than a cause. This is incredibly reminiscient about what Pareto said about derivations and residues (see the appendix on Pareto).

Rumors, particularly false ones, represent a powerful subset of apparent misbeliefs. Mercier references instances where rumors seemingly instigate violent ethnic riots or lead to resistance against beneficial medical practices like vaccination.

Yet, the data suggests a more complex relationship between rumors and behavior. For instance, resistance to vaccination is observed universally across populations, each accompanied by its unique set of rumors. This variability in justifications for a consistent behavior underscores the role of rumors as post-hoc rationalizations rather than primary motivators.

Politics is a fertile ground for rumors and misbeliefs. The rumor about Barack Obama's religious affiliation serves as a case in point. While one might assume such rumors could significantly sway political decisions, empirical data from Mercier indicates otherwise. Studies referenced by him found that acceptance of the rumor was more pronounced among individuals already inclined to view Obama unfavorably. Furthermore, this belief did not tangibly alter voting behaviors, suggesting its reflective nature.

A recurring insight from the data is the propensity of apparent misbeliefs to act as justifications rather than direct instigators of behavior. Whether examining medical practices, vaccination resistance, or political biases, misbeliefs often provide a narrative to rationalize existing behaviors or stances. For example, in the context of ethnic riots, baseless rumors about an ethnic group might proliferate. While these rumors provide a rationale for aggression, the actual aggression tends to have deeper roots in socio-political dynamics, with the rumors acting as a catalyst or an excuse. This is consistent and convergent with the p_s data.

3.3.5   General gullibility is low: more evidence

Mercier has shown that what often looks like costly belief really isn't. He follows this up with more evidence against people being generally gullible [4].

In his article "How Gullible Are We?," Mercier delves into the intricacies of human gullibility, particularly in the context of information processing and belief formation. Its main argument challenges the widely held notion that humans are overly gullible, suggesting that our susceptibility to misinformation is much lower than commonly believed. The article has 7 key points.

The first point is regarding historical context: Mercier references various historical events and phenomena, from Nazi propaganda in World War II to the influence of media in the People's Republic of China post-Tiananmen period.

One of the most striking examples Mercier references is the use of propaganda by the Nazis during World War II. The Nazis effectively utilized mass media, especially radio broadcasts and films, to disseminate their ideologies. The regime's control over information and its ability to manipulate narratives played a significant role in shaping public opinion. However, Mercier points out that while

many Germans did believe in some of the propaganda, there was also a considerable amount of skepticism and resistance. This suggests that even under intense propaganda, individuals do not blindly accept information.

Mercier also discusses the influence of media in the People's Republic of China, especially in the post-Tiananmen period. The Chinese government's tight grip on media outlets and the dissemination of information has often been used to shape public narratives. Yet, Mercier highlights that despite the state's control, many Chinese citizens have found ways to access alternative sources of information, demonstrating a level of skepticism and a desire to seek out different perspectives.

The Soviet Union's use of propaganda is another example Mercier cites. The state-controlled media in the USSR was a powerful tool for disseminating the Communist Party's narratives. However, as with the Nazi regime, while many citizens believed in the official narratives, there was also a significant amount of disbelief and skepticism, especially among those who had access to foreign media or had traveled abroad.

Mercier references the work of anthropologists and sociologists who have studied how beliefs are transmitted across generations in various cultures. He points out that while certain cultural beliefs might seem irrational or unfounded to outsiders, they often serve specific social or functional purposes within those cultures. This suggests that the acceptance of such beliefs is not merely a result of gullibility but instead informatic exchange is depends on information being useful in itself.

Mercier's second point is with respect to media bias. Here, cites studies like DellaVigna& Kaplan (2007) which explored the "Fox News effect" on media bias and voting. It suggests that media outlets can only influence public opinion by a small margin, generally a few percent, and the extent to which they can sway beliefs depends on various factors, including the credibility of the source and the pre-existing biases of the audience. People are not just fooled by the news. Instead, they are genuinely informed, and even this only has small effects on voting behavior.

Next, Mercier references research on heuristic processing, such as the work of Chaiken, which indicates that humans often use heuristics in information processing. These heuristics evaluate the credibility and utility of sources, confirming the hypothesis that humans evolved to be low-gullibility.

The paper then touches upon the role of social conformity in shaping beliefs. Studies like those of Bond (2005) on group size and conformity are cited to demonstrate that while humans may sometimes conform to majority opinions, they also possess the cognitive tools to challenge and evaluate the veracity of such opinions.

Mercier references studies that suggest that even when individuals conform to a consensus, they might not genuinely believe their answers to be correct. This distinction between outward conformity and internal belief is crucial. For instance, in experiments where participants followed a consensus, they often did not genuinely believe their answers, suggesting that conformity might be more normative (based on societal norms) than informative (based on genuine belief).

The influence of the majority on individual beliefs and behaviors is a central theme in studies of social conformity. Mercier cites Asch's experiments, which found that when a single confederate provided the correct answer, participants followed the majority only 5.5% of the time. Moreover, political science studies often show weak or conflicting majority effects. Sometimes, people shift toward the majority opinion (bandwagon effects), while at other times, they shift toward the minority opinion (underdog effects). Importantly, bandwagon effects are typically observed only for issues to which participants are weakly committed and when no better source of information is present.

Research on small groups and on persuasion and attitude change reveals that while the opinion of the majority tends to carry more weight, minority views can sometimes be more influential. This underscores the dynamic nature of group interactions and the various factors that can sway individual beliefs.

Studies focusing on informational conformity have found that it is considered rationally by both adults and children. People tend to be more influenced by larger groups, stronger majorities, and when they are less sure of their own opinions. This suggests that conformity is not just a blind following of the majority but is influenced by various factors that individuals rationally consider.

Mercier discusses Milgram's famous experiments, where participants believed they were delivering electric shocks to another participant under the instruction of an authority figure. While in one experiment 65% complied with the experimenter's request to deliver the maximum shock, this figure is misleading. It was obtained in one of the 24 experiments conducted, with many conditions yielding lower rates of compliance. This challenges the notion that people blindly follow authority.

Humans might use cues to coalition affiliation as cues to trustworthiness. Some cues, like physical appearance, might seem superficial, but they can be easily overridden by more reliable cues when available. For instance, cues of similarity or attractiveness can increase message acceptance, but typically only for messages with little relevance to the receivers.

Mercier highlights the complexities of trust, referencing studies like DePaulo & Kashy (1998) on everyday lies in relationships. It suggests that while humans can be deceived, they also have excellent, evolved mechanisms to detect deception, especially when equipped with the right contextual knowledge.

Finally, Mercier cites studies on children's belief formation, like those of Mascaro & Sperber (2009), indicating that children, while initially trustful, develop a sense of skepticism as they grow, especially when exposed to deceptive information.

In conclusion, Mercier presents a comprehensive exploration of human gullibility, drawing from historical, psychological, and evolutionary perspectives. It challenges the simplistic notion that humans are easily misled, suggesting instead that our belief formation is a mix of cognitive processes, social influences, and evolutionary mechanisms. While humans can be susceptible to misinformation, they are also equipped with the tools to evaluate, challenge, and reject deceptive information. Overall, Mercier posits that human gullibility is relatively low.

3.3.6 Conclusion

Broad swathes of evidence show that human guillibility is very low. This indicates that information exchange is gene-driven, as opposed to meme driven. In other words, there is high genetic bias. People are not harborers of mind-viruses; rather, they use information for their own benefit, and efficiently detect misinformation. At most, misinformation can mislead one action, because upon not working as advertised, bad information can be thrown out. Cognitive science data shows that people are largely incredulous, and information givers have to build trust by telling the truth, and lose trust when their information fails to work. Finally, people who should be engaging in costly ideological behavior are doing no such thing. Liberals are not living around blacks, or taking their kids to drag queen shows, or encouraging their college-aged daughters to try sex work for side income any more than the general population. Instead, they reject memes that do not suit their genes. If their bias is generally high, then their liberal "memes" are in fact only in use to advance their genes, which differ from those of conservatives. All of this indicates that what sounds like false information is really just collective action signalling. People do not really believe false ideological information; rather, they are just signalling what team they are on. When it comes to actually actionable information, people are highly rational, and deception is difficult, risky, and costly.

3.4 How ideas work: Pareto vs. Mosca

We will now move onto modeling. We have shown that the two key assumptions of "cultural evolution models," namely that genetic bias is low, and that transmission is time-consuming, are false.

We now want to consider how we can make a better model. To begin, for motivation we will go back in the discourse to "elite theory." The disagreement over whether the use of information is gene-driven or meme driven goes back at least to Mosca and Pareto.

Vilfredo Pareto and Gaetano Mosca are two theorists who are considered among the early contributors to the classical elite theory, which argues that a small, elite segment of society is destined to rule over the rest of society due to inherent advantages (Gregory Clark's work backs this up empirically, although it is unclear how much exogenous influence elites have over mass behavior). Their theories about how political power is structured and distributed were revolutionary during their times, and their works continue to be studied today. However, there were differences in their theories about how ideas spread and interact with elite behavior.

Pareto (see the appendix for an extensive review) focused on the circulation of elites and how new elites replace the old ones through a process he called the "circulation of elites." This is now known as "social mobility." Pareto believed that social equilibrium was maintained by this continuous process. He suggested that ideologies were mere justifications created by elites to signal or advance their position, implying a gene-centered on how ideas spread - primarily as tools of maintaining or attaining power, which is ultimately resources, which is ultimately reproduction.

Mosca (also see the appendix for an extensive review), on the other hand, posited that political power is held by a political class or elite due to organizational advantages and the apathy or disorganization of the masses. He also claimed that ideas could spread through society in a more meme-centered manner. Mosca believed that "political formulas," i.e. ideological frameworks were important to legitimizing the power of elites, but seemed to allow for a more exogenous role for ideas in shaping social structures.

Pareto was more deterministic in his view, often downplaying the potential for ideologies to evolve or change independently of elite manipulation. Mosca seemed to grant a more autonomous role to ideological evolution, claiming that societal changes could arise from shifts in political formulas which could, in turn, exogenously affect who holds power.

Can we create different models to represent these different views, and then select the most likely one based on the data we have already reviewed?

3.5   Three Models of Memetics

As we model, let us visualize the mind. First imagine a flat, featureless plain. This is what Blackmore and Dawkins believe the mind is like; they are blank slatists. For them, memetics is just a shield that allows them to discuss the obvious evolution of behavior without admitting that genes shape behavior. Since the mind has no features, behavior is explained solely by whatever memes reside on the plain. Under maximal tabula rasa assumptions, memes get into the mind on a first-come-first-serve basis (making childhood Really Important in keeping with the blank slate tradition), and evolution of the meme-pool occurs as unfit memes cause deadly behaviors. Consequently, neither the gene pool nor the material environment must change as culture changes.

$$P = M \tag{3.2}$$

The model obeys this equation. P is behavioral phenotype, and it takes on whatever value a person's memes have in whatever behavioral dimension. As P changes, M changes. Only a change in M can cause a change in P. A change in P never means a change in genetics or non-memetic environmental variables, like economic incentives. If we let P and M be random variables that are distributed according to the population,

$$\mathbb{V}(P) = \mathbb{V}(M) \implies \frac{\mathbb{V}(M)}{\mathbb{V}(P)} = 1 \implies m^2 = 1 \tag{3.3}$$

We get variance of memetics explains variance of behavior completely. Memetability, (heritability but for memes) is 1.

In the second model, the mind has some valleys and crevices. These vary by genotype in the population, and might evolve slowly. Memes that fit these holes can enter the mind and fill them with various success. Better fitting memes may enter and displace worse fitting memes. Whatever meme currently fills the holes produces the behavior. Memes are selected by symbiotic potential and good fit with the mold, which may be determined by genes and environment. The most appealing memes may not be the most symbiotic, implying the existence of pathological memes that have staying power once attached, in contrast to Model 1's mere first-come first-served basis.

Phenotype is determined by something like the sum of genes and memes, as well as perhaps the rest of the environment. Memes will correlate with genes to some degree, but there is still a significant amount of memetic variation after genes and environment are controlled for, perhaps in between 30 and 60 percent.

$$\mathbb{V}(P) = \mathbb{V}(M) + \mathbb{V}(G) + \mathbb{V}(E) + \mathbf{Cov}(G, M) \tag{3.4}$$

In other words, memetability might be around 30 to 60 percent, meaning heritability + environmentability would be 40 to 70 percent.
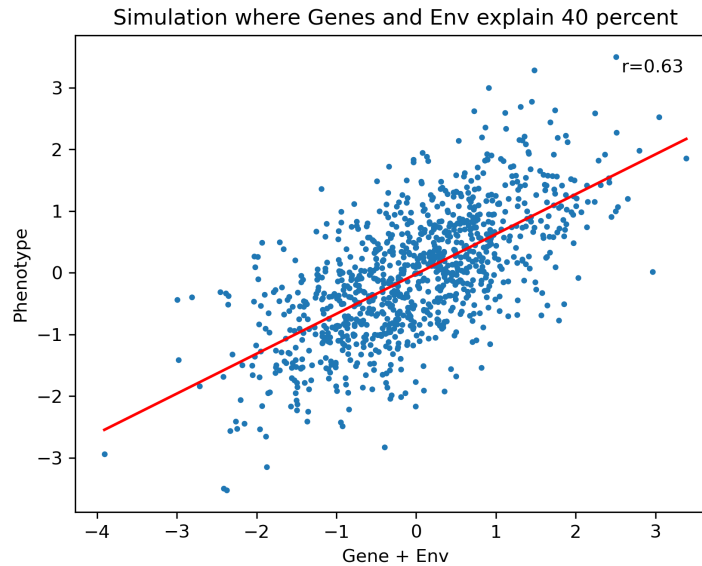
Figure 3.14: Scatter Plot where Genes + Env explain 40%

Above is what a memetability of 60 percent looks like. It shows the malleability of someone given a certain genetic and environment value. If phenotype were wokeness, for instance, someone at a 2 SD woke gene and environment value could still be made below-average woke with the right memes. The memetability is still high.
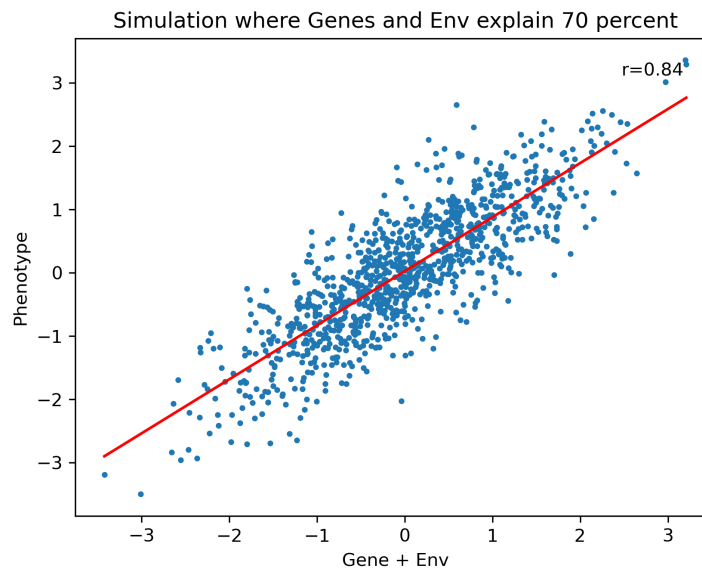
Figure 3.15: Scatter Plot where Genes + Env explain 70%

The situation gets more dire when memetability is only 30 percent. Extremists may always be woke, but there is still some possibility of genuine re-education.

In the third model, the mind lets no memes reside within it. Instead, like in Model 2, the mind has a certain shape which can vary based on genetics or environmental factors; unlike in Model 2, in Model 3, behavior is determined merely by the shape of the mind. While Model 3 does allow for environmental factors, including practices, people essentially do not differ in their behavior due to information at one time.
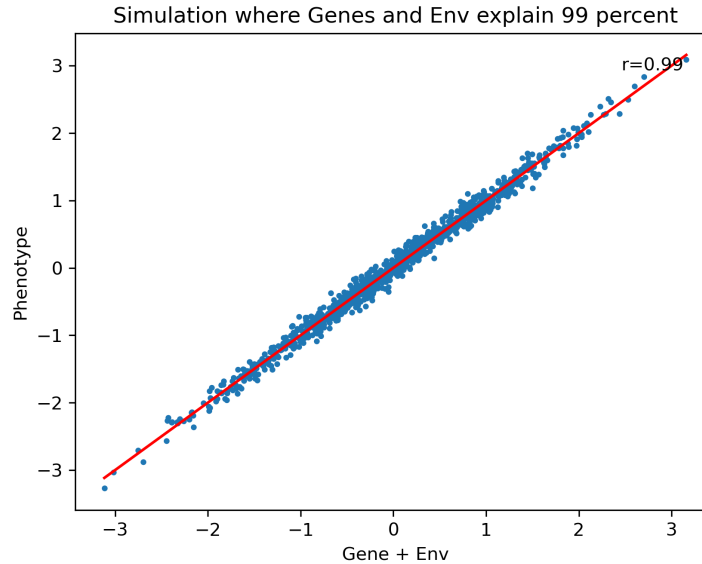
Figure 3.16: Scatter Plot where Genes + Env explain 99%

In this model, there is essentially nothing that can be done memetically to induce malleability. $m^2 = 0$.

$$\mathbb{V}(P) = \mathbb{V}(G) + \mathbb{V}(E) \tag{3.5}$$

Which model fits the mind best? It is intuitively apparent to me that Model 2 gives the best explanation for domains involving scientific information, while Model 3 gives the best explanation for politics and morality. As such, memetics is garbage when it comes to explaining politics, although it may be useful for modeling how justified true belief, including technology like iron metallurgy, the horseshoe, and anti-biotics, proliferates.

Why this intuition? I think the explanation is that memes must be rigorous and apparently true to the average receiver before taking on lives of their own. Obvious nonsense may be unique, but it is still nonsense, hardly even information. An example: there are different species of trees. Say this offends some group that has special logging interests. They begin to state that all trees are the same even though everyone can see that this is obviously untrue. This helps identify loggers, in case it wasn't clear, and may intimidate their enemies if they are numerous enough. The key observation is that, because the idea is obviously untrue, no one really believes it, so its existence is totally dependent on the logger's desires.

The BS was born out of genes and material conditions and is only maintained in the face of overwhelming arbologoy by said genes and material conditions. Any "mutation" of the political gaslight in any direction other than that of truth is in fact heresy and, because it is false, totally trivial verbiage. Mutations must require effort; if they are not effortful, then they come from impulse, and if they come from impulse, they appeal to that impulse. If they come from impulse quickly and appeal to said impulse, then we are dealing with a mold that produces its own memes. This is Model 3. Only other molds that like that verbiage will adopt it. No molds are changed except through whatever material power the signalers have.

For memetics to matter, the mold must not produce the meme; mutation must come from nontrivial effort such that it may appeal to impulse but is not itself impulse in essence. For any descriptive idea that is political instead of scientific, obviously false or unproven instead of true and demonstrated, that idea is going to be, in essence, impulse. In no way does it have life of its own; the idea was essentially already contained in the subjects from which it comes and to which it attaches. To put it most concisely, I believe Model 2 is appropriate for descriptive ideas that are apparently true, while Model 3 is appropriate for impulses, politics, and moral behavior.

Sometimes there may be side-shows that look like Model 2 which are totally dependent on Model 3 processes. Some of the extensive academic "discourse" in wokeism may approximate Model 2 if there

is enough double-think in its participants and if the ideas are complicated enough that they aren't just garbage any anti-white person could think up in five minutes (then it's just ideological whining, not memetic exchange). Even if this is sometimes the case, it would be a mistake to model wokeism with Model 2, since the "discourse" is only "memetic" because of range-restriction.

Here is a fun question: what of memetics discourse itself then? What predicts positions on memetics, information or genes? Because there is hardly any scientific content, until this book, the entire discourse is likely Model 3 political signalling. The through-time transition *into* memetics may have been informatic, however, meaning model 2 might be appropriate for explaining differences between the discourse in 1960 and 2020.

How do we distinguish between the empirical applicability of these models in different situations? What sort of data should we try to find? Before we can figure this out, we should discuss an older variant of this discourse: the dispute between Pareto and Mosca.

3.6 The mathematics of "Culture"

We have seen that "culture" is a confusing, murky concept that mixes at least three distinct components of human behavior (genes, information, and the behavior itself), shutting down scientific understanding in the process.

Here, we seek to model the relative importance of these components mathematically. In addition to advocating for the tabooing of the word "culture," we propose that measuring the relative importance of these components should be made a priority when blank-slatists bring up "culture." They should be asked, "how much does information actually contribute to group behavior? Have you measured it?"

The character of a society (its "culture" under the first definition), changes over time; also, at any one time there is variance in behavior within the society and as a result among the masses. It would be nice to understand what factors cause variance at a given time. The standard model of behavioral genetics was developed for this problem:

$$P = G + E \tag{3.6}$$

$$\mathbf{Var}(P) = \mathbf{Var}(G) + \mathbf{Var}(E) \tag{3.7}$$

As is typical, $\mathbf{Cov}(G, E)$ is assumed to be zero or negligible. We can simply apply this model to political or "cultural" behavior instead of IQ. With it, we can compute heritability and environmentability:

$$h^2 = \frac{\mathbf{Var}(G)}{\mathbf{Var}(P)} \tag{3.8}$$

$$e^2 = \frac{\mathbf{Var}(E)}{\mathbf{Var}(P)} = 1 - h^2 \tag{3.9}$$

We can go further and break down E into informatics M, as well as economic influences \$. which will be important for understanding the effects of social power.

$$P = G + \$ + M + \epsilon \tag{3.10}$$

$$\mathbf{Var}(P) = \mathbf{Var}(G) + \mathbf{Var}(\$) + \mathbf{Var}(M) + \mathbf{Var}(\epsilon) \tag{3.11}$$

Here \$ represents economic incentives, which might differ by industry and economic role, and M represents a person's knowledge, or "memetic environment." We now want to estimate:

$$h^2 = \frac{\mathbf{Var}(G)}{\mathbf{Var}(P)} \tag{3.12}$$

$$\$^2 = \frac{\mathbf{Var}(\$)}{\mathbf{Var}(P)} \tag{3.13}$$

$$m^2 = \frac{\mathbf{Var}(M)}{\mathbf{Var}(P)} \tag{3.14}$$

We have shown that it is likely that h^2 is high and m^2 is low according to the data.

A more original model is needed to map sources of elite variation through time. At time t_i there is a society composed of individuals $P_1, P_2, ..., P_n$. For each political trait, an empirical c.d.f can be computed based on the traits of $P_1, P_2, ..., P_n$. For the sake of simplicity, only the expected value of each trait will be considered here, although the full information of the c.d.f. can in theory be taken into consideration if it is warranted.

From the standard model of behavioral genetics:

$$P_i = G_i + \$_i + M_i + \epsilon_i \tag{3.15}$$

This implies:

$$\mathbb{E}_{t_i}[P] = \mathbb{E}_{t_i}[G] + \mathbb{E}_{t_i}[\$] + \mathbb{E}_{t_i}[M] + \mathbb{E}_{t_i}[\epsilon] \tag{3.16}$$

Where $\mathbb{E}_{t_i}[P]$ is the expected value of a patrician's phenotype at time t_i. Now consider three times:

$$\mathbb{E}_{t_1}[P] = \mathbb{E}_{t_1}[G] + \mathbb{E}_{t_1}[\$] + \mathbb{E}_{t_1}[M] + \mathbb{E}_{t_1}[\epsilon] \tag{3.17}$$

$$\mathbb{E}_{t_2}[P] = \mathbb{E}_{t_2}[G] + \mathbb{E}_{t_2}[\$] + \mathbb{E}_{t_2}[M] + \mathbb{E}_{t_2}[\epsilon] \tag{3.18}$$

$$\mathbb{E}_{t_3}[P] = \mathbb{E}_{t_3}[G] + \mathbb{E}_{t_3}[\$] + \mathbb{E}_{t_3}[M] + \mathbb{E}_{t_3}[\epsilon] \tag{3.19}$$

We can take the variance of the expected values through time:

$$\mathbf{Var}(\mathbb{E}_{t_i}[P]) = \mathbf{Var}(\mathbb{E}_{t_i}[G]) + \mathbf{Var}(\mathbb{E}_{t_i}[\$]) + \mathbf{Var}(\mathbb{E}_{t_i}[M]) + \mathbf{Var}(\mathbb{E}_{t_i}[\epsilon]) \tag{3.20}$$

Again assuming all covariance terms are negligible. Now we just compute the through-time heritability and equivalents:

$$h_t^2 = \frac{\mathbf{Var}(\mathbb{E}_{t_i}[G])}{\mathbf{Var}(\mathbb{E}_{t_i}[P])} \tag{3.21}$$

$$\$_t^2 = \frac{\mathbf{Var}(\mathbb{E}_{t_i}[\$])}{\mathbf{Var}(\mathbb{E}_{t_i}[P])} \tag{3.22}$$

$$m_t^2 = \frac{\mathbf{Var}(\mathbb{E}_{t_i}[M])}{\mathbf{Var}(\mathbb{E}_{t_i}[P])} \tag{3.23}$$

If $t_i \in [1900, 2000]$, then m_t^2, for instance, will measure the relative contribution of change in knowledge to change in political behavior. If $m_t^2 = 0$, then there was no relevant change in knowledge. If $h_t^2 \approx 1$, then almost all of the change in mass behavior and therefore "culture" (type 1) was due to change in the gene pool.

