Quantitative Sociobiology

The Scientific Study of Society
Manuscript, Beta 1.6

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June 2024

Contents

Chapter 1

Preface

1.1 What is Quantitative Sociobiology?

Quantitative sociobiology is the quantitative-scientific study of human social behavior. Because humans are animals, we must understand them through biology. While evolutionary psychology has recognized the biological nature of man, it has not offered much in terms of quantitative understanding. But, as I argue in chapter 1, quantitative understanding is the highest type of understanding. Because this is so, I strive for a quantitative sociobiology.

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 mostly pseudosciences, 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 key topic 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 for 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 improving the primitive notion of the "mind virus" or the "meme". Humans have ideas because of biology, and ideas, in large part, exist for the sake of the gene and its continued reproduction. "Cultural evolution" independent of biological evolution is expected to be quite narrow.

After this, we study the true origins of leftism. It is primarily 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 The Merely Verbal

2.1 Prediction is Key

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 a large inner circle of people who "get" math and science, and who therefore intuitively know and act as if modern "philosophy" is merely writing on a page, signifying hardly anything. Outside of this circle exist those who do not grokk math and science, and who therefore do not understand why armchair arguments do not produce useful knowledge.

I propose an explicit argument attempting to communicate what the "inner circle" knows through practice. 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

Proposal: for any question with a verifiable answer, there is a mathematical answer. Additionally, starting from the mathematical answer, there are many plausible sounding verbal answers which increasingly loosely map onto the mathematical answer. These answers are increasingly less predictive than the mathematical answer.

Imagine a simulated agent that must perform a task under uncertainty. 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.

First one example. Imagine a bag. An agent needs to guess what objects are in the bag. This may not sound like a math problem, but it can be modeled as one using binary variables for the objects.

Now let us see another 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. And consider the bag. There is a notebook in it. Great, notebook = 1. But let's get philosophical: the notebook is becoming in its essence as an ontological being of independence. What?

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.

If a book can be true with mere words, it must be common sense. A book needs data, and ideally mathematical modelling, to really go beyond common sense.

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 math and data, then it is a waste of time for solving problems. Maybe it makes you feel good. But it does not empower you – it doesn't contain the truth.

2.2 Conservatives need scientific theory, not words

A thinker who solves *problems* and answers questions must be scientific. This is not to say there isn't a use for prophets and those who spread signals for collective action. Conservatives have produced many signalers, who claim to be question answerers and problem solvers, but are in fact, not.

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 an unverified, vague, and unlikely 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 a starting premise, which is quite unsatisfying. Where did separation of Church and State come from?

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 de facto 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.

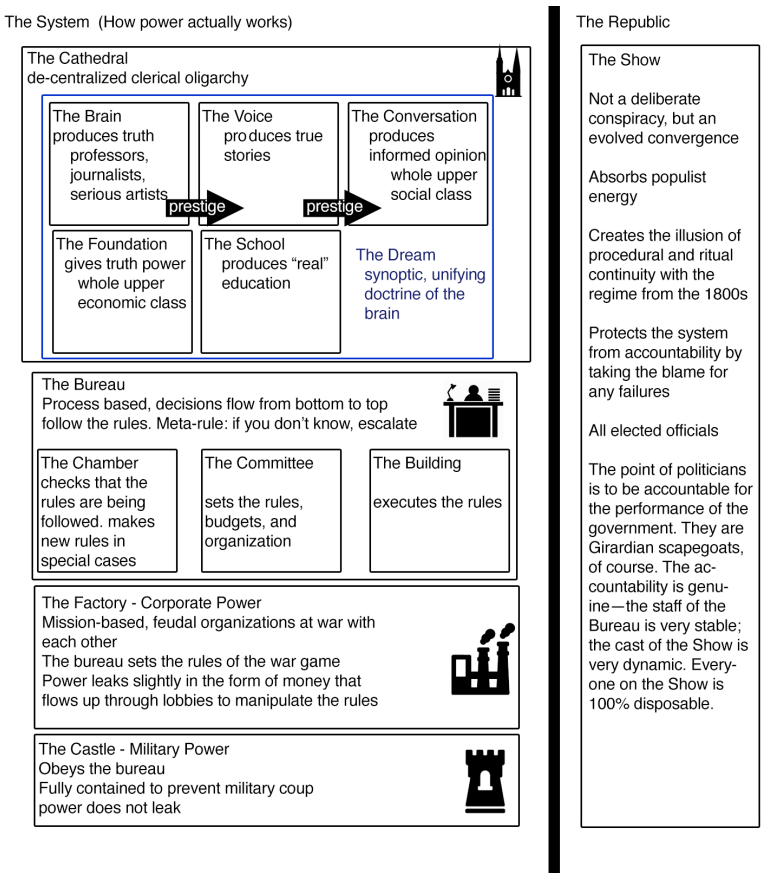

Figure 2.1: A diagram of how power works made by the then-Yarvinist Zero HP Lovecraft [1]

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 interven-

> tion 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 and dysgenics 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 – it cannot be done by mere blogging).

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 departure 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, extremism made equal.

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's gnosticism babble was so bad I named a fallacy after him. He and "idealists" (those who believe ideas alone are the primary factor in explaining social and political events) like him are committing a special instance of the correlation does not equal causation fallacy. It goes like this: they think they observve some books or ideas correlating with social change, and assume the those to be the cause, instead of looking for some third factor behind both (likely genetics). I decided to bestow this honor upon Mr. Lindsay specifically after watching the first hour of his video titled "Hegel, Wokeness, and the Dialectical Faith of Leftism". 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 for his view: (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 view 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 has 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 most likely 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

We have just done something along the lines of debunking wordcelling with wordcelling. Wordcelling is like a person with such a poor self image, it can't even say a good thing about itself! With some words and some common sense we showed how bad it is. But 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, that is, 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, including those induced by mutational load. Further, we show that in the extreme, wordceldom is obviously deleterious to fitness just like 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 the coming chapter on mutational load. 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.

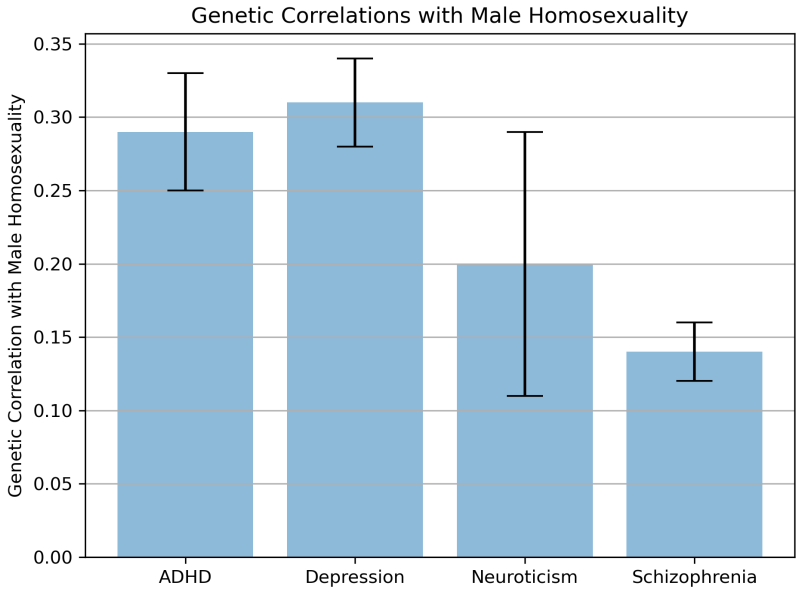

Figure 2.2: Error bars are 95% CI. [4]

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.

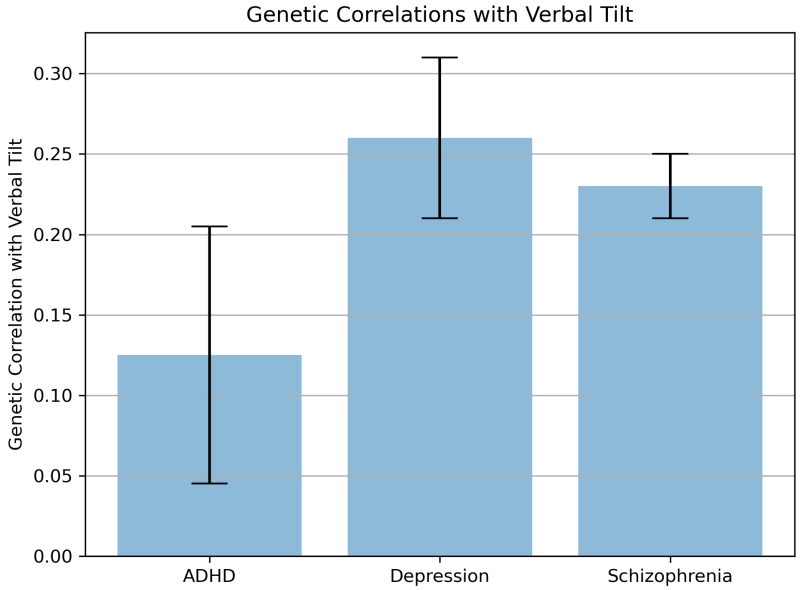

Figure 2.3: Error bars are 95% CI. [6]

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.

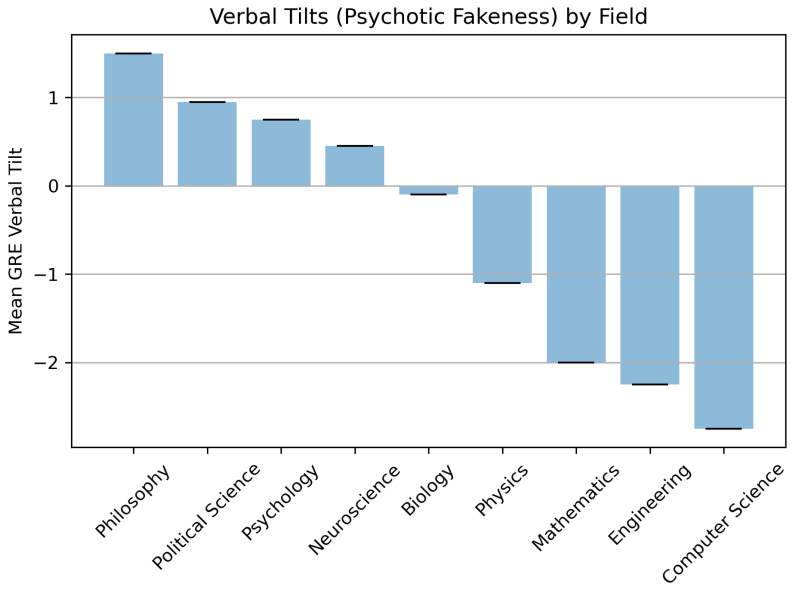

Figure 2.4: Error bars are 95% CI. [7]

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 seems to be a mental illness according to the quantitative-scientific method.

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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

In the recent past, the idea of "culture" has become centered in social science. Here, I argue that the cause of this centering is mainly political and that "culture" is more vague and confusing concept than a useful one.

Today, "cultural" evolution is a popular way to explain changes in human societies over time. I propose that this concept is mainly used to avoid confrontation with the idea of rapid human biological evolution. This claim is supported by tracing the history of the term.

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 the form of a meme with high survival value, or infective power, in the environment provided by human culture. [1]

This is too blank-slatist for no good reason. After the age of 30, genetics are the predominant factor in determining religiosity [16]. There is also evidence that genetic evolution is leading to increased atheism [17]. It is possible, even plausible, that people are genetically hard-coded to believe in God. The mathematical and empirical basis of this fact had more or less been established at the time Dawkins wrote. Meanwhile, there is still no way to test theories of memetics (now cultural evolution) and there are only 3 unverifiable mathematical models from the 1980s. Yet Dawkins and many like him felt the need to completely sidestep the biology of religion, putting "culture" in its place. That's a political move, not a scientific one. The necesarry science was never done. But they act like it was – "cultural evolution" is often cited as if it has scientific legitimacy.

Memetics 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 a 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. Most traits are more than 60% heritable, and as we will learn next chapter, evolution is quite fast. As we learned in Chapter 1, fantastical blank slatism is enabled by their lack of mathematical specificity and data. The memetics 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 memetics, something which is very epistemically dangerous. And barely any attempt has been made at mathematical modeling.

3.2.1 Culture as Blank-Slate Obscurantism

We now turn to the idea of "culture." The concept is incoherent. One minute it means population, the next behavior, then information. It's a complete mess. Not shockingly, this is a concept that has been found to have over 160 different meanings [3], 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 [4]. "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".

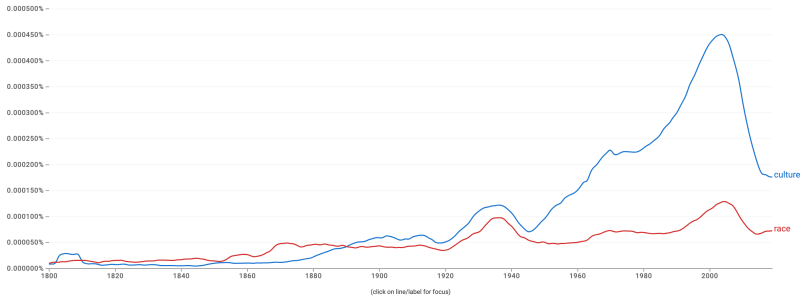

Figure 3.1: Mentions of Race and Culture over Time

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 (if you're new, next chapter), the one that most likely comes down to mutational load and dysgenics, 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 [5].

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 quite taken it seriously because it was vague, 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." Some blank-slatists began working to formalize this idea mathematically under the the cultural evolution name.

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". 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* [6], 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 to avoid acknowledging the strong influence of genetics on traits. For example, they claim that people get more "culture" from their parents than others. They have to say this so that parent-offspring similarity can be cultural.

> A more mundane example [7], 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

This is laughable. Do the authors not know that religious and sexual preferences are strongly influenced by genetics? They just didn't want to acknowledge it.

Parent-child "culturgen" transmission is called "vertical transmission." Decades of twin studies have evaporated the blank-slatist claim of vertical cultural transmission inducing large amounts of trait variance. Shared environment, which vertical transmission is a subset of, 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."

The last cultural evolution model is the 1985 Boyd-Richerson dual inheritance model. First, they are both Californian; this is truly a bad sign... worse, 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 [8]:

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: This 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 authoritarianism metric, 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 (see the next chapter). So increases in college education can explain **about 3% of the increase in leftism over the last 2 generations!**

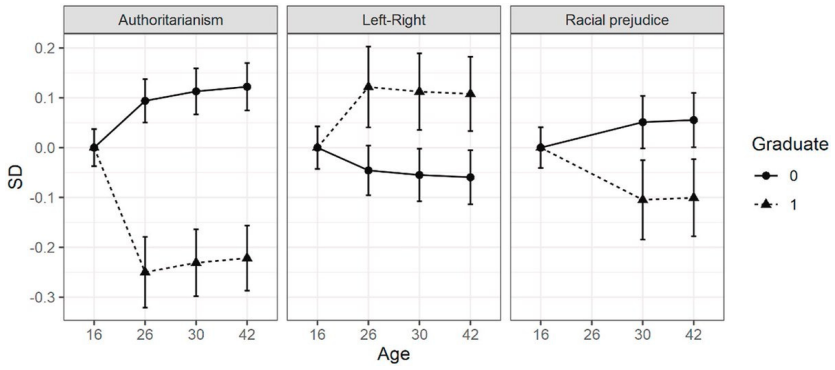

Figure 3.4: The Effect of Education on Leftism, Upper Bound

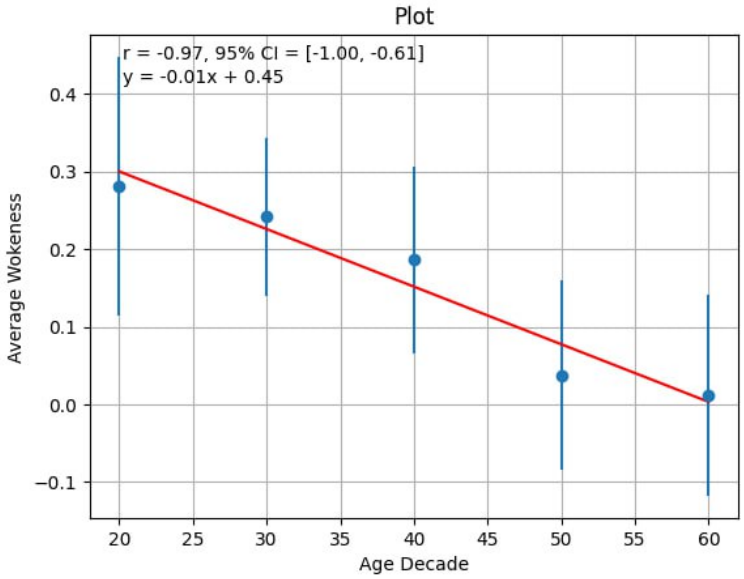

Figure 3.5: The Gap in General Leftism between Generations

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." This is dumb because you can't observe a locus when it comes to information in the brain (later in the chapter, we will build a locus-free model). There is really nothing of significance here because all of this is built on the infinitesimal effect size fallacy and the sociologist's fallacy. In other words, Boyd and Richerson think that demonstrating that people can learn means that learning explains most variance between individuals, groups, and generations, and that all evidence of behavioral differences must be evidence of differences in social learning. A fallacious and circular position. More than that, 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. The models offer to estimable parameters, mostly because their models concern molecular informatics and not estimating how much variance informatics explain. Instead of correlations with theoretical importance, we are given differential equations supposedly tracing the evolution of a single cultural allele. The authors fail by ripping off population genetics instead of quantitative genetics.

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 genetic bias. Genetic bias is the extent to which genes select for fitness maximizing information efficiently. In general, the higher the genetic bias the lower the memetability (variance of a trait that is due to variance of information), because informatic variance that can be explained by genetic variance is not true memetic variance.

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 a term that should not be used. The term is loaded with the three issues we have just discussed. Instead, we should speak of informatic transmission and memetics. 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 Vertical transmission is mostly fake

I will now show that vertical transmission is not important. This will be important for the forthcoming model, which will ignore vertical transmission. The other models assume high vertical transmission, but the data says otherwise. This includes the Boyd-Richerson model, which simply assumes 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.

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) [9]. 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 [10]:

> 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." [11]. 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.