Clear estimates of these parameters should be of high importance to historians and "cultural evolutionists". They say, in general, where to look when it comes to explaining social change. It is popular for thesey types to claim that all social change is due to enlightenment – if m_t^2 is substantially less than 1, this becomes untenable, scientifically speaking, and with it "cultural evolution" becomes irrelevant.

3.7   Conclusion: strong bias and rapid informatic transmission

We can now conclude that vertical transmission and low bias are not real. We hold that if informatic transmission is slow, information would cluster within family units, and therefore we would see significant explanatory power for vertical transmission. We do not see this, so by modus tollens, we conclude that informatic transmission is rapid and does not cluster within families. This, in turn, means it does not cluster, and if it does not cluster, m^2 must be low. By modus ponens, we conclude m^2 is generally low, likely 0.

Generally, then, rapid informatic transmission means the availability of memes does not differ between people, and thus said availability cannot produce phenotypic differences. What we have also

seen is that when it appears that there is variance in meme consumption, this is likely to be because of strong genetic bias. Mercier's findings cover this fact. Political views are highly heritable, and genetic conservatives will tend to watch Fox News, while genetic liberals will tend to watch MSNBC. As my gullibility metrics show, in turn, the information they consume does not turn them away from their genetic tendencies; rather, if it does anything at all (effect sizes are generally very small to null), information helps its users to fulfill their genetic drives.

Thus, genetics keep informatics on a tight leash. What appears to be "cultural evolution" and "mind viruses" is really nothing more than useful information produced by different genotypes, and used by those genotypes in the breeding game of life. There is no gene-independent "cultural evolution", because everyone has access to the same information, and what they choose to claim to believe is strongly correlated, determined even, with their genes.

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Chapter 4

On the Origins of Leftism

We are now ready to understand the true origins of leftism. We will begin with a section on general sociobiology, examining the epistemic nature of sociobiology and its reasonableness, and bias against it. Next, we will examine the evidence that genes play a large role in leftism – its heritability is extremely high, and it correlates with traits that are hard to explain under a model where leftism is primarily the result of environmental influences Then, we will demonstrate the antiquity of leftism, showing that it is not a modern phenomenon. Instead, there is good evidence indicating that leftism shows up in every great civilizational decline throughout history, as a part of the process of the genetic degradation of a population. After this, we will study the evolutionary pressure on leftism. By the breeder's equation, highly heritable traits are highly responsive to evolutionary pressures. There is reason to believe that there are competing selective and mutational pressures on the trait in civilized populations. We will review this evidence, and conclude that the best model of leftism, given the current data, is that it is a polygenic disease that arises in late-stage, wealthy civilization due to dysgenic or null selection pressures and the decline of purifying selection.

4.1   General Sociobiology

In this section, an outline of what is to come as well as an exposition of some general concepts in sociobiology will be given. In general, I argue that sociobiology is the best way to understand human social phenomena, including leftism.

4.2   What is sociobiology?

Sociobiology can be defined in a number of ways which are all essentially equivalent. For one, it can be seen as a heuristic to search hypothesis space by. This heuristic is recognizing that humans are animals, made out of genes, just like all other animals and life forms on Earth, and that therefore their behavior is likely to be genetically determined. Thus, the sociobiologist tries to understand the genetic underpinnings of behavior and differences in behavior, while the non-sociobiologist tries to find non-genetic explanations. Because the sociobiology heuristic is superior, the sociobiologist's results are better, more scientific, and he often pulls in people from non-sociobiological fields that try to research human behavior with inferior heuristics.

Another way of defining sociobiology is that the null hypothesis or Bayesian prior is hereditarian in nature. This is objectively the best prior, as it takes into consideration the full body of biological knowledge and does not make a random exception for humans among all the animals. This prior fuels the hypothesis search space, and the interpretation of existing research, which can be seen as hypothesizing given the input of existing data and the prior.

Not only is the sociobiological prior the result of a neutral starting prior trained on the totality of data which currently exists, the non-sociobiological prior is extremely costly. In other words, non-sociobiologists are not merely ignorant, but are also wasteful to fund. This is because of the prior's relation to searching the hypothesis space. Many non-sociobiological fields are almost completely fake, and only exist because of bad priors. Every new social psychology study is a waste of funds that could have gone towards a new GWAS or twin registry. Most social psychology studies do not replicate, because they search a barren area of the hypothesis space and so most published results will be p-hacked or fraudulent, compared to an area with a fecund hypothesis space like sociobiology.

4.3   The Unbiased Layman is Sociobiology-friendly

In this section, I seek to demonstrate a case for anti-hereditarian bias among anti-sociobiologists. I will argue that an unbiased layman is closer to a sociobiologist than an anti-sociobiologist. I provide some empirical evidence for this idea. Then, I apply this theory to the study of leftism. Afterwards, I will attempt to cover the evidence which reveals that a trained prior built on a neutral prior converges on the sociobiological prior, as the data reveals that leftism is fundamentally a genetic phenomenon, shifting the neutral prior closer to general hereditarianism.

4.3.1   Why can't it be genes? The unbiased layman and anti-hereditarian bias

You are likely to be unfairly biased against genetic hypotheses. Some time ago, I ran a small survey asking people whether they thought key human differences and changes were due to genetics or "culture." I was expected to find differences between leftists and conservatives, with leftists more biased against hereditarianism. Instead, I found hardly any variance at all.
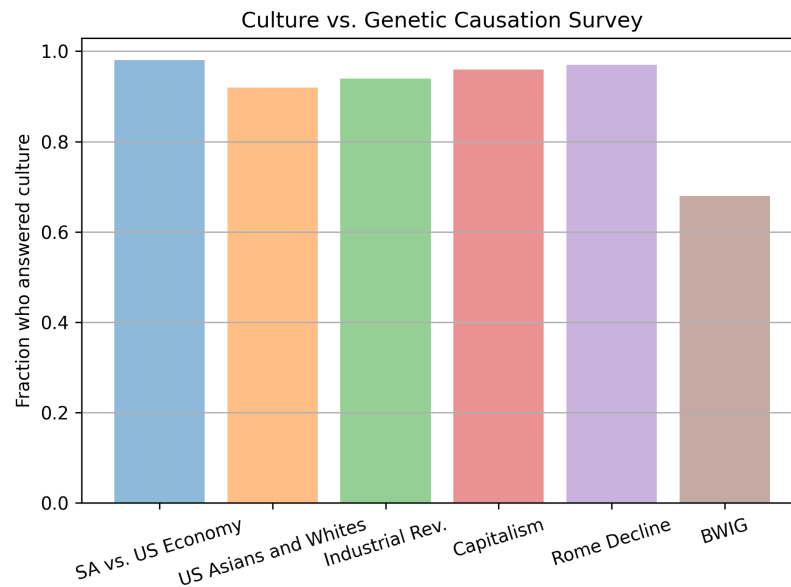
Figure 4.1: What caused it? Culture or genes?

I asked 100 people if culture or genes caused the following: differences in the South American and US economy, differences between US Asians and Whites, the industrial revolution, the rise of capitalism, the decline of Rome, and the black-white IQ gap.

Obviously these results are biased, especially so considering the fact that "culture" hardly means anything at all, as was covered in the last chapter. But we know culture has 3 clusters of meaning. These are culture-as-information, culture-as-phenotype, and culture-as-genotype. Culture-as-genotype differences is the same as genetic differences; culture-as-phenotype differences is a superset of genetic differences, and it is a category error to juxtapose phenotypic differences with genotypic differences; culture-as-information differences properly contrasts with genetic differences, so we conclude that if the respondents meant anything coherent, they meant to say that informatic differences explain continental economic disparities, meaning the populations have the same economically relevant genomes, but have access to different economically relevant information. Is that plausible in the age of the internet? No.

Are you mentally recoiling against the statement you just read? You have anti-hereditarian bias. Don't believe me? Let's try a thought experiment. Imagine you live 10,000 years in the future, and you come across an alien planet with two populations on two different continents. A fair prior is that there's a 50% chance it's mostly due to genetics, a 50% chance not.

What does an unbiased lay observer see after arriving, and how should this affect his priors? First he sees that the populations are visually distinct for genetic reasons. Now, being unbiased, he's 75% genes, 25% not genes. Then he sees they both have extremely similar education systems structured around the same subjects and information transmission times (everyone spends all their time in these systems until they're about 2 decades old). 95% genes, 5% not genes. Then he finds out that for generations they've had open, easy travel between their two continents (airplanes). 99% genes, 1% not genes. Then he finds out that for over a generation all knowledge has been able to be transmitted at the speed of light between the two continents, and all members of the populations have free and total access to that knowledge at any time they want, and they can instantly communicate between continents using this system for free (the internet). 99.99% genes.

As an unbiased lay observer, what other justified information would you have? None, this is why all the unbiased lay observers in history were hereditarians. When people resist this kind of reasoning, they have to lean on complex counter-intuitive arguments, such as "race is a social construct." But you're an unbiased lay observer, so when you see clearly different skull shapes, heights, and skin colors, you don't think "social construct." You think "dog breeds." These are furry, grotesque looking aliens here anyway. You don't have a "humanitarian bias". When we make the education comparison, this is resisted by people talking about "school quality." But as a lay observer, you don't have access to data on school quality. You don't have any justified reason to think that "school quality" differs in

any meaningful way when both populations spend equal time and have access to the same information in the schools. As for the internet, to reject this point you have to be inculcated with some sort of weird, counter-intuitive Freudian non-sense about habitus and implicit learning or something. This is not justifiable without rigorous data (which doesn't exist), and at that point you're not a lay observer and we can just get into IQ and Smart Fraction Theory and twin studies, which show what is obvious to lay observers.

What is the point of this? I'm attempting to make the following argument: 1. An unbiased lay observer would answer oppositely to the participants from my survey. 2. A truthful expert would do the same, because the data confirms it's mostly genetics. 3. Therefore, most people are biased against genetic hypotheses.

But we have an issue here: how do I demonstrate point two without making you an expert? I don't have to. I just have to show you that the cause of your deviation from unbiased common sense is not expertise. If you are not already convinced of point 3, you probably think that you have some non-trivial information which provides evidence against the genetic hypothesis and which elevates you above our lay-observer. But under point 2, no such data exists. Group differences in genetics is an awesome example for employing Bayesian reasoning to demonstrate bias, because it can be cleanly modeled as a parameter that we can estimate from data, just like the mean height in a population.

If you come away with bad posterior for height, a few things could have happened, assuming no fraudulent data:

1. biased data: you sampled height from the NBA thinking it was the general population. This is like getting all your news from MSNBC. Have your opinions on culture been formed by overwhelmingly biased sources that only show you a subset of the data? Did you learn about "culture differences" from anthropology professors 20 years ago? Throw all of that out, you're better off restarting at a neutral prior like our layman observer had.

2. reading error: you randomly add a few 0s to each height. Oops! Your mean is totally off now. This is analogous to having no idea how to interpret the data you're getting. Laymen who see something like this might update improperly. In particular, I call interpreting a study that shows that school can explain 3% of a gap as good evidence for culture effects the "effect size fallacy." Culturists will say "there is an effect" while leaving out the fact that it's miniscule (and not all causal!). It's as if 3% goes to 30% in their minds, due to instinctive bias (something like a coding error in your updating procedure) or because they know very little about the problem domain (like misreading a height that says 60 inches as 600 inches because you have basically no idea how tall people should be. This is like trying to interpret the literature without knowing the first thing about twin studies, heritability, plausible effects, statistics, etc, which I'm sure plenty of people do, given how many times people who should definitely think of themselves as laymen gesture towards stuff like what's in the link).

3. Petrified prior: you start your estimation off with the assumption that the data is Dirac-distributed as 100% culture, 0% genetics. In other words, you're just instinctively biased and will ignore anything you don't like, while accepting that which you do. If this is you, this article won't do anything for you, so we'll assume you're 1 or 2.

Now. If you came in here with culture bias, and agreed with the layman example, and now you think you probably had biased sampling or totally misinterpreted some data, you should now be excepting that YOU were unfairly biased against the genetic hypothesis and that by extension most people, not being any more of an expert than you, are also biased.

The last objection that I foresee is that, while you're not an independent expert, you trust your data source to help you read the data properly and to give you an unbiased view.

I have an argument that, in any society where this is a widespread attitude, knowledge will be biased to an extent similar to that of the epistemic bias of medieval fundamentalism or ancient paganism.

4.3.2   Science and math and the blockchain of knowledge

Eliezer Yudkowsky once tweeted: "Many of the problems of society are things we cannot say. Building a pseudonym with a reputation is one remedy. Society is worse off as people become more afraid to speak."

I read this tweet and something stood out to me. The emphasis on "reputation." This irked me for some reason. He didn't say building a pseudonym with reach. He didn't say building up a good body of proof for things we can't say ... he said building up a pseudonym with "reputation." This implies that, to Yudkowsky, reputation, or trust, is the basis of knowledge.

In other words, Yudkowsky is what I would call a trustor. When he receives a claim, he evaluates not whether he has also received sufficient direct evidence for it — rather, he evaluates whether the sender of the claim is generally "trustworthy."

This grossed me out a bit because I tend to do the opposite. I tend to hold null opinions on topics that I don't process the proof of myself.

But this is evolutionarily novel. In the distant path most actionable knowledge was just individual experience, and there was no video to back that up. The testifiers of this information had to simply be trustworthy by reputation.

Obviously, a system of knowledge where the only evidence is the reputation of the claimant is deeply flawed and led to all sorts of famous misunderstandings, from Aristotle's biology to geocentrism to four humors theory.

It is notable that in modern mathematics, reputation is useless. Any claim is to be accompanied by logical proof. Any node in the belief network is expected to be able to process the proof themselves and accept it based on its merits. Science is similar. With a single assumption, that of no fraudulent data, science is completely decentralized. All scientific claims must be accompanied by their data-based inductive "proofs", and from this the truth can be arrived at with a certainty varying with the inductive weight of the proof, which is determined by things intrinsic to the proof like sample size, problem coverage, and so on.

If you relax the no-fraud assumption, as long as you know the fraud rate, and know when data sources are independent, you can, through sufficient replication, weed out the fraud without any reputation or credibility involved. The real-life fraud rate seems to be pretty low, and replication is generally high, so modern science is trust-free. There should be no "trusting the science." This is another way of looking at the empirical/non-empirical divide of "science" and pre-science. All substantial claims about the world are in a sense empirical. Science is not only empirical, it is secure and decentralized, where "proof: I'm a trusted authority and I said it, so believe me" is centralized and vulnerable.

But what happens when you do have people "trusting the science?" What does this mean? Generally, it means they form strong opinions without actually fully processing the proofs themselves. Instead, they decide based on the reputation of the claimant.

But this is not science at all! This is indistinguishable from a centralized, vulnerable, ancient faith-based belief system.

If you have a knowledge network, an ancient prescientific system has a few central authorities and a bunch of trustors. Full science is decentralized; all nodes are proof processors and don't exchange any reputation signals. The truth-accuracy of the latter network should be higher than the former because it is more secure. So what happens when you add trustors and authorities to the decentralized network? If you add a few, not much. If they become 99% of the network, biases will be amplified. The network becomes no better than the ancient one. It's not "science" at all.

Returning to culture bias, did you go on Google scholar and process the data yourself? Are you an expert? Or did you get influenced by Chris Rufo, James Lindsay, or some other persona? If you trusted, and you know a lot of people who are trusting, you're going to see a level of truth similar to Aristotle's physics. Doesn't matter if the central information nodes claim to be scientific. If you aren't independently verifying this, there is widespread, systematic error.

Sometimes, you may trust someone once, even a number of times, and find that the knowledge they give you pays off. In this case, there is no long-standing trust at all. You are actually an expert because you know what worked for you really does work. But with culture bias, there is no test. If there isn't instinctive bias against genetic explanations, there most certainly is widespread, blind-faith trust in a few centralized nodes that never have to make their rocket ships fly. And insofar as the BS in tested it never works — if you're paying attention you know that blank-slatist interventions always fail. Developmental economics doesn't work, because it's blank slatist. That includes for South America, Africa, and US Blacks.

At this point, we have seen that trustors are prone to errors, and laymen should be sociobiology-friendly. Next, we will discuss the genetics of the rise of leftism with the layman in mind. Would an unbiased layman find the genetic hypothesis for the rise of leftism plausible? Or are there reasonable, common fallacies he might fall into? After that, we will consider the layman as he turns into an expert. What does the evidence say about the rise of leftism, and does that shift priors towards hereditarianism?

4.4   Why can't leftism be genes?

Previously, our unbiased layman observed economic differences between races on an alien planet. He started with neutral priors, and shifted toward hereditarianism with basic information. This time, it makes sense to start with neutral priors. But basic information might bias the layman toward non-hereditarianism. This does not violate condition 2 of his character because it isn't data, it's personal experience.

For this section, I did a modicum of light-hearted research. I've identified 3 major misconceptions an otherwise unbiased, non-credulous layman is likely to have:
1. Genes don't matter much for politics
2. Genes don't change that much, that quickly
3. Leftism couldn't be genetic change because of some alleged feature of leftism

4.4.1   Misconception 1: Genes don't matter much for politics

I suspect people think this because they have experienced themselves or others changing their view.

But the heritability of liberalism-conservatism is 60-70%, which looks like figure 3.15 except it's all genes. On the x-axis is a hypothetical gene score, and on the y-axis is a politics score. People might wiggle around the red line a little bit in their lives, but based people are usually always based. Thus, most based people experience going from normie conservatism or libertarianism to basedness.

Longitudinal research supports high heritability and small plasticity:

> Folk wisdom has long held that people become more politically conservative as they grow older, though several empirical studies suggest political attitudes are stable across time ... Consistent with previous research but contrary to folk wisdom, our results indicate that political attitudes are remarkably stable over the long-term. [1]

The study also found that when people do change views, they don't change much. Moderates might change between the two major US parties on rare occasions, but extremists practically never do, because they are wiggling around their end of the red line.

The red line is their genes. Think about this, if you held this conception, you likely became "based" after already being some flavor of radically right wing.

Like many, I was a libertarian when I started paying attention to politics. I instinctually never wanted black kids to touch my Pokémon cards in elementary school, and when I learned about race and IQ I joined the "IQ right" or whatever you might call it.

4.4.2   Misconception 2: Genes don't change that much, that quickly

I'm not sure where people get this exactly, but I think it may have to do with their grandparents and physical differences between the generations. I am working on a study involving face-feature differences between generations predicting greater leftism in more recent generations. If you pay attention, modern people all look kind of soft and melted — it's not just body fat. Their facial features are mutated compared to people 50, 100, and 200 years ago.

The fact is that it is a well-replicated result that genes can change very quickly. We will explore the literature here soon.

As we will show, from just selection pressures alone, in Henry Kissinger's lifetime the population mean can decline by 5 points, which is about the gap between men and women on IQ. Today's men are yesterday's women when it comes to general intelligence.

Mutational pressure is even more rapid in times like now, when selection pressures are comparatively very weak. This produces even more rapid genetic change.

Furthermore, Smart Fraction Theory is a special instance of a general principal posited by E.O. Wilson: the multiplier effect.

> "A small evolutionary change in the behavior pattern of individuals can be amplified into a major social effect by the expanding upward distribution of the effect into multiple facets of social life. Consider, for example, the differing social organizations of the related olive baboon (Papio anubis) and hamadryas baboon (P. hamadryas). These two species are so close genetically that they interbreed extensively where their ranges overlap and could

reasonably be classified as no more than subspecies. The hamadryas male is distinguished by its proprietary attitude toward females, which is total and permanent, whereas the olive male attempts to appropriate females only around the time of their estrus. This difference is only one of degree, and would scarcely be noticeable if one's interest were restricted in each species to the activities of a single dominant male and one consort female. Yet this trait alone is enough to account for profound differences in social structure, affecting the size of the troops, the relationship of troops to one another, and the relationship of males within each troop."

In other words, there is ethological reason to believe that political behaviors are the most sensitive to changes in the genome. Small changes in behavior can result in large changes to the aggregate social structure. Civil rights, feminism, and gay marriage may seem like radical steps that are hard to explain with small mutational pressures, but the multiplier effect can in theory make small individual changes result in huge aggregate changes to a society.

4.4.3 Misconception 3: Leftism can't be genetic because of [insert bad folk wisdom]

Technically, I asked you to stop pretending to know stuff about sociobiology/HBD/statistics if you're just trusting someone else's take on the matter. If you're not a trustor, you're either some level of "expert", which implies any knowledge you have is fully verified and true, or you're a layman who has ditched all of his unsafe, unverified ideas.

Now I ask you to forget everything you know about history and news (history of your lifetime), because it's a mixture of fake and misinterpreted.

Misconception 3 is people thinking an anecdote from history or the news can be informative, even falsifying, with regards to the hereditary nature of leftism.

Here is the general argument why: news and history are words, not data. They must be turned into data to be interpreted. But to interpret this data you must be an "expert." If you did not turn it into data and interpret on your own, then you are either a trustor or a layman. If you are a layman, you know nothing about it. If you are a trustor, the knowledge is insecure, which as we showed last time is the road to error.

When someone brings up history or news, they are trusting an interpretation of a hypothetical data-ized version of this that they did not do themselves. Thus, the same logic from part 1 of this series applies here.

The most common form of this is probably claiming that you have some knowledge of the mean leftism over time from news or history. "But leftism in the Enlightenment, was this mutational load?" Did you measure leftism in the 18th century? No, you didn't, and you can't infer it from words, so wipe it from your mind. "But what about the rapid increase in the 1960s?" Did you measure this or do you think you know this from stories you heard? The latter. Let it go.

I am not saying that historical events are not locally saltatory, by the way. It is, but consider E.O. Wilson on ultimate vs. proximal causes:

Ultimate versus proximate causation. The division between functional and evolutionary biology is never more clearly defined than when the proponents of each try to make a pithy statement about causation. Consider the problem of aging and senescence. Contemporary functional biologists are preoccupied with four competing theories of aging, all strictly physiological: rate-of-living, collagen wear, autoimmunity, and somatic mutation (Curtis, 1971). If one or more of these factors can be firmly implicated in a way that accounts for the whole process in the life of an individual, the more narrowly trained biochemist will consider the problem of causation solved. However, only the proximate causation will have been demonstrated. Meanwhile, as though dwelling in another land, the theoretical population geneticist works on senescence as a process that is molded in time so as to maximize the reproductive fitness in particular environments (Williams, 1957; Hamilton, 1966; J. M. Emlen, 1970). These specialists are aware of the existence of physiological processes but regard them abstractly as elements to be jiggered to obtain the optimum time of senescence according to the schedules of survivorship and fertility that prevail in

their theoretical populations. This approach attempts to solve the problem of ultimate causation.

How is ultimate causation linked to proximate causation? Ultimate causation consists of the necessities created by the environment: the pressures imposed by weather, predators, and other stressors, and such opportunities as are presented by unfilled living space, new food sources, and accessible mates. The species responds to environmental exigencies by genetic evolution through natural selection, inadvertently shaping the anatomy, physiology, and behavior of the individual organisms. In the process of evolution, the species is constrained not only by the slowness of evolutionary time, which by definition covers generations, but also by the presence or absence of preadapted traits and certain deep-lying genetic qualities that affect the rate at which selection can proceed. These prime movers of evolution (see Chapter 3) are the ultimate biological causes, but they operate only over long spans of time. The anatomical, physiological, and behavioral machinery they create constitutes the proximate causation of the functional biologist. Operating within the lifetimes of organisms, and sometimes even within milliseconds, this machinery carries out the commands of the genes on a timescale so remote from that of ultimate causation that the two processes sometimes seem to be wholly decoupled.

A historical account may not be untrue per se, but it leaves out the generational pattern of Cthulu swimming left when it says stuff like "Rosa Parks was denied a seat on the bus, then everyone chimped out, then we got Civil Rights in response." Civil Rights was caused by an ultimate genetic trend AND a proximate cause, just like a forest fire requires deadwood build up and a spark.

Hopefully, it has now been demonstrated that an unbiased layman would be receptive to the sociobiological idea of leftism upon the clearing of a few bad intuitions. We will now survey the data and see what it says about the origins of leftism.

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4.5   The Heritability of Leftism

There are three existing measures of leftism in the literature: Wilson-Patterson descended conservatism items, Haidt moral foundations, and Big 5 openness. These predict political alignment to varying degrees.

4.5.1   Validity of scales
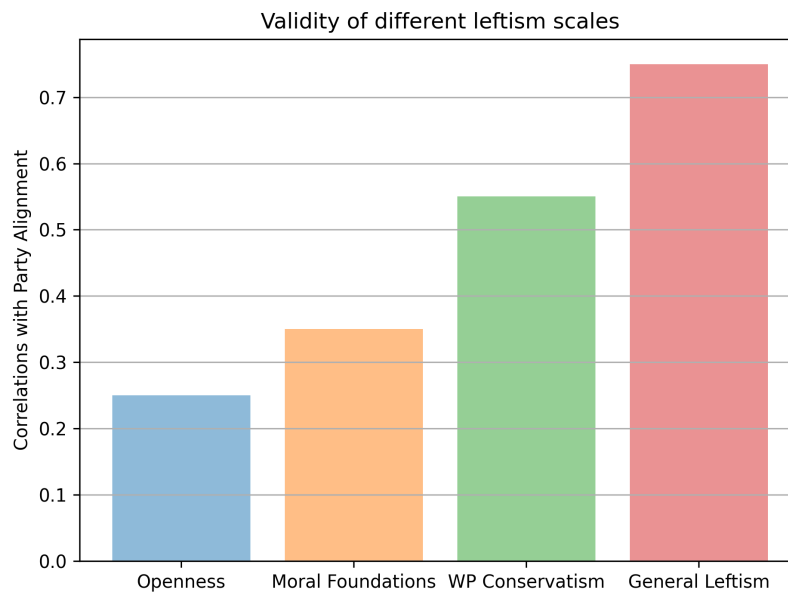
Figure 4.2: Validity of different leftism scales

Above is a chart showing the correlation of openness [6], WP-conservatism descendants [1], Haidt moral foundations (binding factor) [7], and general leftism with party alignment. General leftism is a scale I personally developed due to the mediocre correlations of existing measurements. Also, I refer to WP-conservatism as a family of metrics. These are metrics that try to survey a wide variety of concrete issues with quick questions. These typically include abortion, corporal punishment, execution, economic policy, immigration, marriage, and more. Obviously this will be very noisy. Likened unto IQ tests, these scales are like openness (because this also correlates with IQ), a trivia exam, and a need for cognition test respectively. All correlate with general intelligence, but they also inject noise. In building general leftism, I was inspired by the best IQ tests. General leftism goes deeper into 3 domains each thought to reflect leftism: feminism, homosexuality, and anti-racism. In each domain, test takers are scored continuously on a bell curve. The principal component underlying their 3 scores is used as their general leftism score, like how general intelligence can be computed as the principal component underlying the results of a many-item verbal, spatial, and mathematical test.

There is not yet a study on the heritability of general leftism. However, it should be lower-bounded by the heritabilities of these other scales, as the residual of their correlations with party alignment is taken to be unneeded noise.
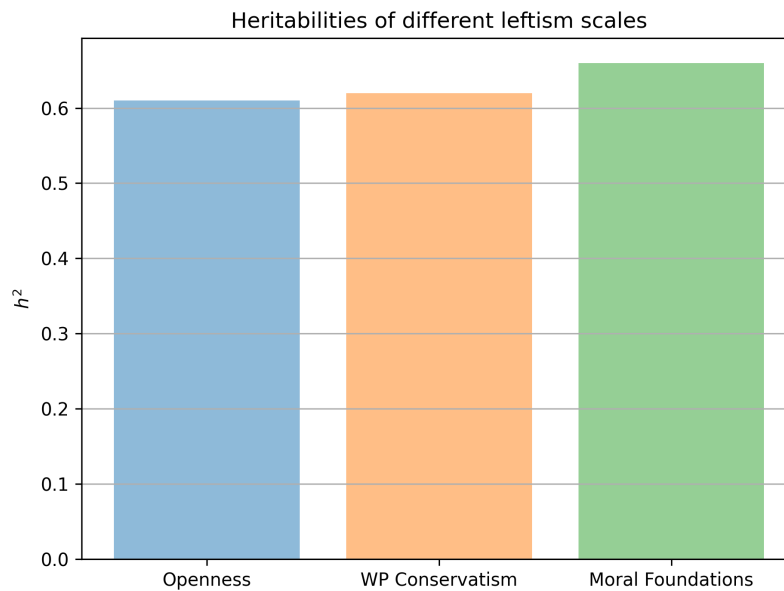
Figure 4.3: Heritability of different leftism scales

Above are the heritabilities of openness, WP conservatism descendants, and moral foundations binding factor (the other parts of the scale are noise). They are all moderately heritable, even though noise is binned into e^2. Thus, it is likely that general leftism is highly heritable.

Recall from the 2nd chapter that the heritability is the variance explained of an ideal genetic score of a trait. Thus, the correlation between gene score and conservatism is lower-bounded by about $r = 0.80$.
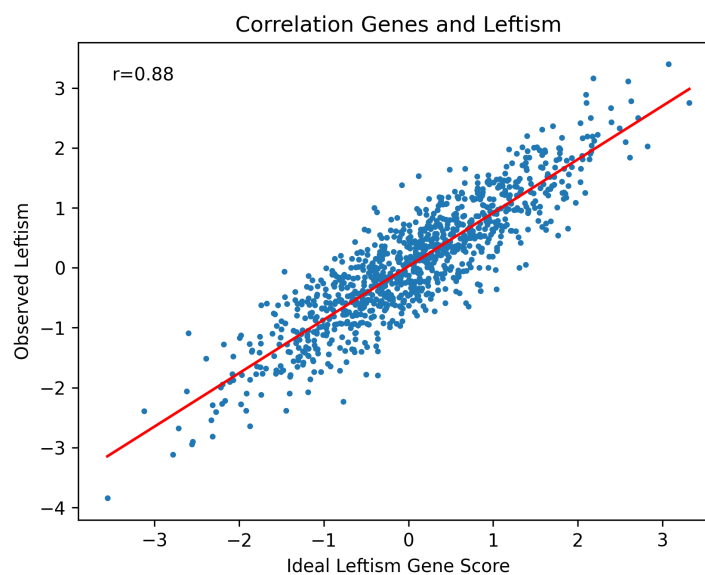
Figure 4.4: Probable correlation of genes with general leftism score

Thus it is highly likely, given the current data, that the increase of leftism over time has something to do with genes, since leftism is highly determined by genetics.

4.5.2   Newer generations are more leftist on these scales

Openness, moral foundations, and WP conservatism have changed over time (and, as you will see, so has general leftism). Research has shown that changes in openness precede changes in political behavior [8]. This makes sense because nothing on the Big 5 openness test asks about politics. Yet the correlation is substantial, as is the heritability. Openness differs by about .2 to .3 SD between generations [9]. At least some of this is not due to aging [10] as later born cohorts have higher openness compared to earlier born cohorts at the same ages. It seems unlikely that this could be due to propaganda, new information, or other blank-slatist explanations for the increase in leftism. Yet this change predicts about a 0.35 SD decline in conservatism over the last 60 years. Furthermore, the correlation between openness and conservatism is mostly genetic in nature [11]. Put together, this evidence suggests that the increase in openness has meant a decrease in conservative genetics.

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4.6   The Asabiyah Cycle

Leftism has been identified by Haidt and others as being associated with being high in individual selfishness and low in social morality. Lynn writes [1] in *Eugenics: A Reassessment*, on the decline of the eugenics movement and the rise of leftist gene denialism,

> This reversal in attitudes towards eugenics was due principally to the increasing priority accorded to individual rights over social rights, in particular the right of those with genetic disorders and mental retardation and criminals to have an unlimited number of children and to transmit their disabilities and pathologies to future generations at the expense of social rights, one of which is the right of society to protect itself against the social costs incurred when these groups have children.

This is an important framing of leftism, because it fits well with Peter Turchin's meta-ethnic frontier theory and his idea of the asabiyah cycle. Turchin's theory states that empires are formed by core ethnicities, which are first selected on "meta-ethnic frontiers." These frontiers are basically areas where different races collide and fight for supremacy under Gause's law, which states that "two species which compete for the same limited resource cannot coexist at constant population values." The winning race is selected for "asabiyah", which is basically what the Third Reich had. This, of course, was the last attempt at German Empire, which had been ongoing since ethnogenesis began in the 19th century, with the main enemies being the French and the Slavs.

Here is a good description [2] of what asabiyah is and how it fits in the theory:

> Asabiyah is a concept from the writings of Ibn Khaldun which Turchin defines as "the capacity for collective action" of a society. The Metaethnic Frontier theory is meant to incorporate asabiyah as a key factor in predicting the dynamics of imperial agrarian societies - how they grow, shrink, and begin. Turchin posits that multi-level selection can help us identify the dynamics of asabiyah in groups. He follows by noting three ways in which the logic of multi-level selection can be relevant in understanding change in "collective solidarity": intergroup conflict, population and resource constraints, and ethnic boundaries.
>
> For small groups, intergroup conflict can increase asabiyah as people need to band together to survive as a group. Conversely (again for small groups), a large population with respect to available resources can decrease asabiyah as individuals compete for limited resources. For larger groups, Turchin proposes that ethnic boundaries can influence how bands of small groups with moderate ethnic differences can band together against people who are even more "ethnically distanced" - more "Other". In this process of small groups banding together against peoples more Other than themselves, they can form what Turchin calls a Metaethnic Frontier ... Turchin notes that this ethnic boundary dynamic which generates asabiyah in a large group (composed of smaller groups) is weak because as the size of the group grows larger, the central regions are less exposed to intergroup conflict and asabiyah decreases, leading to greater internal division. Finally, Turchin notes that all three aforementioned possiblities occur at regions which constitute imperial and metaethnic frontiers (imperial and metaethnic frontiers often coincide, he notes). Its is in these regions of intense dynamics where asabiyah is forged which are most prone to ethnogenesis.

The British Empire and the United States also had asabiyah, until decolonialization and Civil Rights. Rome had asabiyah, until mass immigration and citizenship extension to the MENA masses. The British Empire emerged from the English out of protracted meta-ethnic conflicts with the French, Spanish, Irish, and Scottish, the US emerged out of a meta-ethnic frontier with Amerindians, and Rome in its early days was pitted into intense struggle with the Etruscans, and afterwards the Carthaginians.

The evidence for this is more than verbal. Turchin has collected quantitative evidence. In *Historical Dynamics*, he samples 100 different societies post 0 AD and finds the following:
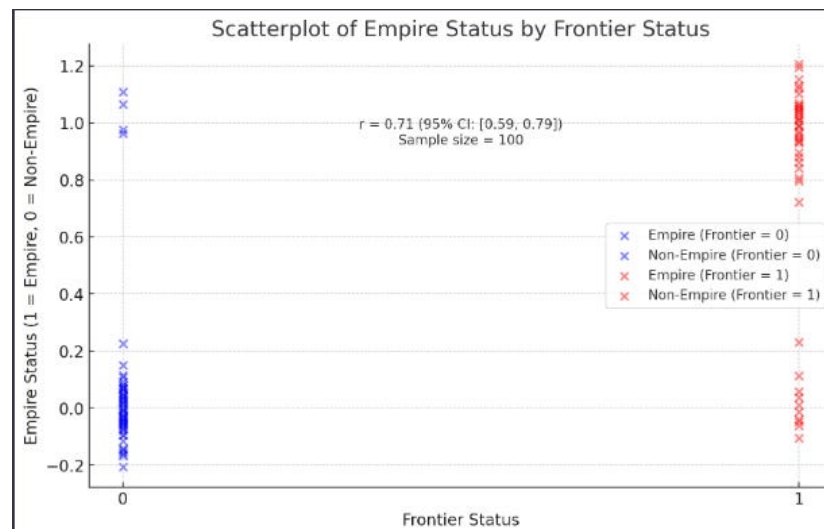
Figure 4.5: Probability of forming an empire based on meta-ethnic frontier exposure

In 2009 this was replicated with data from Asia [3].

The theory also states the asabiyah declines with time, as the core ethnicity of an empire slides into easy conditions. Until this work, there was not much evidence for this part of the theory. However, an examination of past empires indicates that leftism increases as empires declines.

This includes in the modern West. Asabiyah has been operationalized as a factor that loads at -.96 on the moral foundations individualizing factor, and .96 on the binding factor. It has been shown that based on an analysis of words related to binding and individualizing, asabiyah has been linearly decreasing since at least the 19th century in the West, just as Lynn claimed [4].

We know that moral foundations is heritable and is equivalent to liberal-conservatism, so we can see deeper than wordcel fluff about human rights. It would seem, in line with Peter Turchin's theory, that this is a genetic cycle based on the rise and fall of selection pressures on conservatism. The early eugenicists, including Galton, also theorized a model like this, although for the most part they focused narrowly on IQ, which is orthogonal to leftism [1]. In general, they were blind to leftism, which the dysgenic increase of would ultimately lead to their downfall.

4.6.1 The Historical Record on the Asabiyah Cycle

The historical record indicates verbally that asabiyah rises and falls along with the rise and fall of great civilizations. This is important because it demonstrates that it is inappropriate to blame leftism on non-biological causes, like specific modern ideas or pollutants. If a leftism cycle is common to all or most civilizations, it must be caused by something intrinsic to the biology of civilizations, which is shared between them.

It is easier to examine the rise and fall of leftism using the concept of general leftism than it is the concept of binding vs. individualizing morality. In this analysis, we hold leftism to be homosexuality, anti-racism, and feminism, while recognizing that these are simply forms of low binding and high individualizing morality. It can be shown that there is extensive historical evidence that homosexuality, anti-racism, and feminism increase as empires begin their decline, after a past of sexism, racism, and homophobia. This in turn indicates that asabiyah does indeed fall as empires peak and begin their decline, as Turchin predicts.

4.6.2 Feminism has happened before

J.D. Unwin, in his book *Sex and Culture* [5], meticulously documented the claim that civilizational decline is associated with feminism.

His conclusion was that "absolute monogamy", called in the redpill sphere "enforced monogamy", is associated with civilizations at their peak, when they "produced the greatest social energy and the highest human culture." He describes it as a such:

> The wife is taught to submit to her husband in all things ; it is her duty to serve him and to obey him.

All instances of absolute monogamy centered around Kaufehe, purchase-marriage, where men bought their brides, save for the example of the Protestant English. "This payment [the bride-price] secured for him the exclusive possession not only of her sexual qualities but also of the products of her labour. The result was that a wife's goods, and even her life, were at her husband's disposal." Unwin studied 80 tribes and 6 major civilizations: Rome, Babylon, Athens, Anglo-Saxons, British Empire, and Sumerians.

Invariably, after the peak came the fall, and correlated with the fall was the dissolution of absolute monogamy, i.e. the rise of feminism, i.e. the rise of female sexual selection and the fall of fertility and population.

> In its full rigour this institution has never been tolerated for very long ... [in all civilizations] reforms were introduced into the legal position of married women. From a position of complete subjection and legal nonentity they succeeded to the status of free and equal citizens, being able to hold property, to trade, and to contract. They were granted the power of testamentary disposition, and finally took their place in society on a complete equality with men.

Consequently, the domination of Kaufehe transitioned to the reign of Friedelehe, or consensual marriage. In other words, female sexual selection increased. In every society this happened, and in every society, this meant population downfall:

> The same changes were made successively by the Sumerians, Babylonians, Athenians, Romans, Anglo-Saxons, and Protestant English. These societies lived in different geographical environments; they belonged to different racial stocks; but the history of their marriage customs is the same. In the beginning each society had the same ideas in regard to sexual regulations. Then the same struggles took place ; the same sentiments were expressed ; the same changes were made the same results ensued ... its energy decreased, and [it] faded away. The one outstanding feature of the whole story is its unrelieved monotony.

Unwin comprehensively documents this process in 86 societies. It should seem that, short of quantitative confirmation, it is irrefutably true that feminism has occurred many times and each time it is associated with civilization downfall. 200 years ago, in our own civilization, marriages were certainly more arranged; one only needs to read Pride and Prejudice to see the role of the family in marriage. Women could not vote, and they could not own property except in specific circumstances. Slowly, divorce laws have widened, marriages have shifted toward the "consent" end of the spectrum; the rights of women are indistinguishable or greater than those of men, and as in tandem, fertility is down and the West is falling.

4.6.3   Anti-racism comes with feminism

There is also historical evidence of feminism coming with anti-racism, as we expect from our theory. Livy describes the rise of Roman feminism, while at the same time discussing the anti-racism of Romans and their wide extensions of citizenship, which are very similar to the extensions of Western citizenship to Latinos and MENAs today.

> Our ancestors would have no woman transact even private business except through her guardian, they placed them under the tutelage of parents or brothers or husbands. We suffer them now to dabble in politics and mix themselves up with the business of the Forum and public debates and election contests. ... At that time Emporiae consisted of two towns divided by a wall. One was inhabited by Greeks who had, like the people of Massilia, originally come from Phocaea; the other contained a Spanish population. As the Greek town was almost entirely open to the sea its walls were less than half a mile in circuit; the Spanish town, further back from the sea, had walls with a circuit of three miles. A third element in the population was formed by some Roman colonists who had been settled there by the deified Caesar after the final defeat of Pompey's sons. At the present day all have been fused into one municipal body by the grant of Roman citizenship, in the first instance to the Spaniards and then to the Greeks. [6]

Also, remember that racism and anti-racism is definitionally core to asabiyah, more so than homosexuality and feminism. Meta-ethnic frontier theory states that empires are formed by core ethnicities, which are first selected on "meta-ethnic frontiers." These frontiers are basically areas where different races collide and fight for supremacy under Gause's law, which states that "two species which compete for the same limited resource cannot coexist at constant population values." The winning race is selected for "asabiyah".

Nonetheless, as will be shown, it is empirically demonstrable that homosexuality and feminism correlate strongly with anti-racism, which suggests they should come together and may share and underlying genetic architecture.

4.6.4 The gay question

Very simply, in Athens, Solon gave laws which would execute pederasts under specific circumstances. There is little evidence that pederasty was widespread from this period.

Starting during their apex in wealth, and the beginning of their decline, in the 300s BC, we find widespread evidence of pederasty [7]. Myths about pederasty in before-eras began to spread as well; for example, the relationship between Achilles and Patroclus was, lacking a textual evidence, first interpreted as a gay relationship in this time period. Solon's laws had been dead for generations, and it was a struggle to keep blatant homosexual prostitutes from holding power in the Senate through laws technically still on the books. We find thus that Athens started strong, with Kaufehe and low levels of gayness, and transitioned to a Friedelehe regime per Unwin, expanded citizenship and ultimately succumbed to Rome.

In Rome, studying the biographies of the emperors is enough. In the Roman Republic, Athens was considered excessively homosexual, but by the time of the emperors Athens was very conservative in this regard. By the time of Elegabalus, emperors being cross-dressers was normal, just like Joe Biden's transsexual navy admiral.

The Romans empowered their women, also accepted mass immigration and citizenship extension, and they became extremely homosexual. All of this happened without a university system, the Frankfurt school, or the printing press. Idealists are wrong.

4.6.5 Conclusion

We have reason to believe that there is an asabiyah or leftism cycle which dictates the rise and fall of civilizations. We also have reason to believe that the basis for it is genetic. Leftism is highly heritable, and common to most or all declining empires. The next step is to develop and verify a biological and quantitative theory for the rise and fall of leftism in civilizations.

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4.7   What is Evolutionary Pressure?

We would like to quantify the evolutionary pressure on leftism over time. Evolutionary pressure is the sum of all the sources of change on the gene pool, including gene flow, selection pressure, mutational pressure, and genetic drift. It turns out that these pressures can be computed from non-molecular statistics. If the change in leftism over time is genetic, then we should find that evolutionary pressure accounts for all the measured change in leftism.

4.7.1   Explaining mutational pressure

Gene flow, selection pressure, and genetic drift are simple to understand. The first is just immigrants coming into a population and breeding. The second is the extent to which parents differ from the general population due to natural selection. The third is the standard error of sampling the gene pool during breeding.

Mutational pressure, however, refers to the continuous introduction of new genetic variants or mutations into a population's gene pool [2]. Mutations are a random process, like the accumulation of wear and tear on a car, but in the genome instead. It's an empirical fact they exist; major sources may include cellular copying errors, mutagenic compounds that bind with DNA, and radiation that damages DNA, including stellar rays.

Mutation is an important driver of evolution, but not all mutations are beneficial; in fact, most are either neutral or harmful [3]. It is likely that this happens due to the principle of entropy: on a molecular level, genes are made up of many bases, every three of which code for one amino acid in a protein. Selection can cause high-efficiency proteins to emerge; there are a lot of ways for these proteins to break, potentially as many ways as the number of amino acids in a protein, which is usually in the hundreds or more. Thus, new mutations are almost always fitness-reducing.

Fitness decay, or mutational meltdown [4], can occur when harmful mutations accumulate faster than they can be eliminated by natural selection. This is especially likely in small populations where genetic drift — random changes in allele frequency — can override the effects of selection. Over time, the accumulation of detrimental mutations can reduce an organism's fitness, or its ability to survive and reproduce. This can lead to a decline in population size, exacerbating the problem as a smaller population is more vulnerable to further harmful effects of genetic drift. Ultimately, if not countered, this process can result in population extinction, in what's known as an error catastrophe or mutational meltdown [5].

Sarraf et al. (2019b) have argued that "deleterious mutations—that is, those that tend to impair genetic quality and thus depress fitness and/or wellness—have accumulated in modernized populations, which could have a role in the loss of mental health and the nihilization and broader cultural decline of these groups" [6]. This has happened, they argue, because industrialization has relaxed selection pressures. Indeed, it would appear at a glance that the wealthier West is more leftist than other areas of the world which have not experienced the lack of selection pressures for as long.

4.7.2   The increase in Leftism is probably related to mutational pressure

If leftism is increasing due to genetic change, what is causing that genetic change? There are three main alternatives: selection, mutational pressure, and gene flow. It is possible all three are at play. Immigrants have been shown to be more leftist than the mean of the nations they leave [7]. This could mean immigration constitutes leftist gene flow into a population. This is expected if leftism is the opposite of groupishness, and leftist immigrants are less loyal to their homelands, thus being more likely to leave for economic reasons.

However, it is likely that mutational pressure is at play as well. Leftism is associated with several probable indicators of mutational load, including mental illness [8, 9, 10] and face asymmetry [11, 12].

It is theoretically plausible that mutational pressure could produce some or all of the leftward shift of the last several generations in the US and other Western nations. Approximately 1 in 500 people are born with autism due to de novo mutation, and 1 in 300 are born retarded due to de novo mutation [1]. It is estimated that between 1 in 50 and 1 in 20 face some sort of reduced fitness due to de novo mutation [1]. If the mutational pressure on leftism were 1 in 20, and leftism were treated as binary, then mutational pressure would convert 5% of would-be nonleftists each generation.

Mutational pressure may be higher for traits which have higher polygenicity and which are not as vital for survival as others. ADHD, for example, is associated with mutational load [13] and has increased 4.1% in 19 years [14].

4.7.3 Gene flow and genetic drift

We now want to understand how to compute these pressures so that we can test our theory. First, we will constrict our data to just white men and assume the gene flow is not in the conservative direction. This seems like a reasonable assumption as immigrants tend to be nonwhite and non-mixing, and tend to vote Democrat more than native whites in the US. If gene flow is not in the conservative direction, then the most charitable assumption for idealists who oppose a genetic explanation of leftism is that gene flow is 0; if it were not 0, it would be in the leftist direction, given it is not in the conservative direction. Consequently, for this analysis we set gene flow to 0.