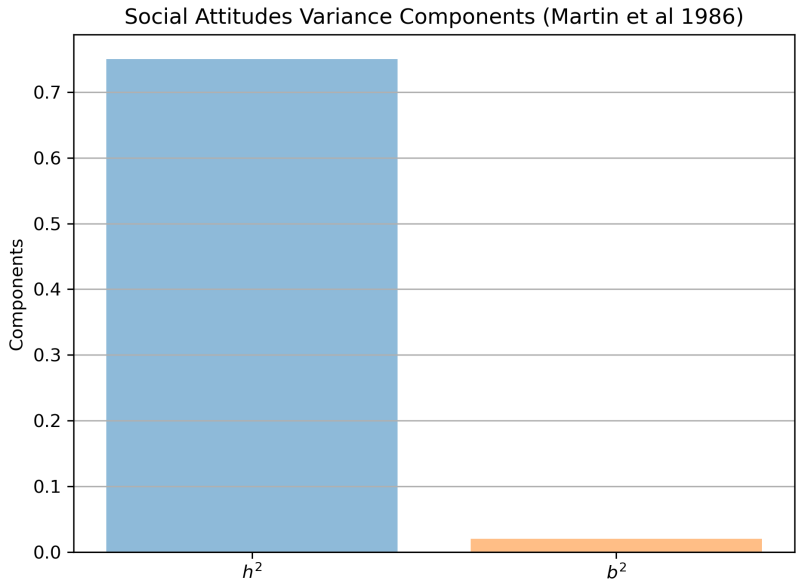

Figure 3.8: Heritability and Vertical Transmission

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 [12] found the following for variance components of Wilson-Patterson Conservatism:

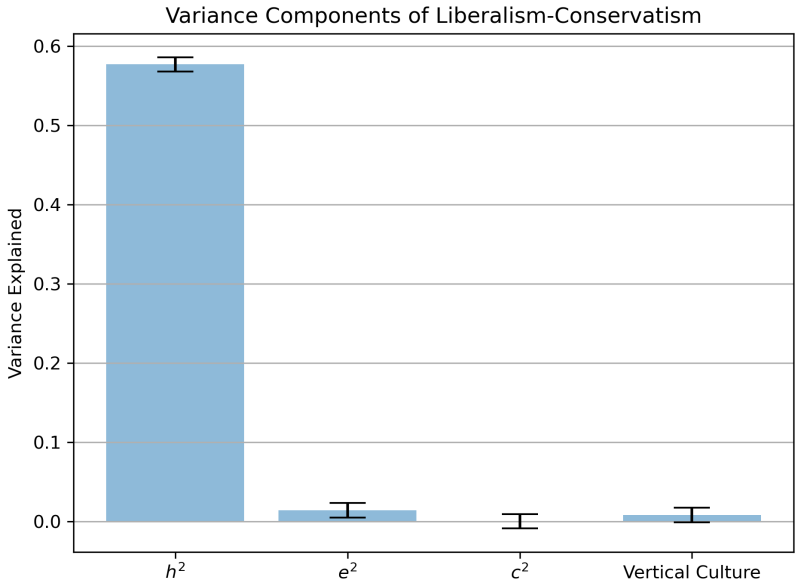

Figure 3.9: Heritability and Vertical Transmission of Conservatism

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

In 2016, Kandler [16] again corroborated this general finding.

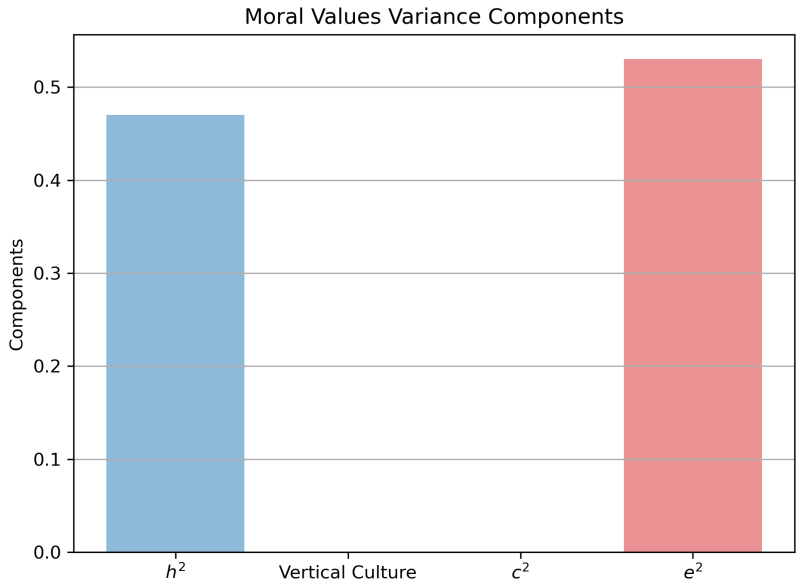

Figure 3.10: Heritability and Vertical Transmission of Moral Values

Kornadt 2018 found the exact same thing for political participation: [14]

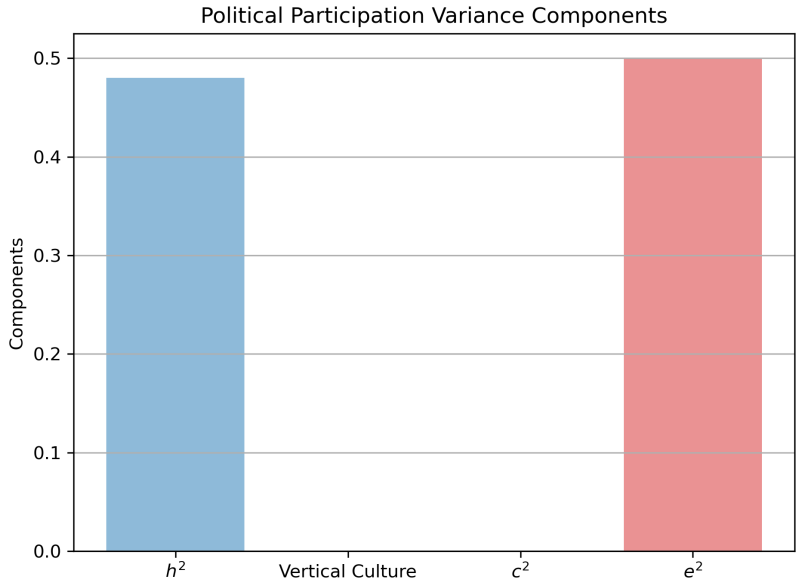

Figure 3.11: Heritability and Vertical Transmission of Political Participation

And finally Bell et al 2018 [15] found yet again the same thing:

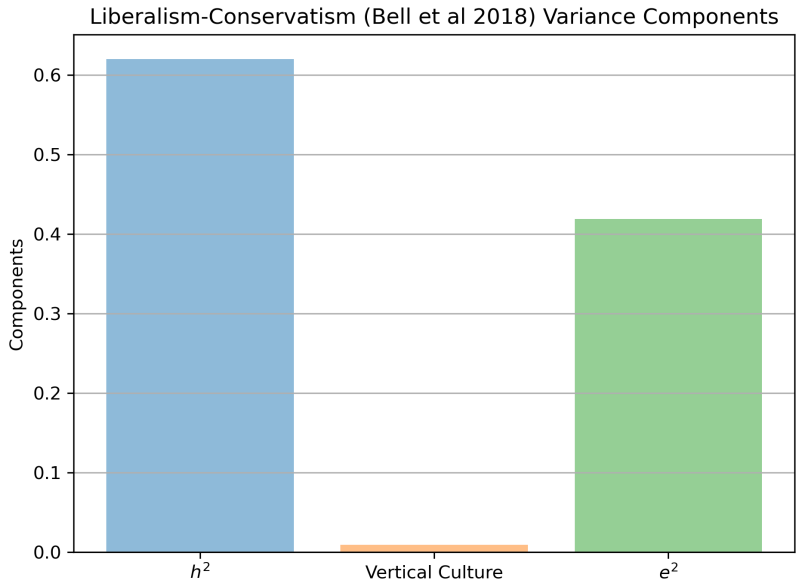

Figure 3.12: Heritability and Vertical Transmission of Liberalism-Conservatism (Bell 2018)

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? I 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. In this way, many memes are "gene-driven."

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 easily controllable by racist parties as easily as anti-racist parties, but they don't seem to be. In other words, such people would be 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 should be high bias, and differences in memotypes will be in large part due to differences in genotypes.

People should naturally favor memes that increase their fitness. But leftism, as we will see in the next chapter, is associated with decreased fitness. How could it has emerged as just an idea, then? Evolutionary psychology predicts that people should have enough memetic security to resist leftism memes. Memetic security is the gene's defense against the parasitic meme. Why should parasitic memes spread in a static gene pool for generations without pause? Why should cthulu swim left only because of memetic evolution?

I suspect this should not be able to happen. What looks like memetic evolution is really being dragged along by genetic evolution.

3.4 How ideas work: Pareto vs. Mosca

We will now move onto modeling. We have shown that two key assumptions of previous "cultural evolution models," namely that genetic bias is irrelevant, and that transmission is vertical, 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.

$$P = M \tag{3.1}$$

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,

$$\mathbb{V}(P) = \mathbb{V}(M) \implies \frac{\mathbb{V}(M)}{\mathbb{V}(P)} = 1 \implies m^2 = 1 \tag{3.2}$$

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.

$$\mathbb{V}(P) = \mathbb{V}(M) + \mathbb{V}(G) + \mathbb{V}(E) + 2\mathbf{Cov}(G, M) \tag{3.3}$$

In other words, memetability might be around 30 to 60 percent, meaning heritability + environmentability would be 40 to 70 percent.