For genetic drift, the US population is in the hundreds of millions. This makes genetic drift essentially null. Genetic drift is a random variable whose SD is upper bounded by the standard error of sampling from a sum of Bernoulli random variables with frequency 0.5 who represent genes composing a polygenic trait like IQ. In other words, $\Delta_\epsilon \sim N(0, \frac{0.50\sqrt{g_n}}{\sqrt{n}})$ is the maximum theoretical distribution as a function of number of genes composing a trait g_n and population size n. For cheetah with a g_n of 1000 this is 0.395 SDs! For American humans it's 0.00003 SDs. Thus, we assume genetic drift is 0.

This leaves us with two key considerations: selection and mutation pressure. We must figure out how to compute these pressures in order to sum them to get our overall evolutionary pressure.

4.7.4 How to compute selection pressures

Computing selection pressure is relatively straight forward. In general, you need the following information:

1. How many kids people are having

2. What the traits are of those people

3. The heritability of the traits

For example, we might have a data set where we measure the number of kids everyone has and their IQ. We then find the mean IQ weighted by number of kids. By the breeder's equation, we multiply this by the narrow-sense heritability of the trait.

Let's break this down. The mean IQ weighted by the number of kids people have just the average parental-IQ of the next generation:

$$\frac{\sum_{i=1}^n g_i f_i}{\sum_{i=1}^n f_i} \tag{4.1}$$

Where g_i is the trait, like IQ, and f_i is the number of kids per couple. We can see that the above formula will work, if, say, we have 5 parent-couples with 7, 3, 1, 12, and 9 kids, and mean IQs of 100, 110, 94, 130, and 81. The result of the weighted IQ mean by fertility is the same as just taking the average parental IQ of the offspring. There are 7 offspring with parental IQs of 100, 3 with 110, and so on. But how do we predict child IQ from parental IQ? The correlation between the average parental IQ and their offspring's IQ is just the narrow-sense heritability of IQ h^2.

This is because the square root of the heritability is the correlation between breeding value (hypothetically perfect additive gene score) and phenotype (thus the square of this square root is how much variance gene score explains of phenotype). Expected offspring gene value is indeed the mean parental gene value, i.e. $\mathbb{E}[G_{f_2}] = \mathbb{E}[G_{f_1}]$. The expected mean parental gene value is $\mathbb{E}[G_{f_1}] = h(\mathbb{E}[P_{f_1}])$. But the expected offspring phenotype is again $\mathbb{E}[P_{f_2}] = h(\mathbb{E}[G_{f_2}])$. Thus, we get expected offspring phenotype given mean parental phenotype is $\mathbb{E}[P_{f_2}] = h(h(\mathbb{E}[P_{f_1}])) = h^2(\mathbb{E}[P_{f_1}])$.

$$\Delta_s = \frac{\sum_{i=1}^n h^2 g_i f_i}{\sum_{i=1}^n f_i} = h^2 \frac{\sum_{i=1}^n g_i f_i}{\sum_{i=1}^n f_i} \tag{4.2}$$

This gives us the equation above. It will equal the selection effect on trait g. If fertility doesn't differ by g, it will be 0, meaning no change in the mean. If the equation equals, say, 0.2 (where g is standardized), it means the next generation will be 0.2 SDs above the current mean genetically, giving a selection pressure of 0.2 SDs.

4.7.5 Computing from correlations between traits and fertility

The equation we derived for computing selection pressures requires full access to a dataset there the rows are parents and the columns are the number of offspring and mean phenotype. This is impractical for computing selection pressures from existing literatures, as often what is reported is a correlation between fertility and a trait. Luckily, if we know the mean and standard deviation of fertility, we can compute the selection pressure from an r value like this.

$$f(g) = \sigma_f((r_{g,f})g) + \mu_f \tag{4.3}$$

First let f(g) be the expected fertility given the standardized trait. If we know the correlation between the trait and fertility, then we simply multiply the standardized trait by the correlation and then convert the fertility SD onto the correct scale.

Now, the selective effect is the following:

$$\Delta_s = h^2 \frac{\int_{-\infty}^{\infty} g f(g) p(g) dg}{\int_{-\infty}^{\infty} f(g) p(g) dg} \tag{4.4}$$

I will give a proof. Say there are only two discrete values for mean parental g, -1 and 1, and you have the average fertility of each. f(-1) = 1 and f(1) = 2. Then the mean g of the next generation is just:

$$h^2 \frac{\sum_{i=1}^{n} g_i f(g_i)}{\sum_{i=1}^{n} f(g_i)} \tag{4.5}$$

Which is $h^2(-1+2)/3 = h^2(1/3)$. This checks out. We may not have a full dataset of parents, but we know the average parent weighted by offspring is still 1/3 SD.

But this assumes g is uniformly distributed. Half of the parents are g = -1 and the other half are g = 1. What if only .25 are g = 1 and .75 are g = -1?

$$h^2 \frac{\sum_{i=1}^{n} g_i f(g_i) p(g_i)}{\sum_{i=1}^{n} f(g_i) p(g_i)} \tag{4.6}$$

Then the next generation has a mean g of $h^2(-1*.75+2*.25)/(1*.75+2*.25) = h^2(-.25)/(1.25) = -.25$.

Just convert this formula to continuous g, and you have the formula with the integrals, since integrals are just continuous sums (i.e., we expand g not only be -1 and 1, but also every number in between, and we have f(g) to compute the mean fertility at any given g, and then we add all of that up).

From my own data, I have that the mean fertility of parents is 2.35 and the SD is 1.35. We will use these numbers for the formula in the next section.

4.7.6 Don't Waste Electricity on Integrals

The integral, while more interpretable, can be simplified further. Note

$$\int_{-\infty}^{\infty} f(g) p(g) dg = \mathbb{E}[f(g)] = \mathbb{E}[\sigma_f((r_{g,f})g) + \mu_f] = r_{g,f} \sigma_f \mathbb{E}[g] + \mu_f = \mu_f \tag{4.7}$$

And:

$$\int_{-\infty}^{\infty} g f(g) p(g) dg = \mathbb{E}[g f(g)] = \mathbb{E}[g(\sigma_f((r_{g,f})g) + \mu_f)] = \mathbb{E}[\sigma_f((r_{g,f})g^2) + g\mu_f)] = r_{g,f} \sigma_f \mathbb{E}[g^2] + \mu_f \mathbb{E}[g] = r_{g,f} \sigma_f \tag{4.8}$$

So:

$$\Delta_s = h^2 \frac{\int_{-\infty}^{\infty} g f(g) p(g) dg}{\int_{-\infty}^{\infty} f(g) p(g) dg} = h^2 \frac{r_{g,f} \sigma_f}{\mu_f} \tag{4.9}$$

4.7.7 How to compute mutational pressure

Similar to Δ_s, mutational pressure Δ_m signifies the generational change in the mean of a trait g due to de novo mutations in the new generation.

Thus we can write:

$$\Delta_m \propto (\omega_{f_2} - \omega_{f_1}) r_{\omega,g} \tag{4.10}$$

Where ω_{f_i} is the average number of de novo mutations in generation f_i and $r_{\omega,g}$ is the correlation between de novo mutation count and the trait g. This equation makes sense. If there is no change in mutational load, there will be no mutation pressure. If the trait is not related to de novo mutations, there will be no mutation pressure. And as either part increases, so will the mutation pressure.

But we don't need to compute absolute mutational load for either generation. We can simplify the equation to this:

$$\Delta_m \propto \left(\frac{\Delta \omega_i}{\Delta f_i}\right) r_{\omega,g} \tag{4.11}$$

Now we are concerned simply with the change in mutational load at a single generation f_i. What will this be? Each year after the age of 8, a man accumulates about 2 de novo mutations per sperm cell [1]. Therefore the average de novo mutation count ω of a generation produced by a parent group where the average paternal age is μ_a will be $2(\mu_a - 8)$. Assuming all the kids make it to adulthood,

$$\frac{\Delta \omega_i}{\Delta f_i} = 2(\mu_a - 8) \tag{4.12}$$

Thus,

$$\Delta_m \propto (2(\mu_a - 8)) r_{\omega,g} \tag{4.13}$$

Now to get an equation and not a proportion we need $r_{\omega,g}$ to be the amount by which g increases per increase in mutation, $\frac{d\mathbb{E}[g]}{d\mathbb{E}[2(\mu_a-8)]}$. If we have a correlation between g and paternal age, $r_{\omega,g} = r_{a,g}$, we have the following:

$$\frac{d\mathbb{E}[g]}{d\mathbb{E}[2(\mu_a - 8)]} = \frac{r_{a,g}}{\sqrt{\mathbb{V}(2(a-8))}} = \frac{r_{a,g}}{2\sqrt{\mathbb{V}(a)}} = \frac{r_{a,g}}{2\sigma_a} \tag{4.14}$$

This is because $\frac{d\mathbb{E}[g]}{d\mathbb{E}[2(\mu_a-8)]}$ is the slope of the line of best fit for a regression of mutational load onto the trait. That slope is computed by the dividing the correlation by the standard deviation of mutational load, which is twice the standard deviation of paternal age. Consequently, under conditions of no purifying selection:

$$\Delta_m = (2(\mu_a - 8)) \frac{r_{a,g}}{2\sigma_a} \tag{4.15}$$

4.7.8 Computing mutational pressure with purifying selection

The above formula works where a is the paternal ages of kids who grow up into adults. Under conditions of no purifying selection, this is the same as the paternal ages of children. Under conditions of purifying selection, one could just sample the paternal ages of existing adults in order to estimate directly how many de novo mutations on average make it to sexual maturity each generation.

However, purifying selection is theoretically important and it may be that we only have data on the paternal ages of children for a time period that has purifying selection. In this case, we want to include a purifying selection function in the model.

The magnitude of purifying selection is simply the difference between the mutational load of a cohort of babies and the mutational load of the remaining individuals of the cohort at adulthood:

$$\chi = \omega_c - \omega_m \tag{4.16}$$

We can now write:

$$\frac{\Delta \omega_i}{\Delta f_i} = \omega_c - \chi = 2(\mu_a^c - 8) - \chi \tag{4.17}$$

It is true that

$$\chi = \frac{p_d}{\sigma_d} \beta_{\omega_c, d_n} = \frac{p_d}{\sigma_d} r_{\omega_c, d} \frac{\sigma_{\omega_c}}{\sigma_{d_n}} = \frac{p_d}{\sigma_d} r_{a,d} 2\sigma_a^c \tag{4.18}$$

This can be proven as follows. Let us have a regression model where we correlate dying in childhood $d \sim Bernoulli(p_d)$ to childhood mutational load. Let d_n be normalized d: $d_n = \frac{d - p_d}{\sigma_d}$.

$$\omega_{c,i} = \omega_c + \beta_{\omega_c, d_n} d_{n,i} + \epsilon_i \tag{4.19}$$

$\omega_m = \mathbb{E}[\omega_{c,i} | d = 0] = \omega_c + \frac{-p_d}{\sigma_d} \beta_{\omega_c, d_n}$. Thus, $\chi = \frac{p_d}{\sigma_d} \beta_{\omega_c, d}$ by plugging into the equation $\chi = \omega_c - \omega_m$. This means

$$\frac{\Delta \omega_i}{\Delta f_i} = \omega_c - \chi = 2(\mu_a^c - 8) - \frac{p_d}{\sigma_d} r_{a,d} 2\sigma_a^c = 2(\mu_a^c - 8) - \frac{\sqrt{p_d}}{\sqrt{1 - p_d}} r_{a,d} 2\sigma_a^c \tag{4.20}$$

Plug in for mutational pressure and, where a is the paternal age of children under conditions of purifying selection, the mutational pressure on adult expression of g is:

$$\Delta_m = (2(\mu_a^c - 8) - \frac{\sqrt{p_d}}{\sqrt{1 - p_d}} r_{a,d} 2\sigma_a^c) \frac{r_{a,g}}{\sigma_{\omega_a}} \tag{4.21}$$

We can now see that when p_d, the probability of death in childhood, approaches 0, the multiplier on χ will go to 1, down from a higher number. Also, $r_{a,d}$ will fall as there is less variance in d to explain stable variance in a. Consequently, merely decreasing infant mortality will decrease purifying selection χ.

We can simplify it further.

$$\frac{\sqrt{p_d}}{\sqrt{1 - p_d}} r_{a,d} 2\sigma_a^c = \frac{\sqrt{p_d}}{\sqrt{1 - p_d}} 2\sigma_a^c \frac{\mathbb{E}[a^c d] - \mathbb{E}[a^c]\mathbb{E}[d]}{\sigma_a^c \sigma_d} = \frac{\sqrt{p_d}}{\sqrt{1 - p_d}} 2\sigma_a^c \frac{\mathbb{E}[a^c d] - \mu_a^c p_d}{\sigma_a^c \sqrt{(p_d(1 - p_d))}} = \frac{2\sqrt{p_d}}{1 - p_d} \frac{\mathbb{E}[a^c d] - \mu_a^c p_d}{\sqrt{p_d}} \tag{4.22}$$

This can be simplified:

$$\frac{2\sqrt{p_d}}{1 - p_d} (\frac{\mathbb{E}[a^c d]}{\sqrt{p_d}} - \mu_a^c \sqrt{p_d}) \tag{4.23}$$

But $\mathbb{E}[a^c d] = \mathbb{E}[a^c | d = 1] p_d$. This is because $\mathbb{E}[a^c d]$ in a sample can be computed as the sum of a such that d is 1 over the total sample size. $\mathbb{E}[a^c | d = 1]$ is the sum of a such that d is 1 over the number of samples where d is 1. p_d is the number of samples where d is 1 over the number of total samples. An analytical proof is left as an exercise for the reader. Now we get:

$$\frac{2\sqrt{p_d}}{1 - p_d} (\mathbb{E}[a^c | d = 1] \sqrt{p_d} - \mu_a^c \sqrt{p_d}) = \frac{2p_d}{1 - p_d} (\mu_{a|d=1}^c - \mu_a^c) \tag{4.24}$$

This makes sense. Where $f(p_d) = \frac{2p_d}{1 - p_d}$, $f(0) = 0$, so when there are no deaths there is no purifying selection. As p_d approaches 1 from the left, $f(p_d)$ goes to infinity. Also, purifying selection is null when the mean paternal age of people who die as children is the same as the overall mean paternal age.

Finally, we have:

$$\Delta_m = (2(\mu_a^c - 8) - \frac{2p_d}{1 - p_d} (\mu_{a|d=1}^c - \mu_a^c)) \frac{r_{a,g}}{\sigma_{\omega_m}} \tag{4.25}$$

What is σ_{ω_m}?

$$\sigma^2_{\omega_m} = \mathbb{V}(\omega_{c,i}|d=0) = \mathbb{V}(\epsilon_i) = (1 - r^2_{a,d})\mathbb{V}(\omega_{c,i}) = 4(1 - r^2_{a,d})\mathbb{V}(a^c) \tag{4.26}$$

Thus we have:

$$\sigma_{\omega_m} = 2\sigma^c_a \sqrt{1 - r^2_{a,d}} \tag{4.27}$$

Finally from 4.21 and 4.25 we have:

$$r^2_{a,d} = \left(\frac{\sqrt{p_d}}{\sigma^c_a\sqrt{1 - p_d}}(\mu^c_{a|d=1} - \mu^c_a)\right)^2 \tag{4.28}$$

Say we only have μ^a_a and σ^a_a, the adult mean and SD of paternal age. It is true that $\mu^a_a \leq \mu^c_a$ and $\sigma^a_a \leq \sigma^c_a$. Also, $\sigma_{\omega_a} \leq 2\sigma^a_a$.

Thus,

$$\widetilde{\Delta_m} = (2(\mu^a_a - 8) - \frac{2p_d}{1 - p_d}(\mu^c_{a|d=1} - \mu^a_a))\frac{r_{a,g}}{2\sigma^a_a} \leq \Delta_m \tag{4.29}$$

4.8 How Strong is the Evolutionary Pressure on Leftism?

4.8.1 What General Leftism Is

In this section two studies are presented. The first surveys 1175 white American men, mean age 41.5 years (SD = 13.2 years) and gives them the general leftism test, and asks their father's age when they were born (mean = 61.3, SD = 7 years). The second surveys 148 fathers over 50 years old (white American men) and gives them the same test, while asking what ages they were when their children were born. The first study establishes the correlation between paternal age (age of father when born) and leftism, while the second establishes that older fathers are not more leftist than younger fathers.

The continuous metric mirrors the binary metric in that it centers around three topics: LGBT, feminism, and race ideology. These dimensions are hypothesized to be common to empire decline, and covary due to being the result of mutational pressure on the same genes [15]. Each question was on a Likert scale with the following answer choices: Strongly disagree, disagree, neutral, agree, and strongly agree. The questions were as follows:

Gay Component

- G1. Is LGBT good?

- G2. Homosexual behavior is fine when it is private and chaste.

- G3. There is nothing wrong with public depictions of homosexual relationships.

- G4. I support gay marriage.

- G5. There is nothing wrong with attending a gay orgy.

- G6. Children should be taught about gay sex in sex education classes.

Feminism Component

- F1. Is feminism good?

- F2. The country would be better if women couldn't vote. (-1)

- F3. Women should try to be married by the age of 25. (-1)

- F4. The government should help ensure sexual equality by making sure women are not

- discriminated against in private hiring.

- F5. Women should hold the majority of the positions of power in society. F6. Marriage is oppressive for women, and monogamy should be moved away from.

Race Component

- R1. Is Black Lives Matter a good organization?

- R2. Europe would be best if it remained all white. (-1)

- R3. Immigration policy should be strict and heavily meritorious. (-1)

- R4. The government should ensure racial equality by prohibiting racial discrimination in private

- business dealings such as hiring.

- R5. Black people deserve reparations for the legacy of slavery. R6. I support open borders.

The questions were intended to get "harder" as they progressed in each category, meaning woker people tend to be the only ones to agree to the later questions, while a greater percent of respondents would agree with earlier questions.

Also, items F2, F3, R2, and R3 were reversed.

Each of the 3 sub-scales was designed to be added up into a sum score. From the three sum scores, a general factor was derived by factor analysis with varimax rotation. The sum-scores were near-Gaussian, with Q-Q plot R-squareds of 0.956, 0.97, and 0.981 respectively. We achieved factor loadings of 0.88, 0.87, and 0.78 for race, feminism, and gay respectively. Cronbach's alpha for the three sums was 0.86, which is far over the typical significance threshold of 0.70. In contrast, Wilson-Patterson conservatism has had alphas as low as 0.71 [16]. Computing alpha over all the sums yielded a value of 0.93. We also performed PCA as an alternative factor analysis method. We found one component explains 80% of variance, strongly indicating the appropriateness of a one factor solution. The PCA factor correlated with the varimax-rotated factor at r = 0.96. For the analyses in this paper, we used the varimax factor because it was slightly more Gaussian, with a Q-Q plot r2 of 0.992 vs. 0.986 for PCA.
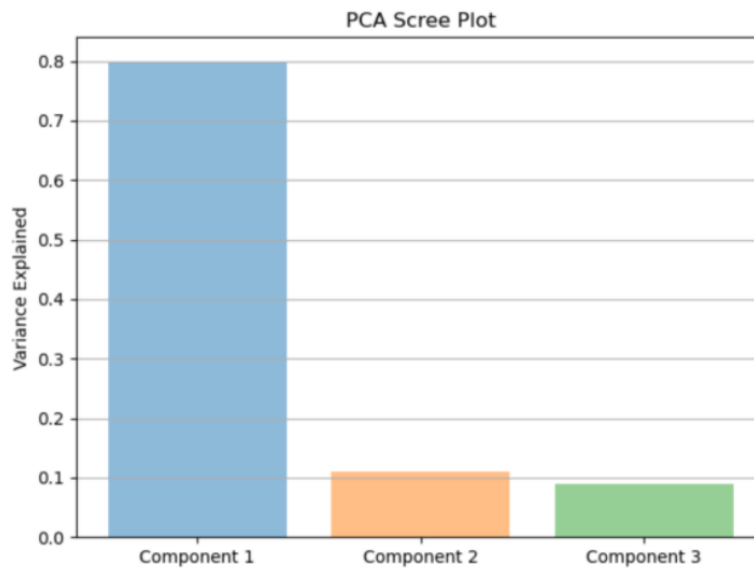
Figure 4.6: Scree plot for principal component analysis of Gay sum, Race sum, Feminism sum.

These statistics suggest that the measurement has high reliability. We also have evidence of high validity in that it predicts party and wingness well.
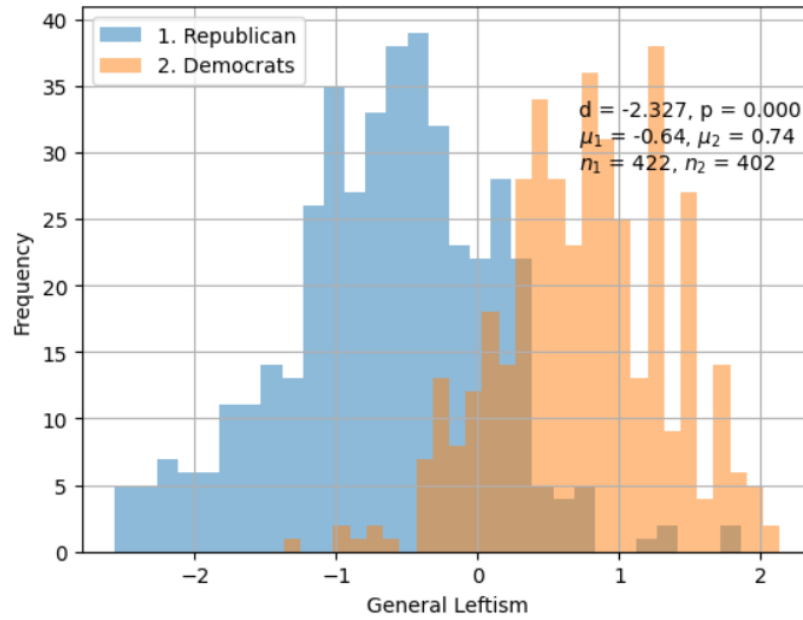
Figure 4.7: General Leftism and Party

Figure 4.7 shows general leftism is good at distinguishing between party loyalties. This d score is equivalent to an r of about 0.75, meaning general leftism correlates strongly with party alignment.