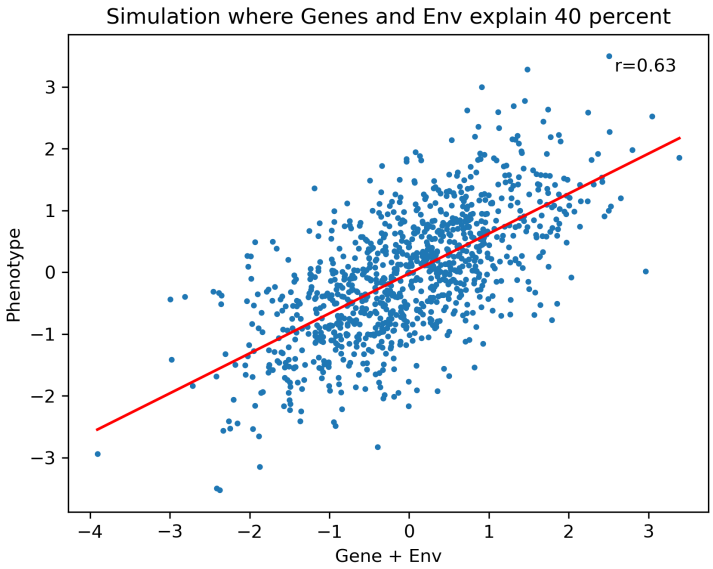

Figure 3.13: Scatter Plot where Genes + Env explain 40%

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.

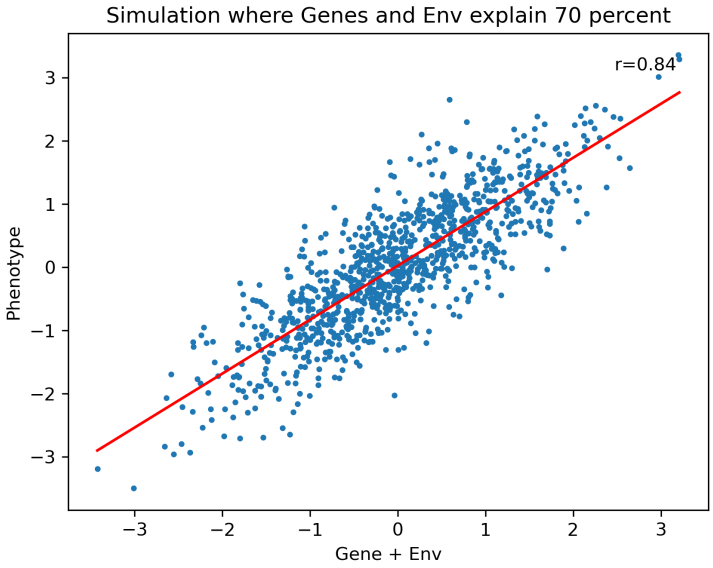

Figure 3.14: Scatter Plot where Genes + Env explain 70%

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.

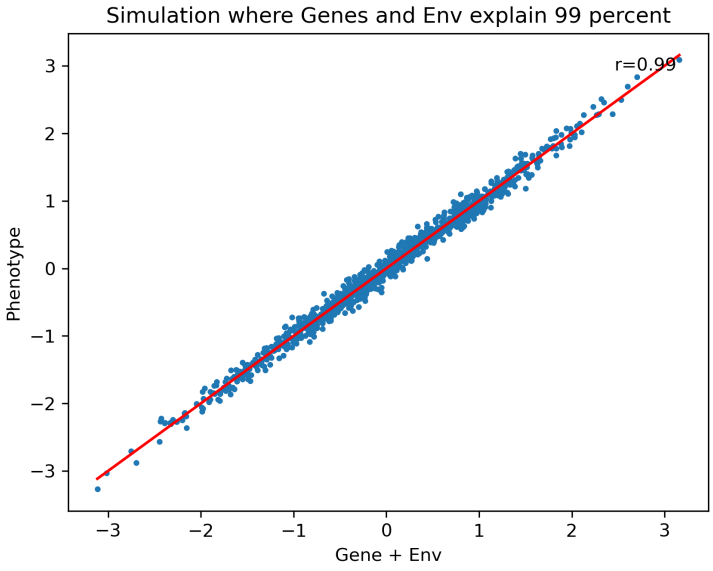

Figure 3.15: Scatter Plot where Genes + Env explain 99%

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

$$\mathbb{V}(P) = \mathbb{V}(G) + \mathbb{V}(E) \tag{3.4}$$

Which model fits the mind best? It is intuitive 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. I consider it unlikely that gene-free memetics could explain modern 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 or 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 as random as the original lie. Mutations must require effort; if they are not effortful, then they come from impulse, and if they come from impulse, they probably 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 unto itself, 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. 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?

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:

$$P = G + E \tag{3.5}$$

$$\mathbf{Var}(P) = \mathbf{Var}(G) + \mathbf{Var}(E) \tag{3.6}$$

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

$$h^2 = \frac{\mathbf{Var}(G)}{\mathbf{Var}(P)} \tag{3.7}$$

$$e^2 = \frac{\mathbf{Var}(E)}{\mathbf{Var}(P)} = 1 - h^2 \tag{3.8}$$

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.

$$P = G + \$ + M + \epsilon \tag{3.9}$$

$$\mathbf{Var}(P) = \mathbf{Var}(G) + \mathbf{Var}(\$) + \mathbf{Var}(M) + \mathbf{Var}(\epsilon) \tag{3.10}$$

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:

$$h^2 = \frac{\mathbf{Var}(G)}{\mathbf{Var}(P)} \tag{3.11}$$

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

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

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 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:

$$P_i = G_i + \$_i + M_i + \epsilon_i \tag{3.14}$$

This implies:

$$\mathbb{E}_{t_i}[P] = \mathbb{E}_{t_i}[G] + \mathbb{E}_{t_i}[\$] + \mathbb{E}_{t_i}[M] + \mathbb{E}_{t_i}[\epsilon] \tag{3.15}$$

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

$$\mathbb{E}_{t_1}[P] = \mathbb{E}_{t_1}[G] + \mathbb{E}_{t_1}[\$] + \mathbb{E}_{t_1}[M] + \mathbb{E}_{t_1}[\epsilon] \tag{3.16}$$

$$\mathbb{E}_{t_2}[P] = \mathbb{E}_{t_2}[G] + \mathbb{E}_{t_2}[\$] + \mathbb{E}_{t_2}[M] + \mathbb{E}_{t_2}[\epsilon] \tag{3.17}$$

$$\mathbb{E}_{t_3}[P] = \mathbb{E}_{t_3}[G] + \mathbb{E}_{t_3}[\$] + \mathbb{E}_{t_3}[M] + \mathbb{E}_{t_3}[\epsilon] \tag{3.18}$$

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

$$\mathbf{Var}(\mathbb{E}_{t_i}[P]) = \mathbf{Var}(\mathbb{E}_{t_i}[G]) + \mathbf{Var}(\mathbb{E}_{t_i}[\$]) + \mathbf{Var}(\mathbb{E}_{t_i}[M]) + \mathbf{Var}(\mathbb{E}_{t_i}[\epsilon]) \tag{3.19}$$

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

$$h_t^2 = \frac{\mathbf{Var}(\mathbb{E}_{t_i}[G])}{\mathbf{Var}(\mathbb{E}_{t_i}[P])} \tag{3.20}$$

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

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

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.

The above variance components through time are decent summary statistics for estimating the general importance of each component for social change over a large amount of time. More immediately useful is the mean drift explained statistics.

Consider having just two observations at two different times:

$$\mathbb{E}_{t_1}[P] = \mathbb{E}_{t_1}[G] + \mathbb{E}_{t_1}[\$] + \mathbb{E}_{t_1}[M] + \mathbb{E}_{t_1}[\epsilon] \tag{3.23}$$

$$\mathbb{E}_{t_2}[P] = \mathbb{E}_{t_2}[G] + \mathbb{E}_{t_2}[\$] + \mathbb{E}_{t_2}[M] + \mathbb{E}_{t_2}[\epsilon] \tag{3.24}$$

Then,

$$\mathbb{E}_{t_1}[P] - \mathbb{E}_{t_2}[P] = \mathbb{E}_{t_1}[G] - \mathbb{E}_{t_2}[G] + \mathbb{E}_{t_1}[\$] - \mathbb{E}_{t_2}[\$] + \mathbb{E}_{t_1}[M] - \mathbb{E}_{t_2}[M] + \mathbb{E}_{t_1}[\epsilon] - \mathbb{E}_{t_2}[\epsilon] \tag{3.25}$$

This can be written as:

$$\Delta\,\mathbb{E}[P] = \Delta\,\mathbb{E}[G] + \Delta\,\mathbb{E}[\$] + \Delta\,\mathbb{E}[M] + \Delta\,\mathbb{E}[\epsilon] \tag{3.26}$$

This implies:

$$1 = \frac{\Delta\,\mathbb{E}[G]}{\Delta\,\mathbb{E}[P]} + \frac{\Delta\,\mathbb{E}[\$]}{\Delta\,\mathbb{E}[P]} + \frac{\Delta\,\mathbb{E}[M]}{\Delta\,\mathbb{E}[P]} + \frac{\Delta\,\mathbb{E}[\epsilon]}{\Delta\,\mathbb{E}[P]} \tag{3.27}$$

These are the mean drift statistics.