4.8.2 The Correlation with Paternal Age

In this section, we show that the paternal age effect is in fact present under the continuous metric. Our measurement is near-Gaussian, has high reliability (measured as Cronbach's alpha), high validity (measured as its ability to predict party alignment), and outperforms the commonly used Wilson-Patterson Conservatism Scale on these metrics.
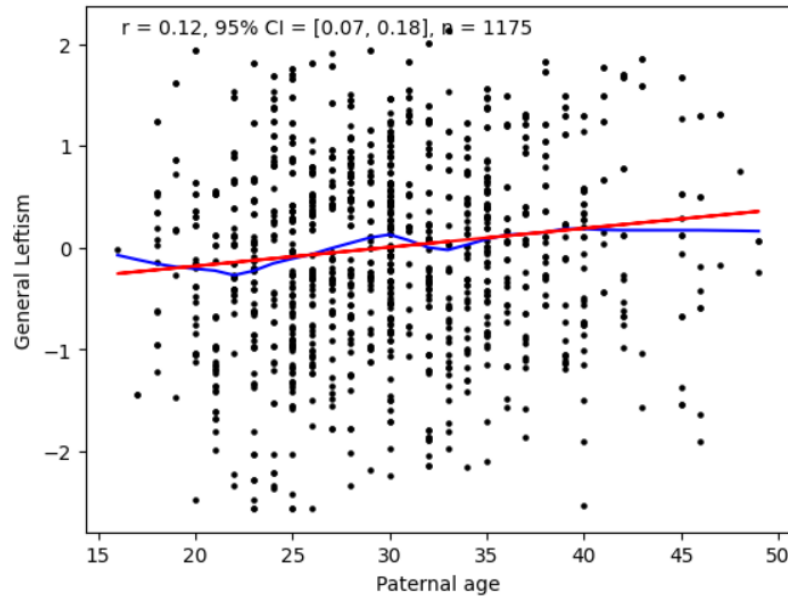
Figure 4.8: Leftism and Paternal Age

Figure 4.8 shows the correlation between leftism and paternal age ($p < 0.001$). There is a significant positive correlation. In this data, we cut off the tails of paternal age ($> 2.5SD$), but this did not change the results.
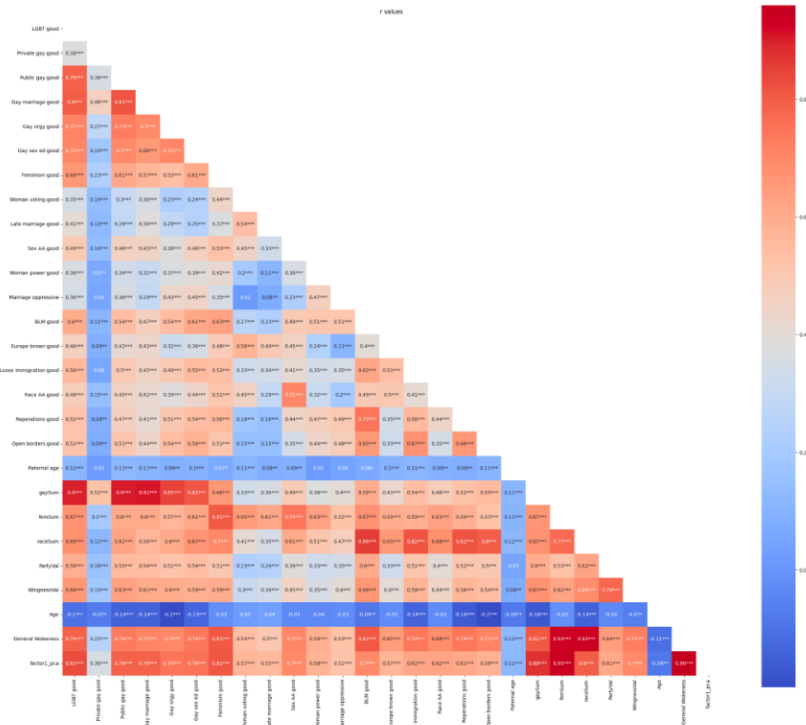
Figure 4.9: Correlation matrix of study variables.

```
                           OLS Regression Results
==============================================================================
Dep. Variable:          General Leftism   R-squared:                       0.025
Model:                              OLS   Adj. R-squared:                  0.022
Method:                   Least Squares   F-statistic:                     9.479
Date:                  Fri, 17 Nov 2023   Prob (F-statistic):           3.45e-06
Time:                          22:11:55   Log-Likelihood:                -1585.1
No. Observations:                  1175   AIC:                             3178.
Df Residuals:                      1171   BIC:                             3198.
Df Model:                             3
Covariance Type:                    HC3
==============================================================================
                    coef    std err          z      P>|z|      [0.025      0.975]
------------------------------------------------------------------------------
const          -1.527e-16      0.027  -5.59e-15      1.000      -0.053       0.053
Paternal_age_n     0.1104      0.028      3.911      0.000       0.055       0.166
Age_n             -0.0901      0.027     -3.386      0.001      -0.142      -0.038
Interaction_n     -0.0065      0.027     -0.239      0.811      -0.059       0.047
==============================================================================
Omnibus:                         16.939   Durbin-Watson:                   0.994
Prob(Omnibus):                    0.000   Jarque-Bera (JB):               15.798
Skew:                            -0.241   Prob(JB):                     0.000371
Kurtosis:                         2.699   Cond. No.                         1.15
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
```

Figure 4.10: Multiple Regression with Paternal age, participant age, on General Leftism. All standardized.
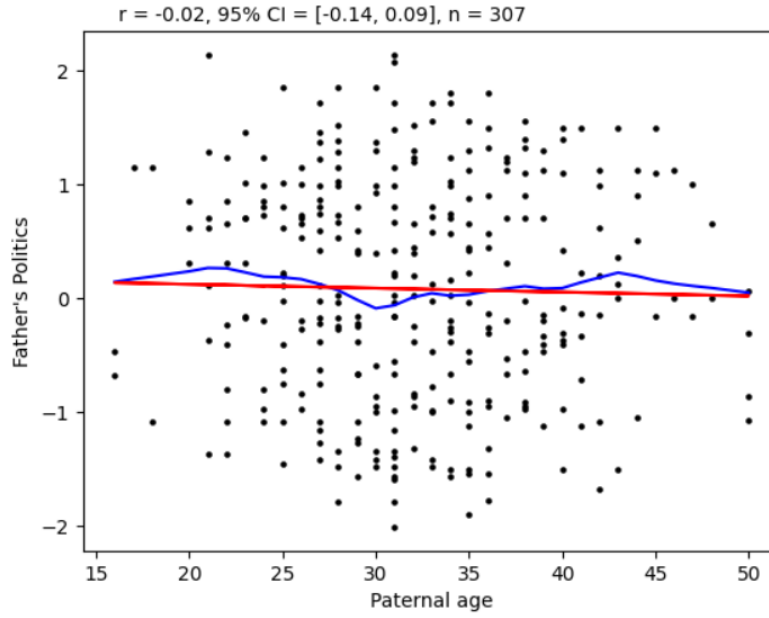
Figure 4.11: Paternal Age and Father's Politics $factor1_pca$.

We find that in the multiple regression model, the partial correlation of paternal age (.1104) with leftism was less than 0.01 under the correlation of leftism with paternal age (0.12), vindicating this prediction. Also, an interaction variable was included, paternal age * age, to see if the paternal age effect varied with age, as Woodley et al. [17]

4.8.3   Selection pressure: the Correlation with Fertility

Figure 4.12: Correlation of Fertility and General Leftism

Using a narrow-sense heritability estimate of 0.6, we find a selection pressure of 0.076 SDs per generation in the conservative direction.

4.8.4 Bayesian Analysis of Evolutionary Pressure
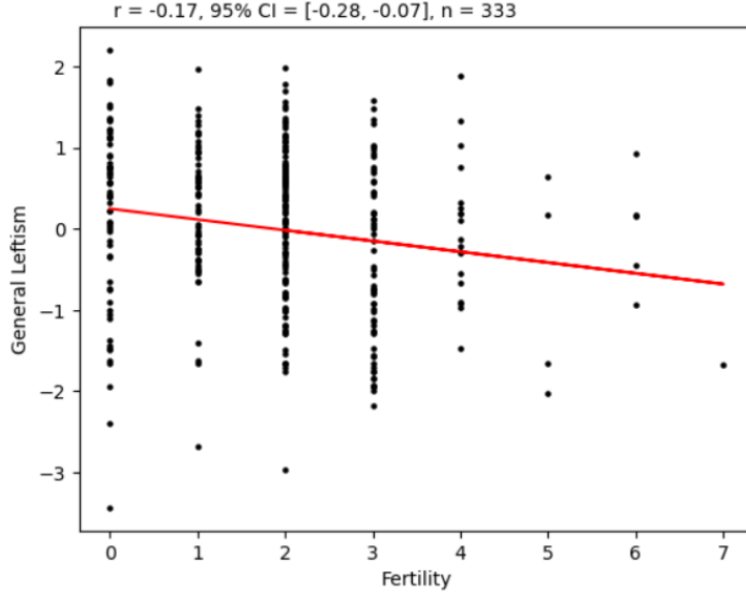
We can go further and compute a posterior distribution for the evolutionary pressure. We will do this by computing posterior distributions for $r_{a,g}$ and $r_{f,g}$, which we will then map onto posterior distributions for mutational and selection pressure, assuming our point estimates of the mean and SD parameters in the equations for these pressures are certain. The posterior for evolutionary pressure is just the sum of the posterior for mutational and evolutionary pressure.

$$\Delta_s = h^2 \frac{\int_{-\infty}^{\infty} g f(g) p(g) dg}{\int_{-\infty}^{\infty} f(g) p(g) dg} = h^2 \frac{r_{g,f} \sigma_f}{\mu_f} \tag{4.30}$$

Equation for computing selection pressure from $r_{g,f}$ First we must start with priors for $r_{a,g}$ and $r_{f.g}$. $N(0, 0.25)$ should be a good prior for both. This prior says we weakly believe it to be 0, but it could be any value between -1 and 1, with decreasing probability from 0.
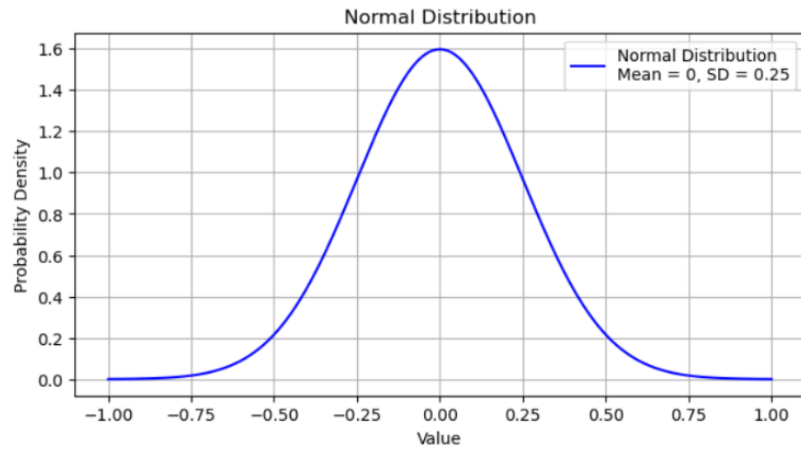
Figure 4.13: Priors for the r values

For selection pressure, we multiply the r value by 0.423, as this is the narrow sense heritability times the sd/mean ratio. For mutational pressure, we multiply by $44/14 = 3.14$.

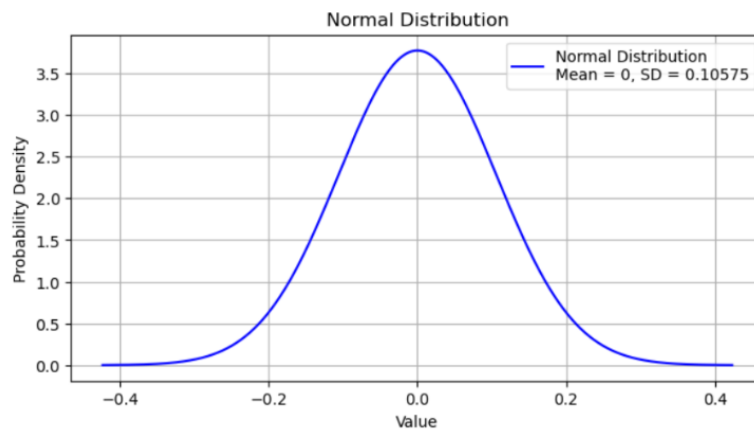Our prior for selection pressure becomes:

Figure 4.14:

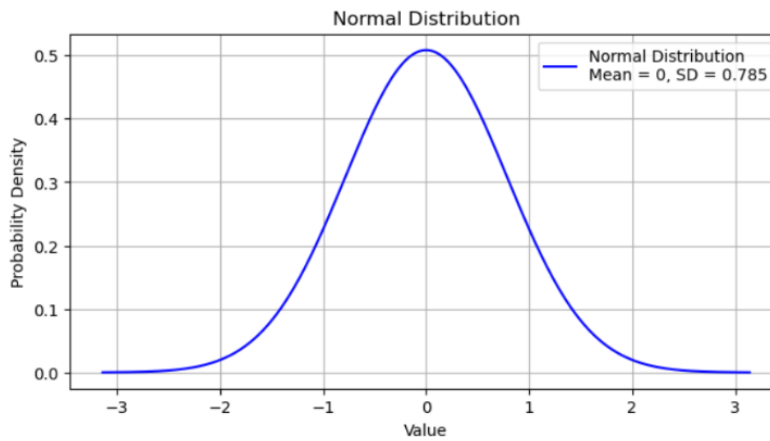And our prior for mutational pressure becomes:

Figure 4.15:

Already we see that, given the lack of purifying selection and the high paternal ages (and therefore expected de novo mutation count), relatively small r values of traits on expected de novo mutational load (paternal age) will produce larger mutational pressures. Meanwhile, because the ratio of fertility SD to the fertility mean is low, coupled with the narrow sense heritability being near 0.5 for traits in general, our we expect much smaller selection pressures. There is not a lot of room for selection with a fertility pattern where 3 is a lot of kids and most people have 1.9! But there is a lot of room for mutational pressure in a world without purifying selection, where nearly all kids make it to adulthood.
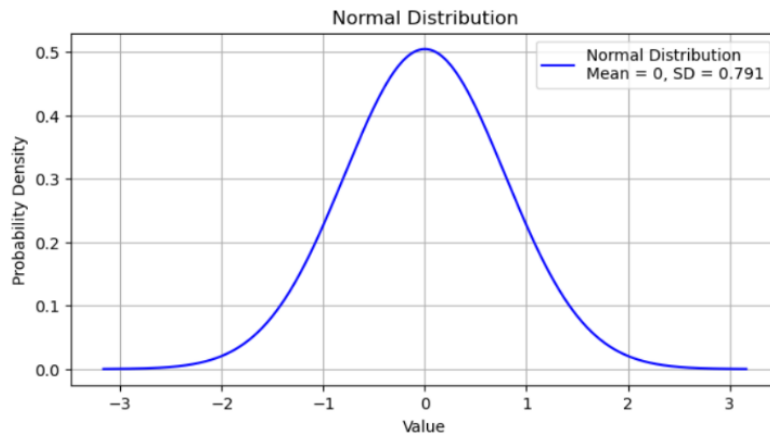
Figure 4.16:

So our prior for evolutionary pressure is above, and mutational pressure explains 77% of the variance in evolutionary pressure. This is directly contrary to the claim that "Mutation pressure is the change in allele frequencies due to the repeated occurrence of the same mutations. There are not many biologically realistic situations where mutation pressure is the most important evolutionary process" [18]. Large human societies with very egalitarian fertility patterns are a biologically realistic scenario where drift is extremely low due to have an expected value of 0 by definition and there being hundreds of millions of breeding individuals (drift is the standard error on evolutionary pressure essentially). Maybe in a cheetah population of 700 where 2/3 of cubs do not make it to adulthood and 40% of adults never breed while the rest have between 10 and 50 cubs the claim is true, but it is most certainly not true in advanced human societies.
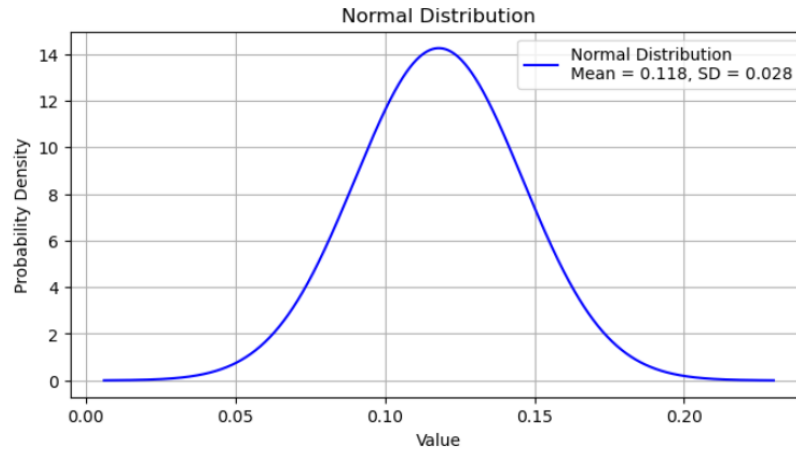
Figure 4.17:

After Bayesian analysis, the posterior distributions for the r values basically go to their point estimates +/- their standard errors. Above is the one for $r_{g,a}$.
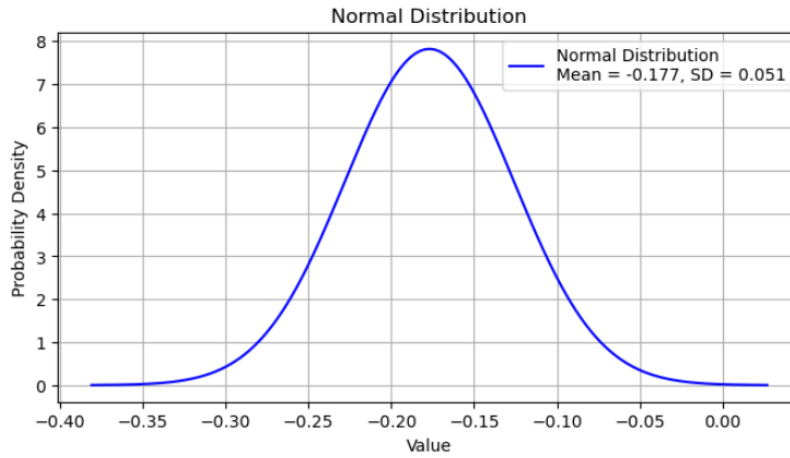
Figure 4.18:

Above is the posterior for $r_{f,g}$. Thus, the posterior for selection pressure is $N(-.177 * 0.423, 0.051 * 0.423)$, and the posterior for mutational pressure is $N(0.118 * 3.14, 0.028 * 3.14)$. The posterior for evolutionary pressure is $N(-.177 * 0.423 + 0.118 * 3.14, ((0.028 * 3.14) * *2 + (0.051 * 0.423) * *2) * *.5)$.
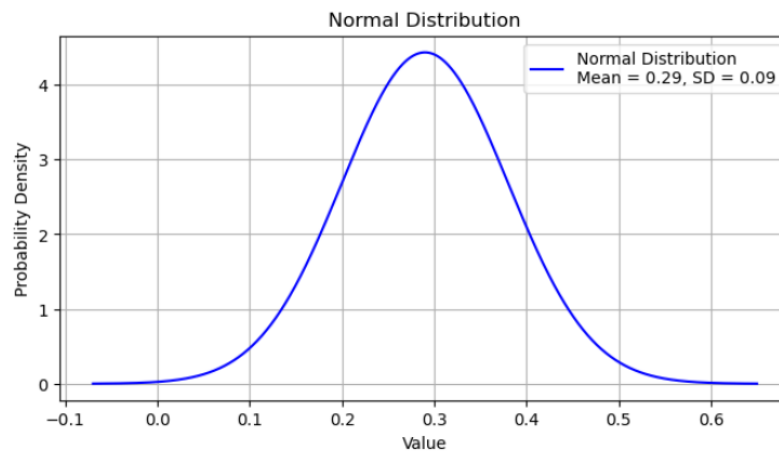
Figure 4.19:

Meanwhile, the posterior for how leftism is changing with each generation is given by multiplying the posterior of the r value of age onto leftism times the mean paternal age (generation time) divided by the standard deviation of age (this transforms r into a per-year effect). This is $30/13 = 2.3$. The posterior of r(age, leftism) is $N(0.081, 0.029)$ so the posterior of the phenotypic change per generation is:
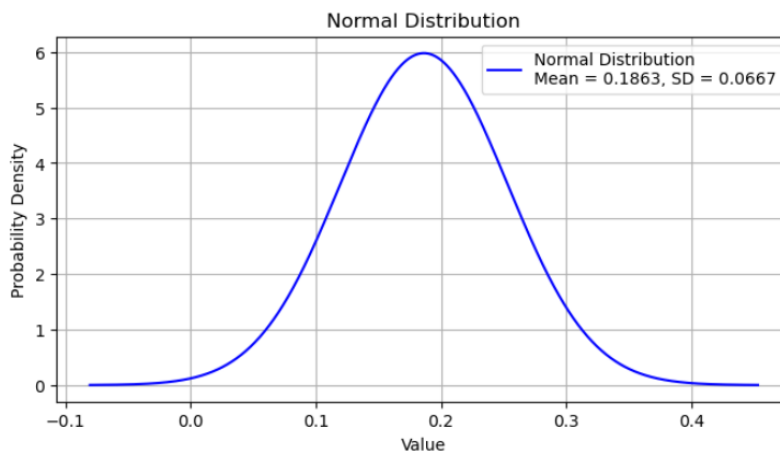
Figure 4.20:
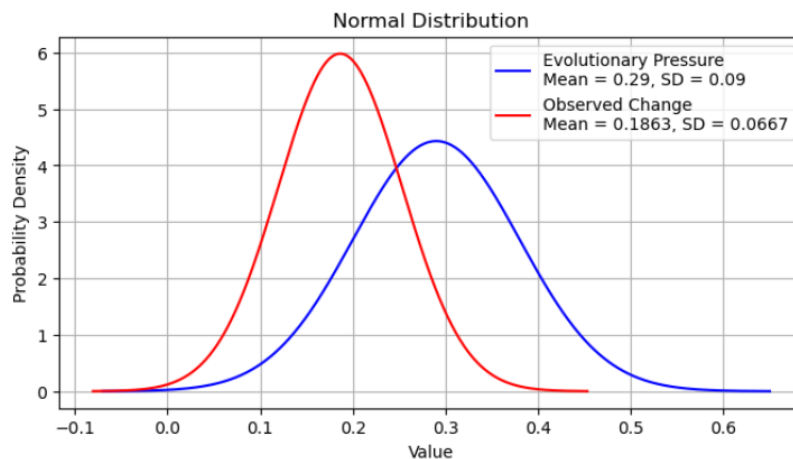
Figure 4.21:

The two distributions have substantial overlap. Imagine you have a multiverse of worlds. The posterior of evolutionary pressure would be the distribution of actual evolutionary pressure among all the worlds that have the same set of observations as we have accumulated. We know for every world Observed Change = Evolutionary Pressure + Environmental Pressure. Thus, we have the posterior of environmental pressure as Observed Change - Evolutionary Pressure. This is given by N(-.11, 0.108).
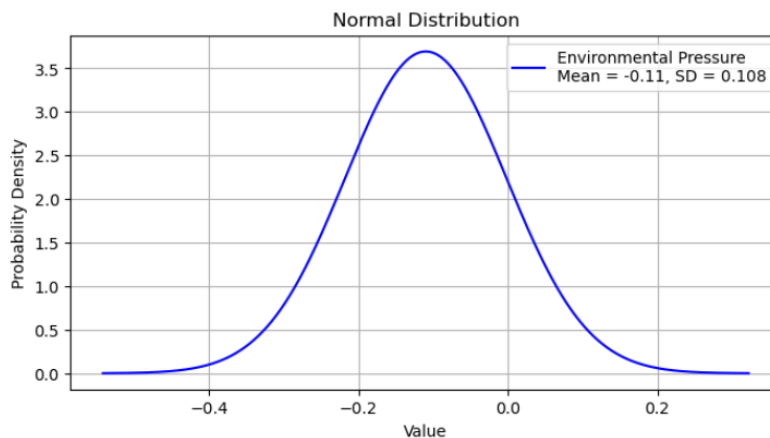
Figure 4.22:
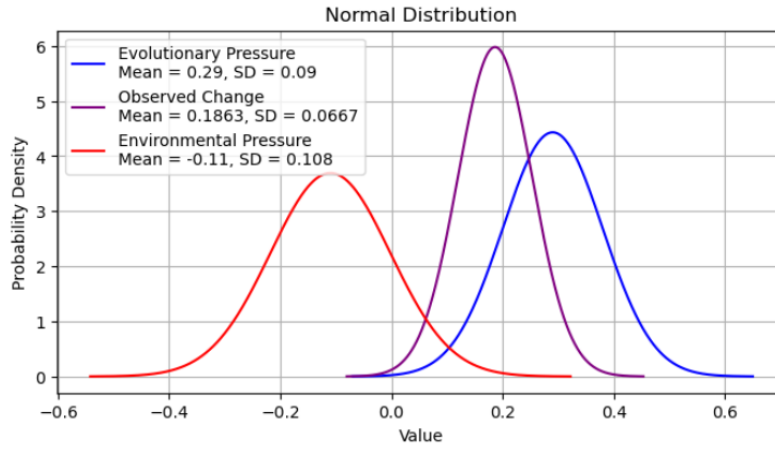
Figure 4.23:

We now have these posteriors. Note that if we define heretaticity as the between-generations heritability of the phenotypic gap, we get that the most likely estimate is $(0.29/0.18) = 1.6$. This can be interpreted as saying, if you held environment constant between the generations, you would see 1.6 times the observed change. Likewise, if the heretaticity were 0.1, the change would be overwhelming environmental, meaning we would only see 10% of the observed change if environments were held equal. Likewise, the most likely environmenticity is -0.6, meaning if we held genes constant, we would actually see a conservative shift. But these are only point estimates. We can define posteriors for these two statistics as Evolutionary Pressure / Observed Change for heretaticity and Environmental Pressure / Observed Change for environmenticity.
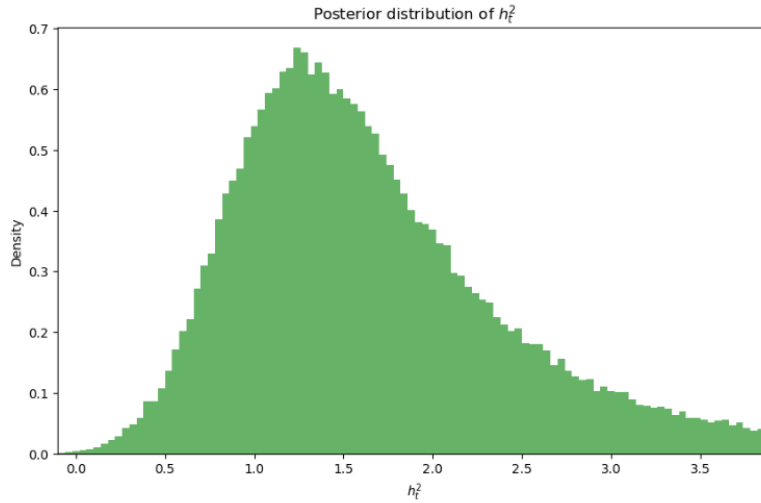
Figure 4.24:

We get the following distribution for heretaticity. The distribution for environmenticity is simply multiplied by -1 and added to by 1. The percentiles for heretiacity are as follows:
1st percentile: $\sim$0.386
2.5th percentile: $\sim$0.551
5th percentile: $\sim$0.694
15th percentile: $\sim$0.984

Thus, there is an 85% chance that heretaticity is greater than 0.984, meaning that if environment were held constant we would see all or more of the observed shift anyways due to genetic processes.

There is a 97.5% chance that 55% or more of the shift was due to genetics and a 99% chance that 38.6% or more of the shift was due to genetics.

For environmenticity we have:
85th percentile: ~ 0.013
95th percentile: ~ 0.302
97.5th percentile: ~ 0.448
99th percentile: ~ 0.607

Thus, there is an 85% chance that the environment effect was less than or approximately 0, a 95% chance that was less than 30%, and a 99% chance that it was less than 60% We inescapably must reject the blank-slate hypothesis. The overwhelming odds are, given this data, that all or more of the observed gap is due to evolutionary pressure, mainly mutational pressure.

Conclusion:

Our result on selection pressure is in line with previous evidence asserting selection pressure using binary variables [19]. The predominant effect, however, is mutational pressure. Environmental pressure is not likely to be above 0 in the observed direction.

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Chapter 5

Appendix 1

5.0.1 The Homosexual and Female Verbal Tilt

Male homosexuals have a verbal tilt. One of the first studies to show this was published in 1984.
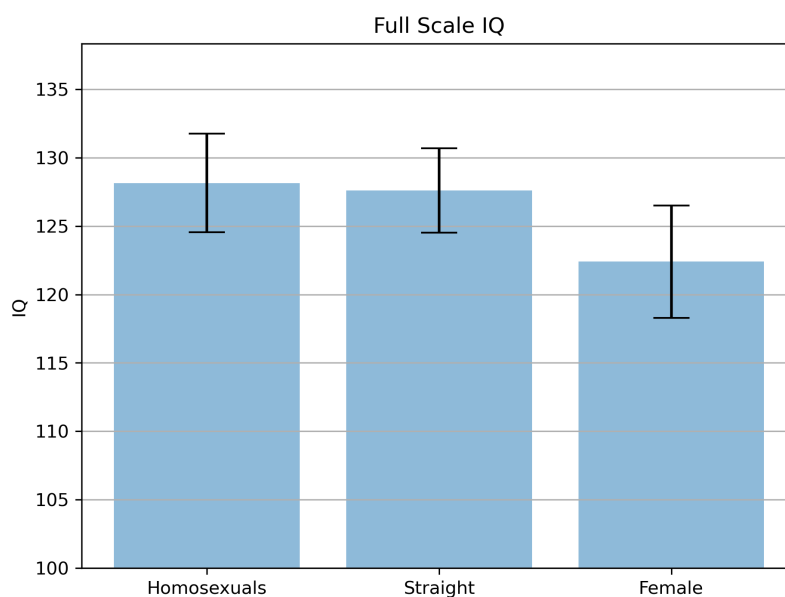
Figure 5.1: Homosexual FSIQ. Bars are 95% CI. [1]

It was performed on college students. It featured 20 straight men, 20 homosexual men, and 20 women. Full-scale, verbal, and spatial (performance) IQs were measured. As Figure 5.1 shows, there was no full scale intelligence gap between the groups.
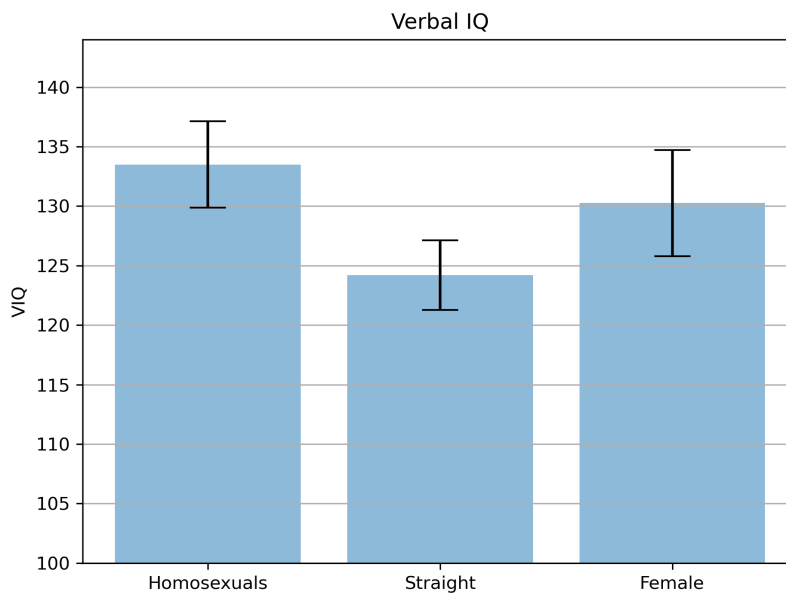
Figure 5.2: Homosexual VIQ. Bars are 95% CI. [1]

However, women and homosexuals had higher verbal IQs than the straight men.
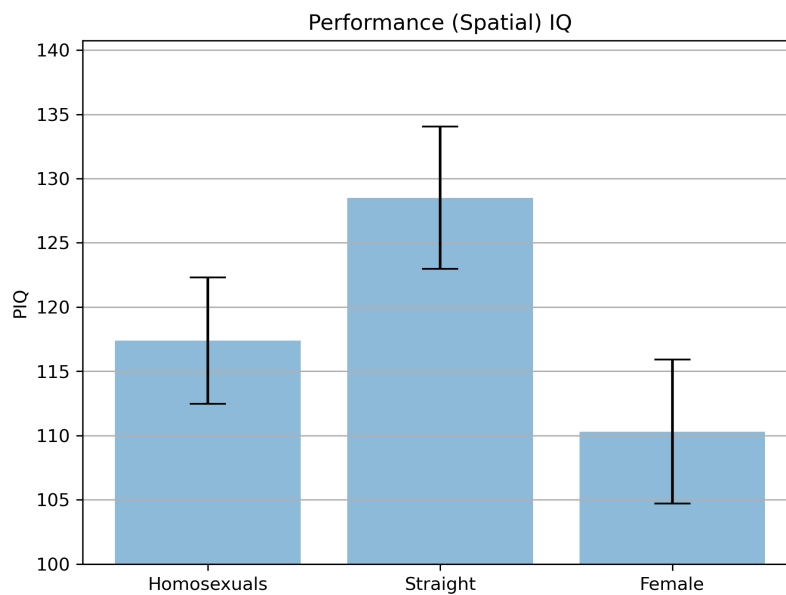
Figure 5.3: Homosexual PIQ. Bars are 95% CI. [1]

While the straight men had higher spatial IQs than the homosexuals and the women. This indicates that homosexuals and women have a *verbal tilt*, a deficit in spatial intelligence without a corresponding deficit in "verbal intelligence" (or verbal signals of general intelligence).

The homosexual male deficit in spatial performance was replicated in 2003 in a study of 240 individuals.
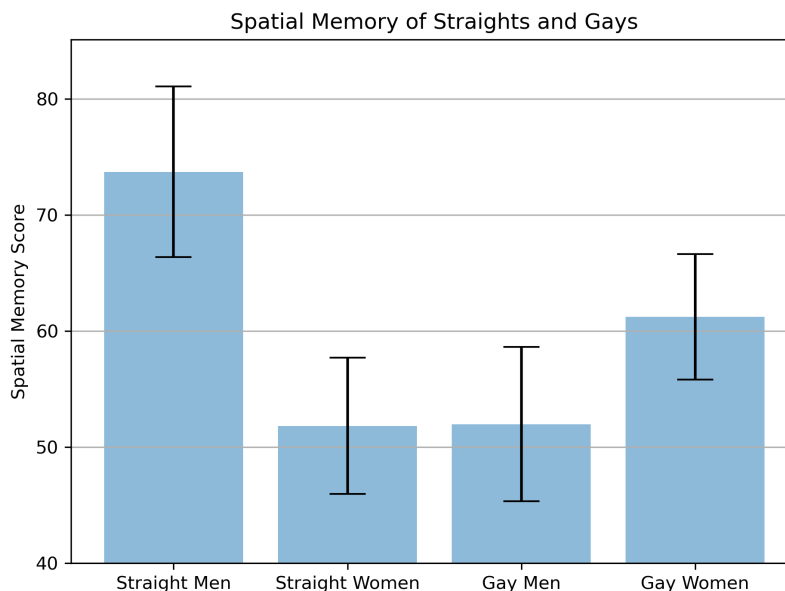
Figure 5.4: Error bars are 95% CI. [2]

Staight men performed better than gays, lesbians, and women on a spatial memory task.

In general, the female and the homosexual verbal tilt is a well-replicated finding [3]. We can now move on to why this tilt exists. The suspicion is that this tilt exists, at least in part, due to the same cause the motivates higher female and homosexual leftism and mental illness.

5.0.2   The Homosexual Correlation with Mental Illness

Homosexuality genetically correlates with several mental illnesses that have paternal-age effects, suggesting the frequencies of these illnesses are increased by mutational pressure. Genetic correlation is the correlation of phenotypic effects by genetic variants across the genome on two phenotypes. It basically reveals the genetic similarity of two phenotypic measurements. If the genetic correlation between two traits were 1, those traits would be determined by the same genes. If it were 0, they share no genes. In between means they share some amount of genes.
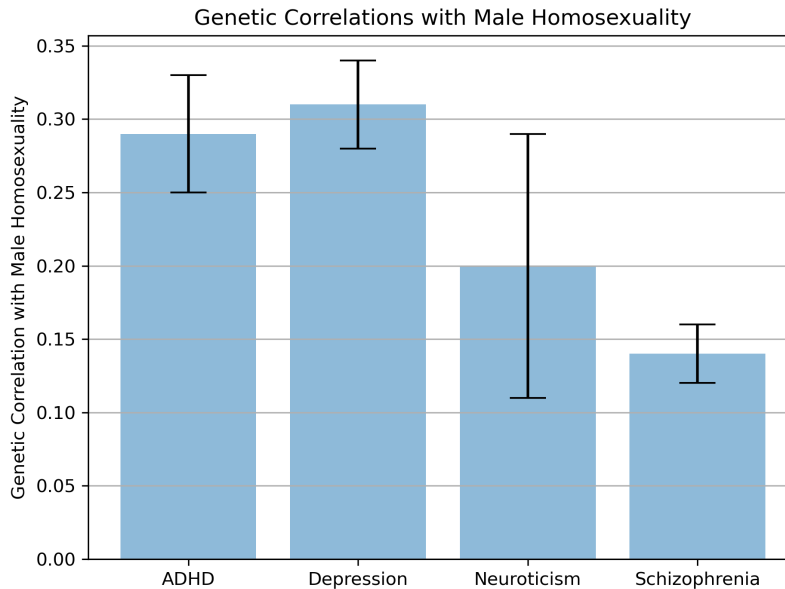
Figure 5.5: Error bars are 95% CI. [4]

These mental illnesses include ADHD, depression, and schizophrenia. Homosexuals are also more likely to have higher Big 5 neuroticism, which correlates with mood issues.

5.0.3   Mental Illness, Homosexuality, and Mutational Load

Some evidence suggests that paternal age may be associated with an increased risk of ADHD in offspring. A paternal age effect is the best non-molecular evidence for mutational pressure on a trait. As men age, their gametes acquire about two new de novo mutations per year. Therefore, the children of 40 year old fathers have twice as many de novo mutations as the children of 20 year old fathers. If de novo mutation tends to increase a trait like ADHD, children of 40 year old fathers will have more ADHD than children of 20 year old fathers, even when environments are controlled.

A systematic review and meta-analysis found that parental age at birth is a risk factor for offspring ADHD [5]. This study specifically looked at the role of paternal age and found a significant association with ADHD risk. Another study also found that advancing paternal age is associated with an increased risk of psychiatric morbidity, which includes ADHD [6].

The relationship between paternal age and ADHD may be influenced by genetic factors. A study on Pax6 mutant mice, which are used as a model for neurodevelopmental disorders, found that paternal aging can interact with gene mutations to affect behavior, including hyperactivity [7]. This suggests that a combination of paternal aging and specific genetic vulnerabilities may contribute to ADHD risk [7].

Paternal age is also associated with schizophrenia risk [8] [9] [10]. The relationship between paternal age, mutational load, and the risk of schizophrenia has been studied in various cohorts and ethnic groups, with consistent findings [11]. A prospective birth cohort study demonstrated a relationship between increasing paternal age at the time of the offspring's birth and the risk of schizophrenia [9].

Men in their 40s at conception were found to be two to three times more likely to father a child with schizophrenia than those in their mid-to-late 20s [11]. These estimates may vary between cohorts, but the link between advanced paternal age and schizophrenia remains significant after controlling for possible confounds [11]. The age-related accumulation of sporadic mutations, potentially arising in paternal germ cells, could help account for the transgenerational persistence of the effects of advanced paternal age recorded in epidemiological research [11].

This suggests that de novo mutations in paternal germ cells may play a role in the development of schizophrenia [10]. The exact mechanisms through which paternal age, mutational load, and the risk of schizophrenia are related are not fully understood [11]. However, the evidence supports a significant

association between advanced paternal age and an increased risk of schizophrenia in offspring, even when controlling for possible confounding factors [11].

Thus, de novo mutations likely increase the odds someone develops ADHD or schizophrenia. Since some of the genes that cause those disorders also cause homosexuality, de novo mutations likely increase the odds someone is homosexual. By extension, they increase the odds that a man is born with a verbal tilt.

Indeed, there is a paternal age effect for homosexuality [12] [13]. Multiple studies have found that paternal age is of more importance than maternal age in causing homosexuality. This is what is expected when mutational load is at play, because women do not accumulate as many de novo mutations in their gametes as men as they age.

5.0.4   Homosexuals, Leftism, and Mutational Load

Leftism is associated with higher paternal age (see chapter 2). In turn, there is evidence to suggest that male homosexuals are more likely to be politically leftist. The existing research indicates that lesbian, gay, and bisexual (LGB) individuals tend to be more liberal than heterosexuals, supporting a "sexuality gap" in liberalism [14] [16]. This is reflected in the political leanings of LGB voters, who are a deeply Democratic bloc with overwhelmingly negative views of the Republican Party [15].

A study conducted among college students in the Southern USA found that LGB individuals were more likely to hold liberal political perspectives compared to their heterosexual counterparts [14]. Another study by the Survey Center on American Life revealed that 54% of LGBTQ respondents identified as liberals, while only 27% of straight respondents did [16]. Gallup News also reported that LGBT individuals are twice as likely as other Americans to identify themselves as politically liberal [17].

5.0.5   The Higher Rates of Female Mental Illness

There is evidence to suggest that women are more likely to experience certain types of mental illnesses than men. Here are some key findings: Women are more likely to be diagnosed with anxiety or depression, while men tend toward substance abuse or antisocial disorders [18]. Women are three times more likely than men to experience common mental health problems [19].

An estimated 7 percent of women were affected by a serious mental illness in 2020, compared with 4 percent of men in the U.S. [20]. Women have a significantly higher frequency of depression and anxiety in adulthood, while men have a larger prevalence of substance use [21].

Women showed a higher risk of having mood disorders, especially anxiety and depression, compared to men [22]. Women had more anxiety-mood disorders than men and men more externalizing-substance disorders than women in all cohorts and countries [23].

5.0.6   Females and Leftism

Women are more likely to associate with the Democratic Party than men. Here are some key findings: Among registered voters, 56% of women affiliate with or lean toward the Democratic Party, compared with 44% of men [24]. In every presidential election since 1996, a majority of women have preferred the Democratic candidate [25]. In the 2018 midterm elections, 59% of women voted Democratic, while only 47% of men did so [26]. Women of all ages are more Democratic in orientation than men of the same ages, and that women of all ages are also less likely than men of the same ages to be independent [27].

5.0.7   The Jewish Verbal Tilt

Ashkenazi Jews have a higher average level of verbal intelligence than non-Jewish whites [28]. This is supported by studies that have found well above-average verbal intelligence in Ashkenazi Jews, along with slightly below-average spatial intelligence, producing an average IQ score in the range of roughly 107 to 115 [30]. Additionally, Ashkenazi Jews exhibit a strong tilt towards verbal and quantitative reasoning, and away from spatial reasoning [31]. A study of kids in Israel by parental origin found that the verbal tilt is an Ashkenazi thing [29].

5.0.8   Jews and Mental Illness

There is evidence to suggest that Ashkenazi Jews have higher rates of schizophrenia than the general population. Here are some key findings: Variations of the DNST3 gene make Ashkenazi Jews 40 percent more likely to develop schizophrenia and similar diseases [32]. A study of Ashkenazi Jews found several genetic variants associated with schizophrenia [33].

5.0.9   Jews and Leftism

Ashkenazi Jews are more likely to be politically liberal and to identify with or lean toward the Democratic Party than to be conservative or identify with the Republican Party. Here are some key findings: Seven-in-ten Jewish adults identify with or lean toward the Democratic Party, and half describe their political views as liberal [34]. Jews are among the most strongly liberal, Democratic groups in U.S. politics [35]. U.S. Jews are a largely Democratic, politically liberal group. Overall, seven-in-ten Jews identify with or lean toward the Democratic Party, while just 22% identify with or lean toward the Republican Party. And roughly half of U.S. Jews describe themselves as political liberals [36].

5.0.10   The Verbal Tilt and Leftism

The verbal tilt of an academic field predicts the percent of Democrats in it at r = 0.71 [37].

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Chapter 6

Appendix: Review of *The Ruling Class* by Gaetano Mosca

6.1 Introduction

Mosca's *The Ruling Class* is a broad, and somewhat lengthy, work of early 20th century political theory. In it, he demonstrates an impressive awareness of historical facts, and exposits on a wide variety of topics, including the structure of the ruling class, memetics, forms of government, civilization growth and decay, and the workings of history. Though many good things could be said of the work, at many points it is quite repetitive, and evidential standards are quite 19th century. The whole book is essentially written as follows: Mosca states a general principle he believes to be true, gives one to three examples from history he believes to be confirmatory, discuss the consequences of this principle being true, and then skip onto the next principle. Chapters are structured to accommodate this format – each chapter contains numerous subsections. The names can be found at the top of every other page, or in the table of contents, but in the text each section is simply numbered. Transition between sections within chapters is often jarring.

In this review, I seek to give a brief account of Mosca's thought, alongside a rudimentary evaluation of the evidence he presents for his ideas, and the ideas themselves.

6.2 The Dynamics of History

The book begins with a discussion on the workings of history. By this I mean what was discussed in my essay *The Culture Equation.* In that essay, I put forth the following equation as a potential model for how history precedes:

$$C = E[P] = E[G] + E[Env] \tag{6.1}$$

That is, culture is the expected value of phenotypes of the ruling class which we know from behavioral genetics to be the sum of the expected values of genotypes and environments. Environment can include techno-epoch and memepool.

I would describe this equation as being a statement of what one might call "Historical pluralism", as opposed to schools of thought like "Historical materialism", "Historical idealism," or "Historical racialism." Mosca, though he does not state it in clear, mathematical terms, subscribes to historical pluralism. The first chapter of the book is a refutation of historical racialism as well as a theory which was evidently popular in his day which claimed that history was determined by climate. Mosca's use of evidence here is simple: he cites the civilizations which have existed among non-Aryan races, and also the civilizations which have existed in different climates. He is particularly bothered by strains of Aryanism which state cold climates and Aryan races are superior to southern Europeans. Mosca, of course, is Sicilian, and was a representative in the Italian parliament in his day. Here is some of what he says on race. First, before addressing the superiority of different types of white people, Mosca passes judgment on certain non-white races:

It seems to us an established fact that the most primitive races, those which anthropologists call "lower" the Fuegians, the Australians, the Bushmen, and so on are physically and intellectually inferior to the others. Whether that inferiority is innate, whether it has always existed, or whether it is to be attributed to the barrenness of their habitats, to the meagerness of the resources that their surroundings offer and to the abject poverty resulting, is a question that it is neither easy nor essential for us to answer. After all, these races represent only a very minute fraction of mankind, and that fraction is rapidly dwindling before the expansion of the white race, which is being followed in its turn, in many places, by an infiltration from the yellow race. In strict justice we are obliged to recognize that the prosperity of the white and yellow races in localities where the aborigines barely managed to subsist has not been wholly due to the organic superiority which the former boastfully claim. The newcomers bring with them knowledge and material means which enable them to reap an ample livelihood from soils that of themselves would yield practically nothing. The Australian native for centuries upon centuries was content to track the kangaroo, bring down birds with his boomerang or, if worse came to worst, eat a lizard. But we must remember that he had no means of securing the seeds to grow grains or other edible plants, or the breeders for flocks of sheep, which the English colonists had at their disposal.

Not a thing in this book is quantified. Instead, it consists entirely of Mosca's qualitative judgments, based off of small glimpses of uncited factoids. It is implied that the aborigines are probably inferior due to their total lack of civilization. No quantifiers of this judgment are given. The question of nature vs. nurture is imprecisely addressed with reference to a vague notion that Europeans and Asians have expanded very rapidly in aboriginal lands, but that this might have been helped by their possession of farming knowledge and equipment. Things are left to be quite subjective and qualitative. The whole work is like this; as such, it is decisively sub-scientific. Another case in point, Mosca writes on the phenotype of American blacks:

Are Indians and Negroes on the whole inferior to whites as individuals? While most people would answer with a ready and emphatic yes, some few with equal promptness and resolve say no. As for us, we find it as hard to agree as to disagree in terms at all positive. Observers rarely fail to report, in strictly primitive groups of these races, individuals who are outstanding for qualities, now of mind, now of heart. Where the American aborigines have mingled with the whites and adopted their civilization, they have not failed to produce distinguished men in nearly all branches of human activity, and under identical conditions the Negroes can boast of a list of names almost as long. Nevertheless, one has to admit, as regards both these races, that the roster of conspicuous individuals is very brief as compared with the number of individuals who have been, and are, in a position to enjoy the advantages offered by civilized life. Some weight, however, has to be given to a remark that was made to Henry George by a scholarly Negro bishop, that Negro school children do as well as white children and show themselves just as wide-awake and intelligent up to the age of ten or twelve; but as soon as they begin to realize that they belong to a race that is adjudged inferior, and that they can look forward to no better lot than that of cooks and porters, they lose interest in studying and lapse into apathy. In a great part of America colored people are generally regarded as inferior creatures, who must inevitably be relegated to the lowest social strata. Now if the disinherited classes among the whites bore on their faces the indelible stamp of social inferiority, it is certain that few individuals indeed among them would have the energy to raise themselves to a social position very much higher than the one to which they were born.

Nothing on probability distributions, just some allusion to some people subjectively reporting that there was a smart black guy on occasion. To top it off he concludes that blacks are put down because a Negro bishop said so! This passage is prescient because it is easy for one with a vast knowledge of contemporary HBD to contrast this sort of sub-scientific word thinking with the sort of quantified rigor we now posses. The difference between my project on power and Mosca's thoughts on political theory are precisely the same as the difference between this passage and my essay on the black-white IQ gap, or between the passage and HBD in general. The reason why I finished this book is that I am forgiving of this type of thing if it occurred sufficiently long ago, and Mosca makes up for it somewhat

with his apparently broad view of history, from which he may be able to derive some of the accuracy he lacks due to the lack of quantified reasoning.