If h_t^2 is known, it gives the mean and variance of $\frac{\Delta\,\mathbb{E}[G]}{\Delta\,\mathbb{E}[P]}$ given $\Delta\,\mathbb{E}[P]$.

The following assumes variable standardization. Since $\sqrt{h_t^2}$ is the r value for the regression of the expected value of G onto the expected value of P,

$$\mathbb{E}[\frac{\Delta\bar{G}}{\Delta\bar{P}}|\Delta\bar{P}] = \frac{\mathbb{E}[\bar{G}|\bar{P}_2] - \mathbb{E}[\bar{G}|\bar{P}_1]}{\bar{P}_2 - \bar{P}_1} = \frac{h_t\bar{P}_2 - h_t\bar{P}_1}{\bar{P}_2 - \bar{P}_1} = h_t \tag{3.28}$$

And the variance is:

$$\mathbf{Var}(\frac{\Delta\bar{G}}{\Delta\bar{P}}|\Delta\bar{P}) = \mathbf{Var}(\frac{\bar{G}_2 - \bar{G}_1}{\Delta\bar{P}}|\Delta\bar{P}) = \frac{1}{(\Delta\bar{P})^2}2\mathbf{Var}(\bar{G}|\bar{P}) = \frac{2(1 - h_t^2)}{(\Delta\bar{P})^2} \tag{3.29}$$

3.7 A Model for Memetic Transmission and Evolution

With a model, we can quantify our notions of genetic bias and vertical transmission, while also breaking down M and understanding the components of its change through time.

The model has only a few simple assumptions. First, that M is the weighted sum of a large number of memes.

$$M = \beta_1 m_1 + \beta_2 m_2 + ... + \beta_n m_n \tag{3.30}$$

Second, that at birth, people are born with no memes. When someone possesses a meme, $m_i = 1$; otherwise, $m_i = 0$. At birth, all $m_i = 0$.

Third, they sample from the finite meme pool. In real life this may occur all through life. Maybe it is concentrated before the age of 25 or 30. In the model, we can imagine a discrete sampling step for all individuals after they are born. From the sampling, they acquire their meme scores.

Fourth, after the sampling step, there is a new meme generation step.

3.7.1 Problems to consider with this model

Idealist conservative theorists of leftism content the following: 1) that leftism is deceptive and/or a mind virus, meaning it is false and/or deleterious to fitness. 2) that nonetheless this mind virus has spread, its incidence increasing monotonically for generations. 3) that this is not ultimately due to dysgenics or some other pressure operating on humans prior to ideology.

We will show with this simple model that it is illogical to hold all of these contentions at once. It is very unlikely that they can all be true, and our model allows for the clean empirical testing of this contention.

3.7.2 Memetic Pressure from Sampling Time

The mean of every m_i is the probability someone in the population has it.

$$\mathbb{E}[M] = \bar{\beta}_1 p_1 + \bar{\beta}_2 p_2 + ... + \bar{\beta}_n p_n \tag{3.31}$$

Let's take as the null hypothesis that in the sampling step, each individual is exposed to each extant meme m_i with probability p_i. This is strongly justified for leftism by the twin study literature we already reviewed. Other models have assumed mistakenly strong structure regarding memetic inheritance through familial vertical transmission. This does not happen; it would seem, rather, that memes are picked up haphazardly at random. This makes sense; every time twins go to the library, turn on the TV, or browse the internet, there is a random component that is compellingly uncorrelated with home environment that dictates what the exact informatic content is they are consuming.

Going with this assumption,

$$\mathbb{E}[M]_{t+1} \sim N(\mu = \mathbb{E}[M]_t, \sigma = \frac{1}{\sqrt{n_p}}\sigma_M) \tag{3.32}$$

In the short run, when n_p (population size) is very large, this says there is no change to the mean meme score over time due to sampling.

If there is no genetic bias in sampling, then genetic evolution will not produce sampling change either. If there is no extrinsic environmental bias, the same is true. In what follows, environmental bias can be exchanged for genetic bias. However, for simplicity, we will assume stable environments and/or no environmental bias. We also assume no other gene score for another trait will have an independent effect on meme score. The end result is the same: all systematic memetic pressure is ultimately downstream of evolutionary pressure, truth bias (which must be evolved), or environmental change, and the effect of bias on the meme pool.

Now consider if there is genetic bias measured by the regression of gene scores onto meme scores:

$$\mathbb{E}[M|G] = r_{G,M} G \tag{3.33}$$

This implies

$$\mathbb{E}[M|\Delta\bar{G}]_{t+1} \sim N(\mu = r_{G,M}\Delta\bar{G}, \sigma = \frac{1}{\sqrt{n_p}}\sigma_M) \tag{3.34}$$

If G does not change, then there is no change; M stays at 0, the mean of the previous generation. We can therefore write that the memetic pressure due to sampling is as follows:

$$\Delta_s = r_{G,M}\Delta\bar{G} + \epsilon_s \tag{3.35}$$

Where $\epsilon_s \sim N(0, \frac{1}{\sqrt{n_p}}\sigma_M)$.

3.7.3 Memetic Pressure from Creation Time

When there is no evolutionary pressure and/or genetic bias on meme creation, we might expect the weighted average effect of new memes to be the same as the old. If there are sufficiently many creators, and the gene pool and environment are not changing, then those creators will have average meme score 0 by definition. If, after creation time, the average effect of the new ideas is sampled, why should it not be expected to be 0? Some ideas will be leftist or unfit, some will be rightist and fit, and absence of any systematic pressure, the average of these by their probability of being sampled should recapitulate the average of the old ideas.

But why would new ideas be created? If we supposed new ideas must be better than old ones to worm their way into the meme pool in the first place, then we expect the average effect of new ideas to be different than the average effect of old ideas. Intuitively, this is reality bias. In science, new ideas are supposed to be more predictive and clean than older ideas. Inferior ideas lose, and we expect the average effect on fitness of new ideas that stuck to be greater than those of the old ideas. Therefore, $\mathbb{E}[new] \approx \Delta_{reality}$, and

$$\Delta_n \approx p_{new}\,\mathbb{E}[new] + p_{old}0 = p_{new}\Delta_{reality} \tag{3.36}$$

Now let us add genetic bias in. It makes sense that people with changed gene scores might create ideas more in line with those gene scores, and might accept them more than people with gene scores from the previous generation.

In theory, the regression of gene scores of creators onto the weighted betas of their new ideas can be performed, yielding

$$\mathbb{E}[new|G] = \mathbb{E}[\beta p|G] = r_{\beta p,G}G + \Delta_{reality} \tag{3.37}$$

Substituting this in to the equation before,

$$\Delta_n = p_{new}(r_{\beta p,G}\Delta\bar{G} + \Delta_{reality} + \epsilon_n) \tag{3.38}$$

We also add a term for sampling error, it is distributed like before except n_p may be smaller, as it is somewhere between the number of new ideas made and the number of creators (some sort of clustering robust SE may need to be used here; we will assume the error is sufficiently small, and it would not produce consistent change in the same direction anyway).

With dysgenics, the genetic bias can be in the opposite direction of the reality bias and can overpower it. This is important for the study of leftism and the idealism hypothesis, because a rigorous study of the facts around race, feminism, and homosexuality seem to indicate a reality bias to the right. Leftists are generally aggressively in denial of mean facts, while rightists are not on these topics. Thus, the systematic shift left can only come from consistent genetic pressure to the left (or exogenous environmental change, but as will be shown in the next chapter, there is evidence of dysgenics being the cause).

3.7.4 Estimating these parameters

We have that

$$\Delta_m = \Delta_s + \Delta_n = p_{old}(r_{G,M}\Delta\bar{G} + \epsilon_s) + p_{new}(r_{\beta p,G}\Delta\bar{G} + \Delta_{reality} + \epsilon_n) \approx p_{old}(r_{G,M}\Delta\bar{G}) + p_{new}(r_{\beta p,G}\Delta\bar{G} + \Delta_{reality}) \tag{3.39}$$

The next chapter concerns estimating $\Delta\bar{G}$. Estimating $r_{G,M}$ is straight forward: draw up a large representative list of memes. Ask people if they understand them. Understanding, and not agreement, is the best method, because this should measure exposure better than agreement; agreement might be biased by genes or memetic epistasis. Ideally, derive a polygenic score for the trait of interest; if not, infer gene score from a family design. Then, regress the memes onto $P - \mathbb{E}[P|G]$. This should give the effects of the memes with sufficiently large sample size, with genetics controlled for. m^2 should be $(1 - h^2)R^2$. Now, using the effects, compute meme scores and correlate these with gene scores. This should yield $r_{G,M}$.

Next, identify a lot of new memes and a lot of old memes. With a large sample, get the total probabilities of the new ones and the old ones. Compute their average effects in the same way. This average effect, minus the average effect of the old means, should be $r_{\beta p,G}\Delta\bar{G} + \Delta_{reality}$. If you assume the evolutionary pressure on creators is the same as that on the general population, and that creator bias equals sampling bias, you can now solve for the reality bias. Otherwise, representative creators need to be gene scored. This is usually taken to be academia; surely the professors would submit to this in the name of science, because they are such honest people interested in truth.