As a last comment on Mosca's racial views, his discussion of Aryanism is simply as follows:

> If some doubt may be raised as to the aptitude of Negroes and American Indians for the higher forms of civilization and political organization, all perplexity vanishes as regards the Aryans and the Semites, the Mongolian, or yellow, race and that dark Asiatic race which lives mixed with the Aryan stock in India and has fused with the yellow in southern China, in Indo-China and perhaps in Japan. These races taken together make up more than three-fourths, and perhaps as much as four-fifths, of all mankind. We say nothing of the Polynesian race. It may well have superior capacities, but being scant in numbers and dispersed over small islands, it has not been able to create any great civilization.

> The Chinese succeeded in founding a highly original civilization which has shown wondrous powers of survival and even more wondrous powers of expansion. Offshoots in large part of Chinese civilization are the cultures of Japan and Indo-China, and the Sumerian people which founded the earliest civilization in Babylonia seems to have belonged to a Turanian stock. The dark Asiatic race seems to have developed a very ancient civilization in Elam, or Susiana, and an autochthonous culture apparently existed in India before the coming of the Aryans. Egypt owes her civilization to a so-called sub-Semitic or Berber race, and Nineveh, Sidon, Jerusalem, Damascus and perhaps even Sardis belonged to the Semites. Reference to the more recent civilization of the Mohammedan Arabs seems to us superfluous.

The superiority of Aryans is dealt with in only two paragraphs, and the reasoning goes: other races had civilizations, so Aryans are not superior. While I am not an Aryanist, I am doubtful that the Aryanists of Mosca's time were unaware of the existence of Chinese, or Egyption, or Babylonian, or Roman civilization. Mosca just sort of crafts his own frame and scarcely deals with much outside of it. Only when the ideas he attacks are really profoundly stupid do his pronouncements become totally adequate. For instance, toward the end of the book Mosca deals with Historical materialism, the Marxist view he summarizes as the idea that change in economic organization is necessary and sufficient for change in social organization. Mosca goes on for a few pages, citing multiple instances like the rise of Christianity and the fall of the Roman empire, wherein social organization changed without change in economic organization. He also claims that economic organization changed in the 19th century with little to no change in social organization. He claims briefly that, per his reading, the democratic revolutions occurred before changes in economic structure. Allegedly, the economy was greatly restructed throughout the 19th century, and political organization stayed representative. We are not given independent evidence of this fact, other than that Mosca believes in it, in his vast accumulation of knowledge. The way in which the economy changed after the revolutions is described by Mosca without reference, lending to his credibility, but again there are no quantifiers. No measurements. Mosca simply waves his hands and says he has seen and read that new machines exist, that this or that came into existence in this year. Rigorous work was not done to measure the effect of some machine on some metric which is hypothesized to change per some hypothesis.

Epistemology aside, Mosca explicitly rejects a one-track view of history, stating that any such view is destined to be flawed. Instead, throughout the book, he puts emphasis on technological change, memetics, and ruling class virtue. His thoughts on the former are that military technology is highly related to government organization. We are given typical levels of evidence for this per Mosca: he claims, qualitatively, for instance, that absolutism trumped feudalism as the firearm enabled it to, and then absolutism gave way to representative government when the new economic masters realized the power of the firearm against the old aristocratic abolutists. He also mentions the association between the Greek hoplite and their representative government, and then the transition to the Roman equestrian. As usual, nothing here is particularly definitive, but it is an interesting hypothesis.

Mosca's thoughts on ruling class virtue are even more vague, but they overlap with my hypotheses. He says that the level of civilization a culture achieves is dependent on the intellectual and moral fortitude of its middle class, which he considers to be the base of a ruling class, a "secondary ruling class." If corruption sets in for whatever reason, that can kill a civilization. The reasons why corruption might set in remain obscure in this work; Mosca seems to have a notion of a cyclical rise and fall of civilizations, and explicitly hopes that perhaps political science could, in the future, prevent the fall of civilizations, which he considers to be great catastrophes which are potentially preventable.

6.3   Memetics

Mosca discusses what might be today called "memetics" at length. He believes it is evident that model two from my essay *Three Models of Memetics & The Lindsay Fallacy* is a good descriptor of reality; specifically, he says that memes essentially appeal to pre-existing impulse, and these impulses in men may be good or bad. He is sympathetic to Christianity, and averse to socialism, saying the former acts upon the altruistic instincts of man, while the latter primarily feeds upon hate and resentment. All ideologies, he says, are mixed, and must appeal to both good or bad instincts, or else just bad. Mosca doubts that an ideology can ever be successful if it only appeals to the good, because like me, he frames the good as altruism, and doubts the ability of men to totally deny themselves. But Christianity, while it says woe to the rich, is ultimately based upon love, and promises revenge in the next life, while socialism demands the rich to be punished now. For Mosca, this difference makes Christianity a positive force for humanity (though he does not seem to be a believer), while socialism is regarded as a pest.

Mosca decries the materialism left in the wake of the lapse of the faith of the ruling class, saying it has encouraged the adoption of dangerous, socialist beliefs, and depressive ideologies which claim that man is a mere collection of chemicals. In one interesting passage, he states that he believes that the decline of religion is most to blame for low fertility rates, that when religion was decaying in the ancient world, before the introduction of Christianity, abortion and adultery and infant exposure shot up in frequency.

Mosca takes the ruling class to be genuine believers of their political formulas. "Political formula" is a term coined by Mosca, though not widely used throughout his text, that refers to the founding myth of a ruling class. Mosca claims that, based on his extensive study of history, men are far more disposed to show obedience to an idea than to another man. Thus kings throughout history have relied on divine right, and new governments rest upon the claim of popular sovereignty. He claims that Rome was also based on popular sovereignty: "The complicated hierarchy of civil and military functionaries in the Roman Empire rested upon the will of the emperor, who, at least down to Diocletian's time, was assumed by a legal fiction to have received from the people a mandate to rule the commonwealth." Specifically, Mosca defines political formula thusly: "This legal and moral basis, or principle, on which the power of tie political class rests, is what we have elsewhere called, and shall continue here to call, the 'political formula.' (Writers on the philosophy of law generally call it the 'principle of sovereignty')."

He claims that the rise of socialism and universal suffrage is associated with the genuine guilt the ruling class felt by basing its moral legitimacy on equality. Due to the genuine belief the ruling class have, on average, in their political formula, their formula can doom them to destruction. They cannot, according to Mosca, simply seek their material self interest. They remain attached, throughout history, to their formula, even to their doom. This explains, according to Mosca, why ruling classes often become sclerotic, and fail to change with the times. I quite doubt this interpretation of history, and I would like to see a more scientific approach to this question taken. Mosca's evidence is, of course, scant, and subjective or qualitative. His observations could be explained with the idea that ruling classes become sclerotic when they are no longer fit to rule; their material interests prevent them from simply giving up power. This would be more parsimonious with the observation that at any time since 1800 the ruling class, based upon the idea of equality, has obviously, and unashamedly failed to extend equality to everyone, even in legal terms. In the spirit of Mosca's epistemic standards, it suffices to allude to the condition of the average 17 year old in contemporary society.

6.4   Forms of Government and Juridicial Defense

More frequent than any other coinage in this book is the term and idea of "juridicial defense." This is essentially Mosca's term for seperation of powers. Mosca believes that a variety of interests must exist in the ruling class, lest it become single-sighted and overbearing. This is relatively standard structural liberalism.

The evidence presented is lacking as always. Much time is spent discussing the supremacy of the 19th and 20th century relative to others. Mosca claims that only with juridicial defense can the necessary level of intellectual freedom be achieved to make scientific discovery. I am not averse to this conclusion but Mosca, even with qualitative data, could have put more effort into exploring the dynamics of different governments relative to freedoms granted. It is very much an axiom of Mosca's,

not rigorously supported, that a social force will eat like a fat dog – that is, if it is able it will take everything for itself at the expense of the rest of society. It is on these grounds that he builds his account of juridicial defense, that he interprets vague historical anecdata without rigorous investagation of the structure of the ruling classes at different times, and upon these grounds he rejects fascism, Marxism, and syndicalism, saying that the ascendency of a Communist party, or a military dictator, or a trade union would necessarily mean the subordination of what he sees as plural valid interests to the one. He heavily cites past thinkers, like Aristotle and Montesquieu, whom he says support mixed forms of government.

Likewise, near the end of the text the terms "aristocratic and democratic tendency" and "autocratic or liberal impulse" are presented. These refer, respectively, to the tendency of a ruling class to repopulate itself with its own descendants, or with new blood, and whether or not a new ruling class is selected from above or below. Mosca claims that these tendencies should be found in multiple institutions throughout society, and should be balanced.

I would like to see these ideas better investigated rigorously and quantitatively. Ideally, a way to measure the levels of juridicial defense and freedoms of a society would be developed, and correlations could be calculated. The same goes for the tendencies Mosca defines.

6.5   Conclusion

The Ruling Class is an interesting text with average rigor given its time period. I would not bother with such a text were it written today, since it was written over 100 years ago, this book serves as a interesting window to the past and as an interesting source of hypotheses. It is also somewhat canonical in elitist political theory and therefore serves to help familiarize the reader with the development of field, whatever that field's faults may be.

6.6   Addendum: Ruling Class and Social Type

I noticed that I failed to mention Mosca's treatment of two concepts: ruling class and social type. One of these is ironically the title of his book! The reason why I did not mention these concepts is that Mosca's treatment of these topics is inadequate. He spends maybe five, at most ten pages of his 450 page book discussing the ruling class. Much more space is devoted to juridicial defense, memetics, and so on.

Mosca gives essentially no evidence for his claim that "everywhere is found an organized minority ruling over an unorganized majority", to paraphrase. I find his assumption reasonable (see my conclusion to my review of *Political Parties* – disorganization could very well imply weakness while organization means strength) but his treatment of the topic quite lacking.

One thing he does emphasize is that any king or small inner oligarchy invariably needs a supporting outer oligarchy. At some point he distinguishes these as the two levels of the ruling class. The former are kings or billionaires and the latter are managers or civil servants. He asserts with little support that the are generally aligned on their political formulas, and vaguely share class interests due to both essentially existing on behalf of the State.

Social type has to do with the different possible types of ruling classes. Diversity of social type is important for juridicial defense, according to Mosca. Interestingly, he almost totally reduces this concept to ethnicity, and supports himself by referencing examples of ethnic intolerance throughout history.

I was hoping for more hypothesis fodder relating to class interests and different types within an ethnicity. Sadly this was not given. Overall I found his treatment of these topics to be lacking.

Chapter 7

Appendix: Review of Pareto's *The Mind and Society*

7.1 Introduction

Vilfredo Pareto's 1916 text *The Mind and Society* is, for its day, truly the pinnacle of the scientific study of society. Among early 20th century treatises on power this book is certainly the most scientific, the most honest, the most grand, and the most genius.

   With that said, the book has some flaws. The most substantive is its failure to provide certainty in its analysis. Pareto certainly tried, what with his 2000 pages filled to the brim with historical anecdata. The problem is the state of knowledge of the time period in which the book was written. Pareto simply has no access to measurement, and as such there is not one statistic in the entire book. Consequently I must agree with Herbert J. Muller's epistemic assessment, despite the latter's Marxist motivations: [1]

> Even within its scope, however, there is a fatal weakness in Pareto's inductive analysis—in the foundation itself of his system of sociology. Professor P. S. C. Northrop has remarked that Pareto's procedure was a rather curious one for a scientist; all his "facts" he got from classical texts and newspaper clippings, never leaving his armchair for firsthand observation. Apparently he seldom bothered even to consult the work of sociologists, psychologists, and anthro-pologists who have made such observations, for his few references to them are chiefly sneering. But the final objection is that his inferences, however shrewd and stimulating and drawn from however staggering an erudition, have no real scientific validity. Pareto provides no clear criterion by which to determine uniformities, no strictly logico-experimental test by which to verify his residues. One has to take them on faith, precisely as one takes the quite different list of instincts drawn up by Professor William McDougall. Ultimately his whole "scientific system" is simply inspired guesswork.

> As a matter of fact, it is not even clear what a "residue" is. It is a "manifestation" of something or other, but on the processes of manifestation Pareto is silent. Evidently it corresponds to biological instincts, innate constants, else he could not generalize and predict so freely. Accordingly he tells us again and again that residues change very little and very slowly, if at all. But now embarrassing questions arise. For one thing, the many parallels that Pareto cites as evidence of basic uniformity are by anthropologists usually explained as the result of imitation or historical diffusion; and the whole question of what is instinctive, what acquired, is still wide open.

> Yet even after Pareto's ideas have been pruned of their shaggier extravagances and supplemented as he hoped they would be, I can see no positive, systematic use for these residues, simply because any classification is inevitably arbitrary and unverifiable—at least until biology has solved the problem of heredity, and psychology has precisely defined and explained the unknown "psychic states" that Pareto imaginatively reconstructed from his armchair reading. Meanwhile his system is not strictly "scientific" and has no absolute validity. Eagerly he introduces mathematical formulas whenever possible, just to show how

exciting it would be to get definite quantitative measurements, but he always adds mournfully that we cannot use these formulas: the unknowns and immeasurables are too many, the interdependencies are too intricate, the very objectives are as yet beyond the scope of science.

Mr. Muller is indeed correct that Pareto's system is inspired guesswork. What Muller failed to understand is that said guesswork was inspired by truth and fueled by genius. What Pareto has given posterity is, I dare say, the best grand account that could have been done in this field by anyone alive up to the point of Pareto's death in 1923. I wish the man had had better access to quantifications and thorough histories, and in my future study I hope to do him and his work justice by giving his theories the fullest of consideration and by taking full advantage of the knowledge he certainly wish he had, i.e. the sum total of all scientific research and historical study conducted in the 100 years since his death that relates to the questions he asked and the answers he gave.

While I said that Pareto's system is not wholly scientific, this doesn't mean that I don't think Pareto isn't almost certainly correct. The *text* is uncertain. Logically speaking Pareto has not shown that his conclusions necessarily follow from the facts he presents. 2000 pages was simply not enough and it is not clear that 20,000 pages would have been enough. His proof, in other words is incomplete. This doesn't mean that Pareto hadn't obtained proof. It merely means that the full proof was too large and complicated, and perhaps not well enough verified among his peers, to write down for other's consumption.

We have already seen that the whiny Marxist was quick to complain about Pareto's hereditarian assumptions. Data has verified these assumptions in the last century, and perhaps one could say Pareto was merely lucky to have built his theory on a correct assumption. I don't think that's the whole picture. Pareto is clearly an above-all honest man in a way which Marxists can only pretend to be. It is not a coincidence that the non-dogmatic regarded hereditarianism as basic fact for thousands of years before the discovery of genetics. Whether it be blood-memory, honest introspection, or partially conscious machine learning on many thousands of samples, truth seekers seem to have always known what the results of the MTRAS were going to be, and only have Marxists and other Orwellian dogmatists ever acted as if it were uncertain. Now quantitative science has efficiently verified what was always known; Lysenko and Lamarck have died as failures and Darwin and Mendel have been exalted by lady Truth. Pareto stands firm in the winds of the unknown while Muller and his Marx have already been blown into the pit of lies.

Shall we throw Pareto a rope, that he might catch so that he might be brought in from his brave journey into the unknown into the heavenly epistemic world of the quantitatively verified? Yes, we shall, for we are confident that he deserves admission. We must first begin to fashion the rope, however. That will be done soon, but first we must discuss his doctrine.

7.2   Pareto's Doctrine

The Mind and Society has four epic volumes: the first is on non-logical behavior, the second is on "residues", the third is on "derivations", and the fourth is on class circulation and Pareto's overall theory of society.

For an in-depth, solid, excellently styled (why is his prose so satisfying?) 50 page summary of the first three volumes, I strongly recommend the Pareto section of Burnham's *The Machiavellians*. Sadly, for reasons potentially relating to his theory of the managerial elite, Burnham fails to properly summarize the fourth volume. More on this later.

Here it will suffice to briefly treat the first three volumes and more to more extensively summarize the fourth.

7.2.1   Non-logical conduct and Pareto's epistemology

Volume one is half epistemic treatise, half historical analysis of the relative frequencies and importance of logical and non-logical behavior. It begins not by defining what "logical" and "non-logical" mean, but rather with a 70 page tract on what a science is and how one could create a truly scientific theory of society. Pareto informs us that he is "looking for uniformities" – in other words, invariant phenomena, like the fact that the force of gravity is 9.8 meters per second squared.

Only on page 77 does Pareto define logical and non-logical actions, giving us the following table:

GENERA AND SPECIES	HAVE THE ACTIONS LOGICAL ENDS AND PURPOSES:	
	Objectively?	*Subjectively?*
CLASS I: LOGICAL ACTIONS		
(The objective end and the subjective purpose are identical.)		
	Yes	Yes
CLASS II. NON-LOGICAL ACTIONS		
(The objective end differs from the subjective purpose.)		
Genus 1	No	No
Genus 2	No	Yes
Genus 3	Yes	No
Genus 4	Yes	Yes
SPECIES OF THE GENERA 3 AND 4		
3α, 4α	The objective end would be accepted by the subject if he knew it.	
3β, 4β	The objective end would be rejected by the subject if he knew it.	

As the table shows, a logical action is defined by Pareto as an action wherein the actual effect is congruent with the expected effect. Non-logical actions are split into classes according to whether or not there is an expected effect or an actual effect. Genus 1 non-logical actions have neither expected nor actual effects, genus 2 non-logical actions have expected effects but not actual effects, genus 3 non-logical actions have actual effects but not expected effects, and genus 4 non-logical actions have both expected and actual effects, but these effects differ.

Pareto gives some examples and specifies what he means by "purpose": (pg. 79)

> Genera 1 and 3, which have no subjective purpose, are of scant importance to the human race. Human beings have a very conspicuous tendency to paint a varnish of logic over their conduct. Nearly all human actions therefore work their way into genera 2 and 4. Many actions performed in deference to courtesy and custom might be put in genus 1. But very very often people give some reason or other to justify such conduct, and that transfers it to genus 2. Ignoring the indirect motive involved in the fact that a person violating common usages incurs criticism and dislike, we might find a certain number of actions to place in genera 1 and 3.

> Says Hesiod: "Do not make water at the mouth of a river emptying into the sea, nor into a spring. You must avoid that. Do not lighten your bowels there, for it is not good to do so." The precept not to befoul rivers at their mouths belongs to genus 1. No objective or subjective end or purpose is apparent in the avoidance of such pollution. The precept not to befoul drinking-water belongs to genus 3. It has an objective purpose that Hesiod may not have known, but which is familiar to moderns: to prevent contagion from certain diseases.

> It is probable that not a few actions of genera 1 and 3 are common among savages and primitive peoples. But travellers are bent on learning at all costs the reasons for the conduct they observe. So in one way or another they finally obtain answers that transfer the conduct to genera 2 and 4.

> Granting that animals do not reason, we can place nearly all their so-called instinctive acts in genus 3. Some may even go in 1. Genus 3 is the pure type of the non-logical action, and a study of it as it appears in animals will help to an understanding of non-logical conduct in human beings.

The rest of volume one is devoted to espousing something like verificationism (before the Vienna circle and Ayer's famous book that popularized it!) while surveying history and philosophical works in order to approximate the relative importance of logical and non-logical behaviors in determining the general form of society.

Pareto's extensive review of in vogue philosophical doctrines at various times hits both these birds with one stone. His main aim is to show that the all-too-common idea that, for instance, "Voltaire wrote a book, people read it and rationally decided to overthrow the King" is totally wrong. Voltaire's book, and others like it at other times, is nonsense and sentiments, meaning that the correlation between a,

the popularity of the book, and *b*, the French revolution, is not causal, but rather is explained by a third factor *c*, sentiments. Revolutionary behavior is not the result of reasoning; insofar as Voltaire and similar writers are used as "justification" for said behavior, the behavior constitutes type 4 non-logical behavior, because the subjective purpose, being confabulated nonsense, can't possibly describe the actual purpose of the behavior in question.

On Voltaire he says, specifically: (pg. 1224)

> When one reads Voltaire, it is natural enough to conclude that he was the artisan of the unbelief so prominent in the people of his time. But pondering the matter a little more closely, we can only wonder how it could have come about, if that is the general rule, that the writings of Lucian, which are in no way inferior to Voltaire's on the side of literary quality and logical effectiveness, failed to have an influence as great as Voltaire's, that Lucian stood alone in his unbelief while faith and superstition were increasing all about him. There is no way of explaining such facts, and many others of the kind, except by assuming that the seed that is sown bears fruit, or fails to bear fruit, according as it falls on congenial or uncongenial soil. The philosophes of the eighteenth century in France revived arguments that had already been used against Christianity by Celsus and the Emperor Julian. Why did they succeed where their predecessors failed? Obviously because there was a difference in the minds of the people whom they addressed. But that is not all. Had Voltaire been the chief artisan of the ideas prevalent among his countrymen, those ideas should not have weakened in intensity so long as his literary labours continued. Yet towards the end of Voltaire's life, while his fame was still soaring, one notes the rise of a movement directly opposite to his tendencies: the educated classes were turning to Rousseau. Rousseau, in his turn, was doing little more, on the whole, than to state derivations that corresponded to residues that Voltaire had left unstirred. To that Rousseau owed the favour with which the public showered him, just as Voltaire owed the popularity he had enjoyed to derivations corresponding to other residues. Those writers did not create the public sentiments of their day. The sentiments created the reputations of those writers. So much for the main element in the phenomenon; for the facts clearly show that the writing of such men was not entirely and absolutely without effect, that it did amount to something. But, as compared with the other, this latter effect seems something quite secondary.

> What we have just been saying relates to the effectiveness of certain reasonings, but it has nothing to do with the intrinsic value of the reasonings in themselves. ... Had Voltaire lived in the day of Lucian, he would have had no following.

Pareto is more entertainingly harsh with other writers. One amusing take lambastes a writer who argued that "God is spherical": (pg. 288)

> In the treatise commonly entitled De Melisso the following proposition is ascribed to a philosopher: "God being everywhere the same, He must be spherical." That sets up a relationship between a non-experimental entity, God, and an experimental entity, the shape of a sphere. There is no experimental criterion for passing judgment on such an issue. And yet an apparently experimental reason is offered to prove that God is spherical: it is said that He is one, that He is absolutely similar to Himself, that He sees and hears on all sides. The author of the De Melisso is not convinced and remarks that if everything that is similar to itself throughout has to be spherical, white lead, which is white throughout, should also be spherical. And he gives other arguments of the kind. All that very evidently overreaches the domain of experience, and if we would keep within the experimental field, we can neither endorse nor disavow either party in the controversy. Any siding with the one or the other would be due to some sentimental inclination on our part and not to any experimental consideration.

Hegel is also eviscerated:

> Says Hegel: "In general one cannot deny the influence of comets. I set Mr. Bode shrieking some time ago by remarking that experience now proves that comets are attended by a good vintage, as happened in the years 1811 and 1819, and that that twin observation is

worth as much as the observations of the returns or comets, and even more." Here he is stating a false proposition and betraying gross ignorance of astronomy by assuming that the uniformity in the "returns" of comets is a matter of merely empirical observation; but at least he uses clear and exact terms that correspond to concrete things. That, in fact, is why we see so readily that his proposition is false. But the clearness fades when he adds: "What makes cometary wine so good is the fact that the aqueous process abandons the earth, and so brings on a change in the state of the planet." What in all creation is that "aqueous process" which "abandons" our earth. Who has ever seen or heard of it ?

The vagueness and absurdity are far greater in what Hegel says of the Moon and the tides. In strict fact, we know what he means by "crystal," "water," "thirst," "rigidity." It is his manner of combining them that makes them hard to understand. But even that glimmer of comprehensibility vanishes when Hegel says: "Light is simple thought itself, existing under form of nature. It is understanding in nature, or—what amounts to the same thing—the form of understanding present in nature." Or again,: "Light as constituting universal physical identity is first positable as a differentiated term and consequently as forming here a distinct and external principle in matter qualified according to another determination of the notion that constitutes the negation of light, namely, darkness."

If all such verbiage were nothing but a reflection of the psychic state of given individuals, there would be no more occasion for bothering with it than with the ravings of a lunatic. But it has been admired by many people, and its equivalents in the social sciences continue to enjoy great prestige. For that reason they deserve consideration as a social phenomenon of great importance.