Finally, the first assumption of the model is that, absent some sort of exogenous genetic or environmental change coupled with sampling bias, in a sufficiently large population, the expected score of the old component is the same across generations. We assumed a very simple transmission mechanism, but other mechanism, like the sampling of a subset of memes according to the magnitude of their effects times their incidence rates, can produce the same result. If this assumption does not hold, it produces a memetic pressure "dark matter" with respect to this model. It would be hard to distinguish this dark matter from environmental change, if it existed, though if it was a stable force, it could be corrected for in the model, like how allele theorists use effective population size to smooth over the Wright-Fisher model. Assuming no environmental pressure and bias, we could test for dark matter and the validity of this assumption by simply comparing meme scores for old memes between generations, with gene scores controlled for. We should observe that the meme score mean for old components are the same, as the assumption states.

3.7.5 Individual memes and the Whig assumption

This model assumes that, barring biological change or sampling error, memes never really fall out of the meme pool if they're viable to begin with. If each person exposed tells some number of people per generation, and the meme frequency can increase at all, then all memes will eventually reach a probability of 1 barring biological evolution or sampling error.

A mistake correction can be modeled as a meme that has an equal and opposite effect. Once this reaches fixation, mistake and correction transmission are equivalent to no transmission at all, mathematically.

An intuition is that most memes are simple to transmit and if they have any effect at all people will want to transmit them many times per generation, and can do so easily. This means that transmission time is low, and this predicts that most memes have probabilities close to 0 or at 1. This would suggest m^2 is 0 and sampling pressure is also 0, because when the variance of M is 0, the correlation between G and M is 0. Therefore, meme pool change would only come from creation bias and reality pressure.

If memes take a while to transmit, then a lot can be at intermediate probabilities, producing meme score variance and sampling pressure. Sampling pressure could overpower slow transmission times, leading to meme death.

With the designs mentioned previously, we could check if probabilities are strongly bimodal around 1 and 0. If they are not, it suggests transmission time is moderate.

An explicit model is as follows:

$$n_t = sn_{t-1} + n_{t-1} \implies n_t = n_0(s+1)^t \implies p_t = p_0(s+1)^t \tag{3.40}$$

Here, s is the average number of people each person exposes. If this is less than or equal to 0, the meme can never get off the ground. If t is a year, values of s below .1 spread per person per year tend to make fixation take hundreds of years. Is this realistic? Maybe, if a large number of people are bystanders. However, it is likely that the more effective a meme, the higher s is. This could be tested, of course, with the proper design using a good sample of memes.

3.7.6 Genetic bias and m^2 confounding

By the ommitted variable bias formula,

$$m = \hat{m} - hr_{G,M} \tag{3.41}$$

We know h is about 0.8. So if people are observing an apparent correlation between ideas and phenotype of .8, but the genetic bias is .5, then the true m is only .4. m^2 goes from an inflated .64 to a mere .16.

In the GSS, meme scores correlated with political phenotype at about $r = .5$. This means if genetic bias is a mere .25, the true m is .3 and $m^2 = 0.09$. With very weak genetic bias, apparent effect sizes of m that people think they see can be inflated by a factor of 2. When this is true, it means half of the actions of memes are just to make genetic variance more apparent. Confusion over this and failure to see the world behind the veil is probably a big source of naive idealism.

3.8 Conclusion: bias and fast informatic transmission

Slow informatic transmission is needed for high m^2, otherwise everyone knows the same memes. If informatic transmission were particularly slow for most memes, information would probably 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 somewhat fast and does not cluster within families. This, in turn, means it does not cluster, and if it does not cluster, m^2 must be quite small. By modus ponens, we conclude m^2 is generally low, potentially 0.

Generally, then, rapid informatic transmission means the availability of memes does not tend to 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 modest to strong genetic bias. Mercier's findings (see the appendix) add to 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.

3.9 Social Epistasis Amplification

This model could serve as a mathematical basis for the social epistasis amplification model (SEAM). The idea of SEAM is that dysgenic changes in the gene pool have their effects amplified by social behavior. Both sampling and creation bias in this model can create amplification of emerging genetic differences.

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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.

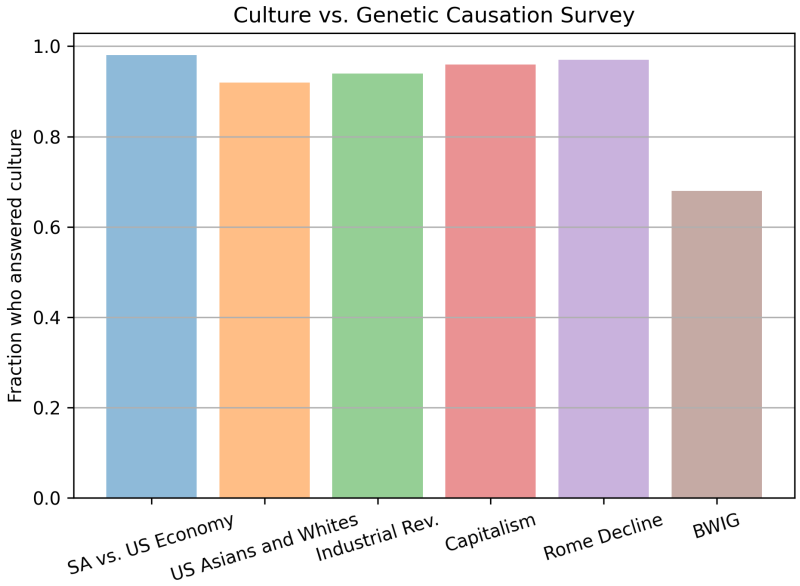

Figure 4.1: What caused it? Culture or genes?

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 past 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 plastiticity:

> 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 can produce 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]

In the last part, 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.

Evolution should look smooth and linear, but history can look saltatory. I am not saying that historical events are not locally saltatory. They can be, 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. The ultimate trend is linear, the proximate cause is saltatory.

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

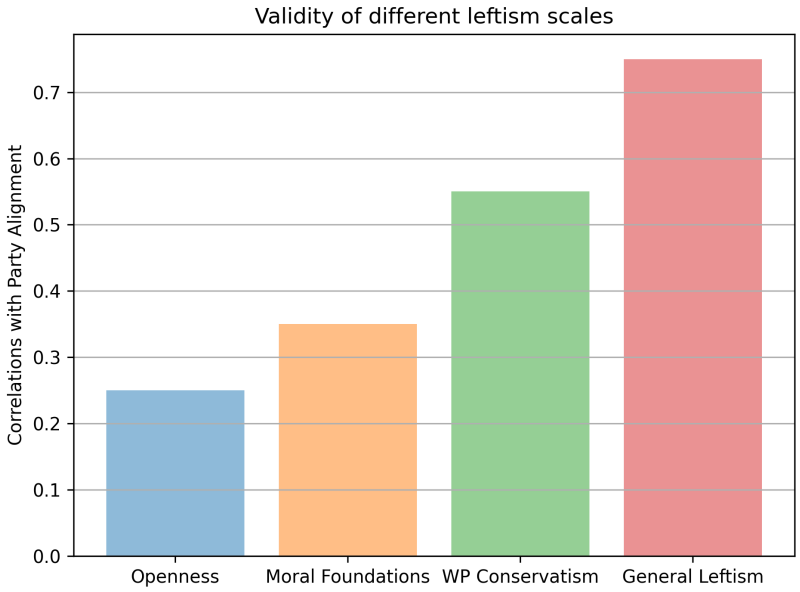

Figure 4.2: Validity of different leftism scales

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, they are assumed to have more noise than general leftism as they are less predictive of outcomes like voting alignment.

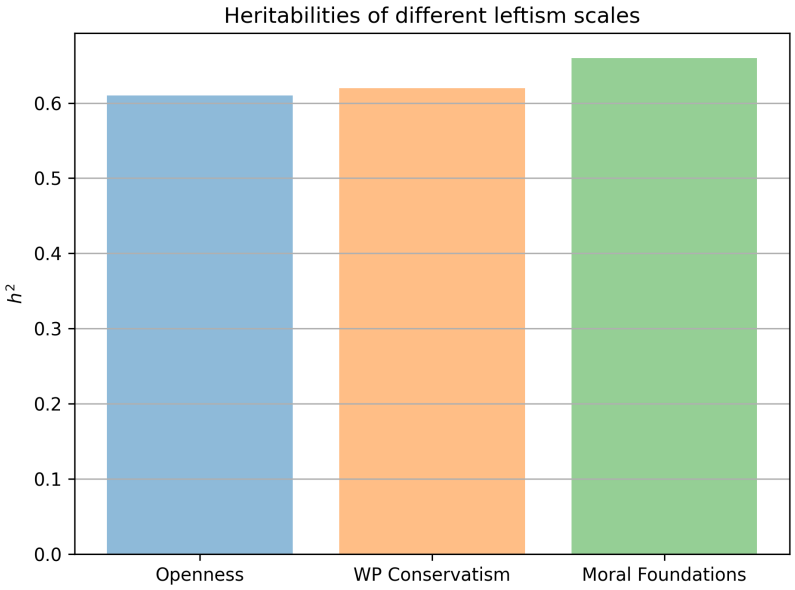

Figure 4.3: Heritability of different leftism scales

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:

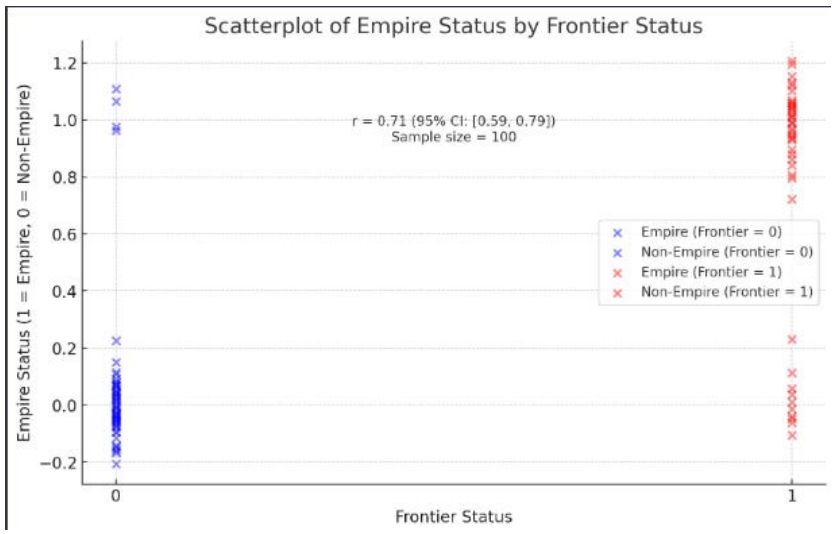

Figure 4.5: Probability of forming an empire based on meta-ethnic frontier exposure (noise added for visual reasons)

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 words 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 at most weakly correlated with leftism [1].

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 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:

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

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:

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

So:

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

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 robust partial 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:

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

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 robust partial 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 0, 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:

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

4.8 Connecting this with Molecular Genetics

Let's take a detour to IQ and mutational load, and assume that leftism has a similar genetic architecture. Given knowledge of genetic architecture, what do we expect the mutational pressure to be?

It has been found that about half to a third of the genes, 10,000 out of 20,000 to 30,000 [20], in the human genome contribute to intelligence [21],. When these genes are mutated, they almost always decrease intelligence [21],. This makes sense from the point of view of the principle of entropy. The human genome is like an optimization problem on an extremely high dimensional vector which is 800 megabytes in size. If gradient descent is run on this vector for millions of years, it will be close to an optimum. If afterwards random bit flips are introduced to the vector, fitness will tend to fall. It is not hard to see that there are a lot of ways to be dumb and one way to be smart; most human diseases decrease IQ scores because anything that saps energy will tend to decrease general brain function.

A simple model can produce the following equation:

$$r = h^2\frac{2\sqrt{n_t}d}{3n_g} \tag{4.29}$$

Where r is the paternal age correlation with the trait, is the number of genes that contribute to the trait, d is the average number of new mutations a person inherits per generation, and is the number of genes in the human genome. Currently, $d = 50$ [22], and for IQ, $n_t = 10,000$ and $n_g = 20,000$. Plugging into the equation, r is predicted to be 0.088. A recent analysis found that that this number is in the confidence interval for the correlation [23].

To derive this equation, first consider what the mutational pressure on a trait is in standard deviations as a function of its number of genes and the mutation probability per gene . If the trait is modeled as a binomial distribution with size and allele frequency 1/2, and a mutation always flips an allele from 1 to 0, then

$$\Delta^G_m\frac{\sqrt{n_t}}{2} = n_t p_m \tag{4.30}$$

Where Δ^G_m is the mutational pressure in SDs on the gene score G, $\frac{\sqrt{n_t}}{2}$ is the standard deviation of the trait as a function of its polygenicity, and p_m is the probability of one of the alleles flipping to 0.

If this is confusing, consider this example. Let the polygenicity be 500. Then from the model assumptions, the starting mean is $500/2 = 250$ and the standard deviation is $\sqrt{npq} = \sqrt{500/4} = 11.1$. For the mutational pressure to be 1 SD, 11.1 mutations must take place per generation. There are 500 alleles, so the mutation rate must be $500^*p_m = 11.1 * 1$. This recovers the equation. In this case, the mutation rate is 2.2%.

Now we write the equation as such:

$$\Delta^G_m = 2\sqrt{n_t}p_m \tag{4.31}$$

We can also write

$$p_m \approx \frac{d}{n_g} \tag{4.32}$$

This is because when a mutation hits the genome, each gene has a $1/n_g$ chance of getting. If d mutations hit the genome, ignoring the very small chance of a gene getting hit twice, the chance of getting one of the mutations is d/n_g.

We now substitute this in for p_m and we have

$$\Delta_m = 2\sqrt{n_t}\frac{d}{n_g}h^2 \tag{4.33}$$

Finally, we add in h^2 to get the expected phenotype score given gene score. Also, the mutational pressure is about 3 times the causal paternal age correlation [24], so substituting 3r in for the mutational pressure recovers the original equation.

Now, to apply this to the leftism, assume leftism has a similar polygenic architecture to IQ. Taking $h^2 = 0.50$, we predict that the correlation between leftism and paternal age will be about 0.08. This is a much more specific hypothesis than is found in most human behavioral science, and it is backed by a simple, yet realistic molecular model, with parameters supported by molecular genetics research.

4.9 How Strong is the Evolutionary Pressure on Leftism?

4.9.1 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 1876 fathers and mothers over 50 years old (white Americans) and gives them the same test, while asking what ages they were when their children were born. The first study tries to show the correlation between paternal age (age of father when born) and leftism, while the second attempts to show that older fathers and mothers are not more leftist than younger fathers and mothers. There are some flaws with this methodology, but it is the best that could be done with the present funding and means, namely restricted to online surveys of individuals. A more ideal study would collect family level data. Still, if older fathers are not more leftist, and birth order is not a confounder, the results of this study should reflect the robust partial correlation between paternal age and leftism.

The leftism metric 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.

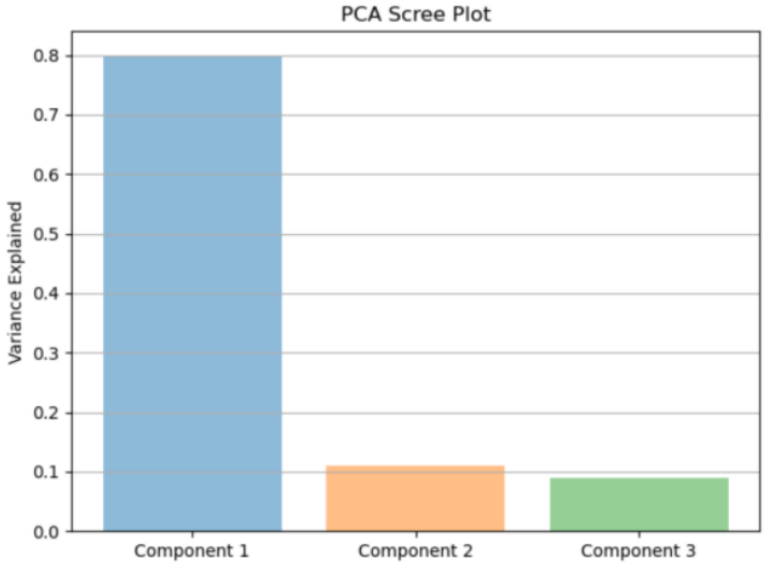

Figure 4.6: Scree plot for principal component analysis of Gay sum, Race sum, Feminism sum.

These statistics suggest that the measurement has high reliability. We also have evidence of high validity in that it predicts party and wingness well.

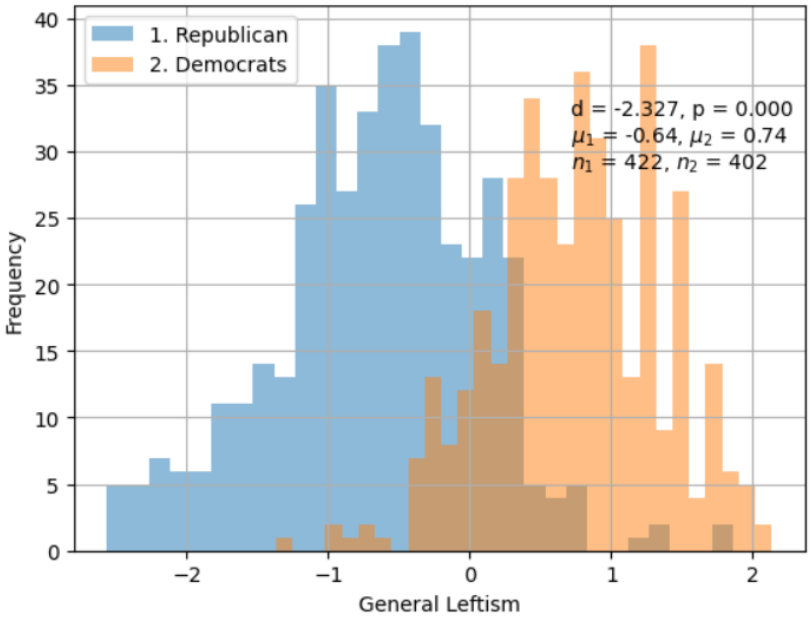

Figure 4.7: General Leftism and Party

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. 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.

4.9.2 The Correlation with Paternal Age

In this section, we show that the paternal age effect is in fact present with this metric.