Thus Pareto effectively shows that whatever has been blamed on Hegel by historians, whether it be Marxism, Hegelian conservatism, etc, is not really caused by Hegel; rather, they are caused by mutual sentiments. Marx spewed Hegel because it was useful and appealed to the sentiments of those who he sought to persuade; people spew Marx, insofar as it is as nonsensical as Hegel, because it appeals to their sentiments. Had the Bolshevik Revolution occurred before the publication of *The Mind and Society*, Pareto could have easily showed that Marx, like Hegel and Voltaire, is nonsense; Marxism did not "lead to" or cause the Bolshevik Revolution; who could such pseudo-scientific drivel appeal to, other than people who already desired economic egalitarianism and revolution?

7.2.2   Residues and Derivations

Pareto divides socially important behavior into two parts: residues and derivations. For the Bolsheviks, Marxism is the derivation and their underlying sentiments are residues, roughly speaking. Pareto is unclear throughout the work whether a residue is a micro-habit or a mental sentiment in itself; it suffices to go with the latter. In volume four, he says as much, writing that, technically speaking, he has isolated micro-habits of man found in the historical record, but colloquially it introduces no loss to refer to these as sentiments.

There are, roughly speaking, two parts to Pareto's exposition on residues. The first consists of the evidence for the claim that residues are generally superior to derivations, i.e. that significant changes in residues precede significant changes in derivations. The second part is his classification of residues; in this part, he cites copious amounts of examples to show different basic motivations for non-logical behavior.

The most powerful evidence cited in the first part (pg. 99) claims to show that derivations developed only after rites, based on sentiments, came about:

Preller observes that in Rome parallel with the world of the gods was a family of spirits and genii: "Everything that happened in nature, everything that was done by human beings from birth to death, all the vicissitudes of human life and activity, all mutual relationships between citizens, all enterprises . . . were under the jurisdiction of these little gods. Indeed they owe their existence to nothing but those thousands of social relationships with which they are to be identified." Originally they were mere associations of ideas, such as we find in fetishism. They constituted groups, and the groups were called divinities or something else of the sort. Pliny soundly remarks that the god population was larger than the population of men. When the tendency to give a coating of logic to non-logical

conduct developed, people tried to explain why certain acts were associated with certain other acts. It was then that the rites of the cult were referred to great numbers of gods, or taken as manifestations of a worship of natural forces or abstractions. In reality we have the same situation here as in § 175. The psychic state of the Romans A (Figure 2) gave rise, through certain associations of ideas and acts, to the rites B. Later on, or even simultaneously in some instances, the same psychic state expressed itself through the worship C of abstractions, natural forces, attributes of certain divinities, and so on. Then, from the simultaneous existence of B and C came the inference, in most cases mistaken, that B was a consequence of C.

Multiple other examples are given, including the tendency for Romans to say "duo" to stop scorpions and the tendency to try to control the weather with words. Over the course of 40 pages, Pareto shows that derivations often change every few hundred years, sometimes faster, but the underlying behavior stays constant. Sometimes the weather is influenced by words because of demons, sometimes by gods, sometimes by the right magic spell, etc. At no point does the derivation actually influence behavior to a significant degree. Thus Pareto concludes, "Generally speaking, a derivation is accepted not so much because it convinces anybody as because it expresses clearly ideas that people already have in a confused sort of way-this latter fact is usually the main element in the situation" (pg. 1202).

In the second part of the exposition on residues, Pareto gives his classification scheme.

<div align="center">CLASS I</div>

<div align="center">INSTINCT FOR COMBINATIONS (§§ 889-990)</div>

I-α. Generic combinations (§§ 892-909)

I-β. Combinations of similars or opposites (§§ 910-43)

     I-β1. Generic likeness or oppositeness (§§ 913-21)

     I-β2. Unusual things and exceptional occurrences (§§ 922-28)

     I-β3. Objects and occurrences inspiring awe or terror (§§ 929-31)

     I-β4. Felicitous state associated with good things; infelicitous state, with bad (§§ 932-36)

     I-β5. Assimilation: physical consumption of substances to get effects of associable, and more rarely of opposite, character (§§ 937-43)

I-γ. Mysterious workings of certain things; mysterious effects of certain acts (§§ 944-65)

     I-γ1. Mysterious operations in general (§§ 947-57)

     I-γ2. Mysterious linkings of names and things (§§ 958-65)

I-δ. Need for combining residues (§§ 966-71)

I-ε. Need for logical developments (§§ 972-75)

I-ζ. Faith in the efficacy of combinations (§§ 976-90)

<div align="center">CLASS II</div>

<div align="center">GROUP-PERSISTENCES (PERSISTENCE OF AGGREGATES) (§§ 991-1088)</div>

II-α. Persistence of relations between a person and other persons and places (§§ 1015-51)

     II-α1. Relationships of family and kindred groups (§§ 1016-40)

     II-α2. Relations with places (§§ 1041-42)

     II-α3. Relationships of social class (§§ 1043-51)

II-β. Persistence of relations between the living and the dead (§§ 1052-55)

II-γ. Persistence of relations between a dead person and the things that belonged to him in life (§§ 1056-64)

II-δ. Persistence of abstractions (§§ 1065-67)

II-ε. Persistence of uniformities (§ 1068)

II-ζ. Sentiments transformed into objective realities (§ 1069)

II-η. Personifications (§§ 1070-85)

II-θ. Need of new abstractions (§§ 1086-88)

<div align="center">CLASS III</div>

<div align="center">NEED OF EXPRESSING SENTIMENTS BY EXTERNAL ACTS (ACTIVITY, SELF-EXPRESSION) (§§ 1089-1112)</div>

III-α. Need of "doing something" expressing itself in combinations (§§ 1092-93)

III-β. Religious ecstasies (§§ 1094-1112)

<div align="center">CLASS IV</div>

<div align="center">RESIDUES CONNECTED WITH SOCIALITY (§§ 1113-1206)</div>

IV-α. Particular societies (§ 1114)

IV-β. Need of uniformity (§§ 1115-32)

     IV-β1. Voluntary conformity on the part of the individual (§§ 1117-25)

     IV-β2. Uniformity enforced upon others (§§ 1126-29)

     IV-β3. Neophobia (§§ 1130-32)

IV-γ. Pity and cruelty (§§ 1133-44)

     IV-γ1. Self-pity extended to others (§§ 1138-41)

     IV-γ2. Instinctive repugnance to suffering (§§ 1142-43)

     IV-γ3. Reasoned repugnance to useless sufferings (§ 1144)

IV-δ. Self-sacrifice for the good of others (§§ 1145-52)

     IV-δ1. Risking one's life (§ 1148)

     IV-δ2. Sharing one's property with others (§§ 1149-52)

IV-ε. Sentiments of social ranking; hierarchy (§§ 1153-62)

     IV-ε1. Sentiments of superiors (§ 1155)

     IV-ε2. Sentiments of inferiors (§§ 1156-59)

     IV-ε3. Need of group approbation (§§ 1160-62)

IV-ζ. Asceticism (§§ 1163-1206)

<div align="center">CLASS V</div>

<div align="center">INTEGRITY OF THE INDIVIDUAL AND HIS APPURTENANCES (§§ 1207-1323)</div>

The most important of these are class 1 and class 2 because these are the only ones he refers to in his social analysis. Class 1 residues are simple enough – they come down to curiosity, openness, irreligiousity, risk-taking and intelligence in Pareto's final account of his system. His evidence, as well as probably anybody's personal experience, shows that these residues are deep parts of our psyche not motivated by other fundamental drives plus reasoning. His evidence fails, however, to at all correlate these different aspects, or to sample the population as to establish how the expression of these residues vary between people. This matter will be investigated using modern psychological evidence near the end of this writing.

His class 2 residues have to do with attachment to the family, the home, and by extension, the nation. They also involve obedience to tradition – it is unclear exactly how this tradition is instilled in people or what power this gives "derivations." Pareto's treatment of this is vague and far too short. At times Pareto seems to think that these residues negatively correlate with Class 1 residues, that people tend to be either un-open, unintelligent, averse to risk, and attached to one's family and homeland, or else one is open, intelligent, irreligious, risk-tolerant, and hedonically unattached to family and nation. It is unclear, however, why loyalty to family and nation, religiosity, and risk-taking would correlate. I suspect Pareto is only partially correct here, and I hope to clear up this scheme and isolate what truth it has in my analysis of contemporary evidence below. For now this summary suffices; Pareto seems to play loose with his definitions anyway in his fourth volume so we will clarify these concepts more as needed soon.

First, a brief comment on Pareto's treatment of derivations. His third volume classifies derivations into four types: assertions, appeals to consensus and authority, appeals to sentiment, and verbal proofs, which include analogies, metaphors, ambiguities, and anti-concepts (connotation-theft). Basically, Pareto spends 500 pages showing how stupid and widespread these types of derivations are. It's essentially an extension of his treatise on non-logical behavior, just with classifications now. He shows these mistakes are very common, but not much more. As for why they happen, he has a residue for that: need for logical developments. One can ponder on whether the human mind has innate logical weaknesses rendering it susceptible to this specific set of tricks, but such psychological hypothesizing is far beyond Pareto's scope.

7.2.3   Class Circulation

Pareto's theory of class circulation is the real meat of his giant treatise. It comes down to the following equation: (pg. 1703)

$$\frac{dClass1}{dt} = f(\frac{dWealth}{dt}) \tag{7.1}$$

In other words, the rate of change of class 1 residues coming into the elite is a function (positively correlated) of the rate at which new wealth in a society is being created. Pareto believes wealth creation is a Class 1 residue activity, because only people high in class 1 residues are intelligent, open, risk-tolerant, and active enough to be successful in business.

This makes Pareto's theory primarily a theory of economic elitism. Throughout the volume, Pareto states that his society is run by plutocrats, that the world of his day was a plutocracy, and gives numerous examples of corruption and the ways in which money rules so-called democracies. More than that, Pareto seems to view wealth as the fundamental maker of the governing elite. Even when considering military leaders, their eliteness is primarily a function of how much wealth they manage to monopolize through their conquest. In this connection Pareto states:

> Actual movements from class to class. They depend primarily upon the ease with which wealth can be amassed in one way or another.

There's more – at the same time, people with class 1 residues are greedy and short-sighted. As the proportion of class 1 residues in the elite increases, the commons are despoiled. To show why, Pareto introduces yet another schema, his four variables for social change, residues, economic interests, derivations, and class circulation. In his system, class 1 people enter the elite due to economic interests, the accumulation of wealth. This entrance changes the residues of the elite and therefore the derivations. It also effects elite economic interests; protectionism can slow the arrival of new economic elites and contribute to the build up of class-2 residues, which leads to economic decline, eventually

reaching a bottom and starting over. History consists of this undulation occurring again and again, sometimes more or less severe. Sometimes revolution is involved – revolution can be of the class 1's or the class 2's. Caesar's revolution was a class 2 takeover of the decadent, uncoordinated, short-sighted Roman elite which was over-saturated with class 1's. The French Revolution was the overthrow of a heavily class 2 elite which had allowed the nation to become as sclerotic as their class; with too many class 2 residues they were helpless against the intelligent scheming of the class 1's.

Pareto also distinguishes two types of ruling elites, speculators and rentiers. These correspond to class 1's and class 2's respectively; the former are economically dependent on risk taking and wealth creation, the latter are dependent on a stable status-quo because their wealth consists of static assets like land or tools or "means of production" which are leased.

What evidence does Pareto provide for this model of society? We have already been over much of it, but there is new content, primarily with regards to his economical postulates. Simply put, Pareto's evidence consists of examples showing that 19th century Europe is a plutocracy, and seeing how well different historical undulations conform to his theory on the undulation between class 1's and class 2's.

Of Pareto's multiple examples showing that 19th century Europe was a plutocracy, his claim that Napoleon III was backed by speculators was most striking: "Napoleon III appears in history in two outstanding guises: as the unwitting leader of a band of 'speculators' who used him as their tool; and then as a kindly upright soul with a prevalence of Class II residues" (pg. 1775). More extensively, (pg. 1590)

> The interlude provided by the administration of Luzzatti confirms these inferences. Luzzatti had been of great help to elements that profited by protective tariffs, but they had no further need of him when he became Prime Minister-at that time protection was in no danger, and once water has gone over the dam it comes no more to the mill. Furthermore, Luzzatti was far from being as good a representative of the speculators as Giolitti had been, nor did he have Giolitti's faculty for using sentiments without sharing them. For that reason Giolitti remained the actual "boss" during Luzzatti's turn in power and took power away from him with the greatest ease when he judged the moment opportune. Likewise Sonnino, who is far superior to many another statesman in Italy so far as education and political thinking are concerned, has never been able to last long in power, because he lacks either the ability or the inclination to act as a faithful agent of the band of speculators. In France, Rouvier was frequently "boss" of the parliament simply because of his merits as leader of a similar band, and his last ministry came to an end not because of difficulties at home but because of difficulties abroad. Caillaux's strength lies altogether in the speculators who are gathered about him. But it would be wiser for us not to stop at these names or any other list of the kind and imagine that we are dealing with situations peculiar to certain individuals, certain political systems, certain countries. They are closely bound up with a social system in which speculators make up the governing elite. In England the election campaigns against the House of Lords were backed financially by speculators led by so-called Liberal ministers. In Germany the great manufacturing and financial interests reach the very foot of the throne, though that choice spot is still to some extent disputed by the military caste. In the United States Wilson and Bryan went into power as professed and probably sincere opponents of trusts and financiers, but actually they worked in their favour in maintaining anarchy in Mexico with a view to securing a President there who would be subservient to American finance. And those pacifists carried their self-composure to the extent of inviting Mexico to attend the Peace Congress at The Hague at the very moment when the American navy was attacking Vera Cruz, killing men, women and children! The recent past is very much like the present. In France Louis Napoleon Bonaparte was able to become Napoleon III only because he had become the leader of the speculators, while in Italy administrations of the past have fallen through unawareness of the importance of speculators or through disregarding or neglecting them. It would perhaps be going too far, though not very much too far, to say that if the governments of the King of Naples and his other neighbours had made a concession of the "Railways of the South" to private interests, and promoted other similar enterprises, they would not have been overthrown. For years and years French and Italian liberals have tired our ear-drums with their praises of the English parliamentary system, which they have -held up as a model before the whole world. Some of them may possibly have been ignorant of the extraordinary corruption which features that system and

has been so excellently described by Ostrogorski. But others must certainly have known of it, and if they have held their peace, it has been in deference to the principle that wolf does not eat wolf.

He also mentions how this connection is typically kept secret: (pg. 1595)

[Economic elites can give massive favors to politicians resulting from their control] of economic production, and, in their turn, must receive favours and patronage from them. The relation between rulers and speculators will as far as possible be kept dark. Still, every so often to some the connexion will come to light-it will be proved, that is, that certain A's, who are in power, have had relations of that kind; and almost always it will be certain B's, adversaries of the A's, who reveal the scandal.

As for his exemplar historical undulations: Pareto gives multiple examples, including those of France, Prussia, Athens, Venice, and Ancient Rome.

Another interesting example would be the case of the Albigenses. (pg. 1820) The cloaking they used for their sentiments, their doctrine, seems to have been an offshoot of Manicheism, and ideas of that sort were current in a number of countries; but the movement thrived primarily in countries that were economically prosperous, in other words, in Italy, where there were not a few heresies (well diluted by the usual Italian scepticism), in Flanders, and most notably, in Southern France. In the twelfth century Provence was more flourishing in both material and intellectual domains than other Latin countries. People there had grown rich, and their literature, earlier than the Italian, was the first of our literatures in the vernacular. The contrast with Northern France, a poor, ignorant, uncouth region, is very striking. In the South Class I residues predominated, in the North Class II residues held the lead by far (Paris, with its university, was an exception). As often happens in such cases, one notes in the South, on the one hand an absence of religious sentiments, and on the other, religious fanaticism; on the one hand extremely loose morals, on the other, excessive strictness. In the Courts of Love, matters of sex were treated mirthfully. In the meetings of the heretics licentious gaieties were mercilessly condemned. Schmidt gives an excellent description of conditions in Southern France in the twelfth century, which, after all, were very much like what was again to be witnessed during the Renaissance in Italy and in other economically prosperous countries. There is no lack of testimony to the shrewdness of the Provencaux of the twelfth century. Raoul de Caen devotes a whole chapter to a description of the capers of the men of the South on Crusade. They had brighter wits than the French of the North, but were also less courageous; He tells how they would slyly wound a horse or mule in the intestines in such a way that the wound could not be seen, and the animal would die. The French, good souls, would be nonplussed at such a thing and cry: "Let us away! Forsooth, the Devil hath blown upon this animal." Then "like crows the Provencaux would gather about the carcass and cut it in pieces, each of them carrying a share away, either to eat it themselves or to sell at market." To see a merely religious war in the Albigensian Crusade would be to stray far from realities. Looking at derivations, one may well point out that the doctrine of the Catharists was a form of Manicheism, admitting two principles, one good and one evil. But in advancing to the conquest of the rich and blossoming lands of the South the Crusaders from the North were not in the least concerned whether there were one, two, or sixteen principles, and most probably they would not have understood head or tail of those complicated and fantastic arguments. They were interested in the booty, the pretty women, and the fertile lands that were soon to be theirs; and, as always happens, those who had wealth, but not the courage to defend it, saw it taken from them by those who were poor but had the energy to fight and win. So among the nobles in the South, who were kindly disposed towards the Albigensian heresy, there may have been some few who were prompted by soulful theological conceptions, but the motives of many of them were more material and tangible. Guiraud, Cartulaire de Notre-Dame de Prouille, Vol. I, Preface, p. cclxiv: "Antagonism reigned between the ecclesiastical and the lay nobility, the latter trying to rob the former, the former trying to recover at the first opportunity the properties that had been usurped to their loss. The Albigensian heresy profited by that fairly general state of things." The masses, as usual, were inspired by envy

of the comforts of the higher classes, and that sentiment was much more powerful than any ingenious theological theory. Traces,of that fact are discernible in many writers, among others in Etienne de Bourbon, who had judged the Albigensians as an Inquisitor and was thoroughly acquainted therefore with their ways of thinking. Again as usual, a wave of asceticism and religious ardour was rolling up from the lower social strata and threatening to engulf the whole of society.

In other words, high levels of Class I elites in the South, due to high economic development, led to them being accepting of heresy. But they were too weak, and subsequently lost to invading Class II elites. This mirrors the Roman experience, according to Pareto. Many pages are spent explaining how from the Republic to Caesar class circulation of Class I's continued to increase with prosperity; at the high point of Class I concentration things were very chaotic due to low Class II residues, causing the decline into the empire. From this point the rate of wealth acquisition began to decline and with it the influx of Class I residues into the elite; this reached a low point at the end of the Empire. Pareto summarizes: "Roman society declined economically and intellectually under the curse of a stupid military caste and a cowardly and superstitious bureaucracy" (pg 1907).

7.3 Other Summaries

7.3.1 Burnham's *The Machiavellians*

Normally I would not comment on other summaries, but strangely, Burnham's summary of Pareto starkly fails to properly explain his overall system of class circulation. Burnham states at the beginning of his chapter on Pareto's theory of class circulation that "Pareto does not treat economic factors at great length" (The Machiavellians, pg. 205).

He goes on to explain Class I and Class II class circulation, but makes no mention that Pareto hypothesizes that the cause of the influx into the ruling elite of Class I residues is the creation of wealth by Class I elites. The fundamental economic-elitist aspect of Pareto's theory is suppressed. I suspect this is because Burnham disagreed with economic elitism; he had written *The Managerial Revolution* only two years prior to *The Machiavellians.*

I suspect Burnham disagreed with economic elitism due to the influence of economic elitism. Burnham was an early Trotsky-turned-neo-conservative and had connections to Buckley, Reagan, and others. For some reason the best funded pseudo-theorists of society, like Burnham and Moldbug, never seem to seriously consider economic elitism. It goes beyond mere disagreement – we have now caught the former redacting a massive part of Pareto's theory for mysterious reasons, and the latter I have written on at length elsewhere regarding his suspicious habits of exposition.

Burnham's Machiavellian behavior aside, I do approve of his chapters on Pareto's doctrine of logical vs. non-logical behavior and residues and derivations, although he is misleading about the quality of the evidence Pareto presents, claiming Pareto proves these things beyond all doubt. His chapter on Pareto's thoughts on social utility is also fine, but I believe he misrepresents how central that subject matter is to Pareto's text. He is very much making a chapter out of some brief asides because it fits his own broader point.

7.3.2 Parvini's *The Populist Delusion*

A second popular summary has recently come out, written by Neema Parvini, aka "The Academic Agent", who as of this writing has 67,000 subscribers on Youtube as a far-right content creator. Parvini makes the same major mistake as Burnham: he ignores an semblance of economic elitism in Pareto. This isn't helped by the fact that his summary of Pareto is a measly 8 pages! And about two of those pages are quoting from or addressing whinges from Marxist reviewers of the 1930s, who would claim Pareto is fascist and therefore he's not worth reading, pretty typical stuff.

So the author wrote only 6 pages on Pareto's 2000 page treatise and on top of this he admits in the first page to have only read an abridged, 500 page version known as the Compendium. And in making the same major mistake as Burnham, his summary may have well have been a summary of Burnham's summary, which is only 50 pages.

7.4   Ideas to Verify in Pareto's Doctrine

Pareto lays out two clear hypotheses: his residues and his theory of elite recirculation. In a future essay, psychological literature could reveal if Pareto was correct with his grouping of traits. Cliodynamic data could reveal if Pareto was correct about the association of wealth increase with destabilization.

7.5   Conclusion

This book is magnificent. It is truly a work of a genius. From just a reading of history, Pareto anticipated many ideas that were visionary in their nature. Now that we possess the tools needed to test Pareto's ideas, they deserve to be given full attention as hypotheses.

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Chapter 8

Memetics Appendix

8.1 p_s Statistics

8.1.1 Homosexuality

Source: A Prolific survey I did asking if people supported homosexuality, and if they encouraged their kids to experiment with their sexuality.

Description: p_1 is the probability they encouraged their kids to "experiment" given they did not support homosexuality (a proxy for being "exposed" to the mind virus). Obviously, this is an upper bound for guillibility, making this procedure maximally charitable.

$p_1 = 0.03$
$p_2 = 0.09$
$p_s = 0.061$

8.1.2 Sex Work

Source: A Prolific survey I did asking if people supported sex work, and if they encouraged their adult kids to experiment with sex work.

Description: p_1 is the probability they encouraged their kids to "experiment" given they did not support sex work (a proxy for being "exposed" to the mind virus). Obviously, this is an upper bound for guillibility, making this procedure maximally charitable.

$p_1 = 0.01$
$p_2 = 0.00$
$p_s = -0.01$

8.1.3 Drag Queens

Source: A Prolific survey I did asking if people supported drag queens, and if they encouraged their kids to go to drag queen shows.

Description: p_1 is the probability they encouraged their kids to go to drag queen shows given they did not support homosexuality (a proxy for being "exposed" to the mind virus). Obviously, this is an upper bound for guillibility, making this procedure maximally charitable.

$p_1 = 0.03$
$p_2 = 0.02$
$p_s = -0.01$

8.1.4 Top Gun

Source: [1]

Description: Some claim Top Gun boosted military recruiting a lot. I assumed joining the military is a bad decision for fitness, so estimating the percent of non-military people who joined the military after seeing it would be a good way to gaige guillibility.

$p_1 = 0.005$

$p_2 = 0.0056$
$p_s = 0.0006$

8.1.5   White Flight

Source: [2]

Description: Study looked to see if leftists live around diversity more. Despite supporting it, they flee diversity as much as conservatives, suggesting they reject any personally costly "mind virus." Leftism is then purely about getting things that they actually want, and is gene driven. Somebody wants diversity for some reason ...

$p_1 = 0.19$
$p_2 = 0.19$
$p_s = 0.00$

8.1.6   Miscegenation

Source: [3]

Description: How much more do leftists race mix? With maximally charitable assumptions to mind virus theorists, we assumed support for leftism results from mind virus exposure, and that race mixing is deleterious to fitness. Leftists race mix 5% more, giving us a maximally charitable p_s of 0.06.

$p_1 = 0.17$
$p_2 = 0.22$
$p_s = 0.06$

8.1.7   Monk Life

Source: [4]

Description: Religious monks forego breeding. Under mind virus theory, this is due to religious mind virus infection. Under maximally charitable assumptions, we assume no non-Christians go to monk life. Under exposure to Christianity, about 1% turn to monk life, leading to a maximum p_s of 0.01.

$p_1 = 0.00$
$p_2 = 0.01$
$p_s = 0.01$

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