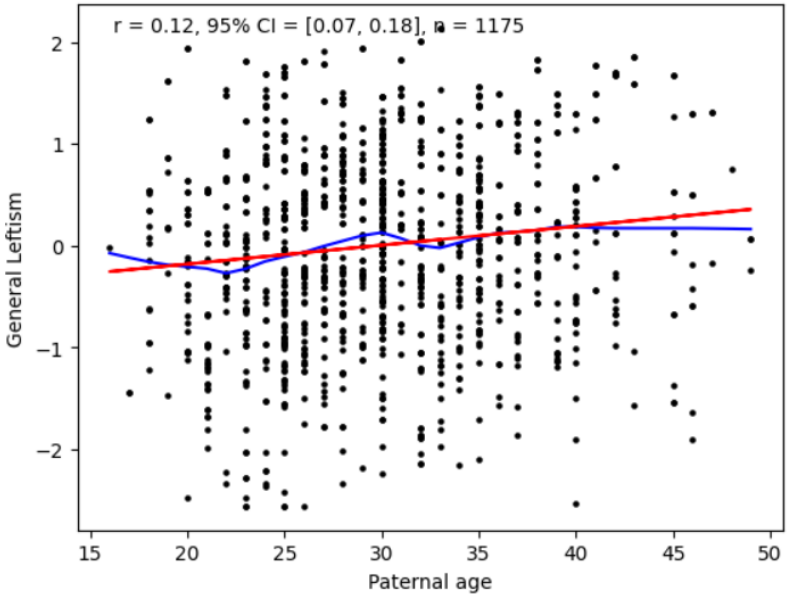

Figure 4.8: Leftism and Paternal Age

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.

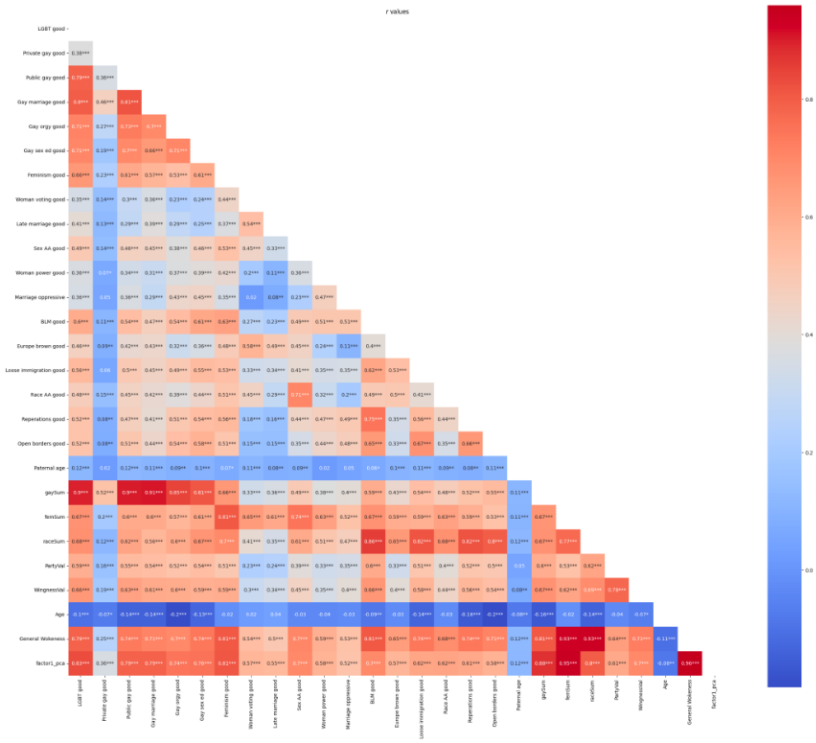

Figure 4.9: Correlation matrix of study variables.

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.

OLS Regression Results

Dep. Variable:	factorV	R-squared:	0.016
Model:	OLS	Adj. R-squared:	0.015
Method:	Least Squares	F-statistic:	4.048
Date:	Thu, 08 Feb 2024	Prob (F-statistic):	0.00715
Time:	14:59:59	Log-Likelihood:	-2646.2
No. Observations:	1876	AIC:	5300.
Df Residuals:	1872	BIC:	5323.
Df Model:	3		
Covariance Type:	cluster		

	coef	std err	z	P>|z|	[0.025	0.975]
const	3.469e-17	0.037	9.38e-16	1.000	-0.073	0.073
Breeding_Age_n	0.0252	0.031	0.819	0.413	-0.035	0.086
Current_Age_n	-0.0857	0.036	-2.377	0.017	-0.156	-0.015
SexN	0.0942	0.038	2.501	0.012	0.020	0.168

Omnibus:	269.896	Durbin-Watson:	0.993
Prob(Omnibus):	0.000	Jarque-Bera (JB):	67.069
Skew:	-0.075	Prob(JB):	2.73e-15
Kurtosis:	2.086	Cond. No.	1.24

Figure 4.11: Paternal Age and Parent‘s Politics.

We find that in the multiple regression model, the partial correlation of paternal age (.1104) with leftism, controlled for participant age, was less than 0.01 under the correlation of leftism with paternal age (0.12). Consequently, the result is not merely due to older people having younger fathers, while being more conservative; it is found at all ages that leftists have older fathers than rightists, potentially indicating higher mutational load. Also, an interaction variable was included, paternal age * age, to see if the paternal age effect varied with age, as Woodley et al. [17] claimed with religion. It was not stronger at more recent ages, as the interaction was null.

We also found that, in a different sample of fathers and mothers(not the parents of the first sample, but from the same generation and area (USA)), that there was no significant correlation between their politics and their ages at the time of the birth of their children. As such, it is unlikely, though not impossible, that this study is confounded by older fathers and mothers (women were added for higher sample size, since paternal and maternal age strongly correlate) being more leftist. Nevertheless, a followup study with family level data should be done.

4.9.3 Selection pressure: the Correlation with Fertility

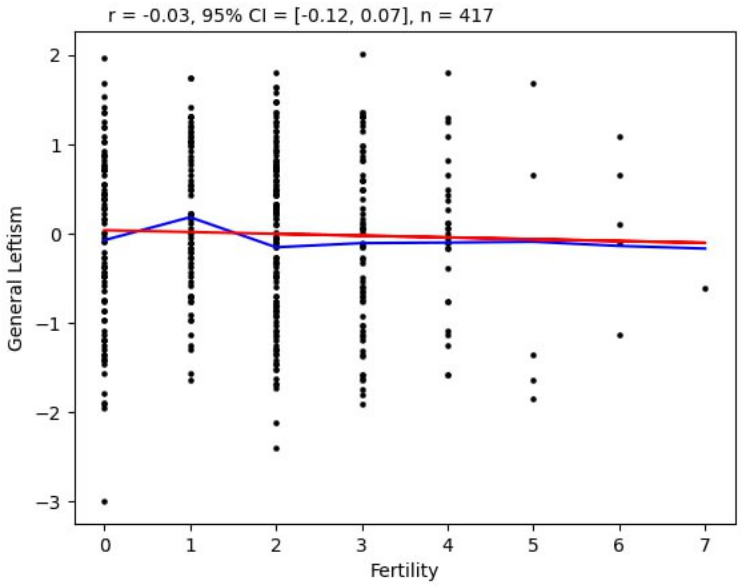

Figure 4.12: Correlation of Fertility and General Leftism

Using a narrow-sense heritability estimate of 0.5, we find a selection pressure of $(0.5)(0.03)(0.75) = 0.01125$ SDs per generation in the conservative direction where 0.75 is the SD of fertility divided by the mean of fertility. This is very small, and as we will show, the mutational pressure is expected to have a much greater magnitude than this weak selection pressure, despite the claims of those who say that conservatives are rapidly outbreeding leftists.

4.9.4 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.

$$\Delta_s = h^2 \frac{\int_{-\infty}^{\infty} gf(g)p(g)dg}{\int_{-\infty}^{\infty} f(g)p(g)dg} = h^2 \frac{r_{g,f}\sigma_f}{\mu_f} \tag{4.34}$$

Above is the 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.

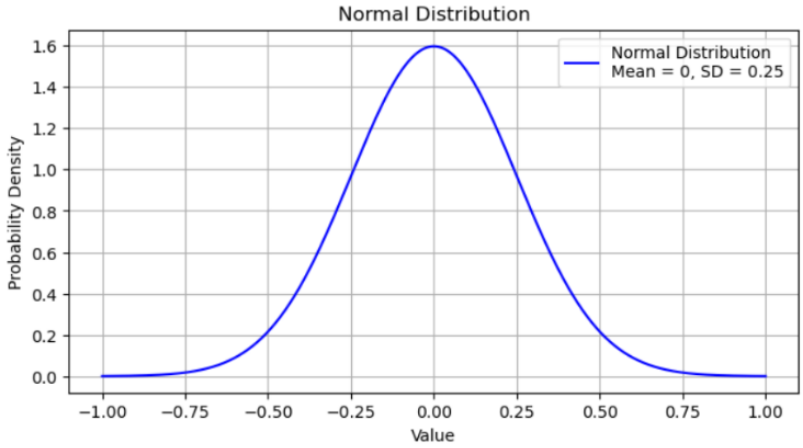

Figure 4.13: Priors for the r values

For selection pressure, we multiply the r value by 0.375, as this is the narrow sense heritability times the sd/mean ratio. For mutational pressure, we multiply by (2(30-8) - 2*.33/.66 (5))/14, applying equation 4.24, taking an extremely charitable 33% infant mortality rate (including miscarriages) as well as a charitable average infant mortality paternal age of 35 (whereas the average paternal age is 30). This is certainly an overestimate. We get (44-5)/14 = 2.78.

Our priors become:

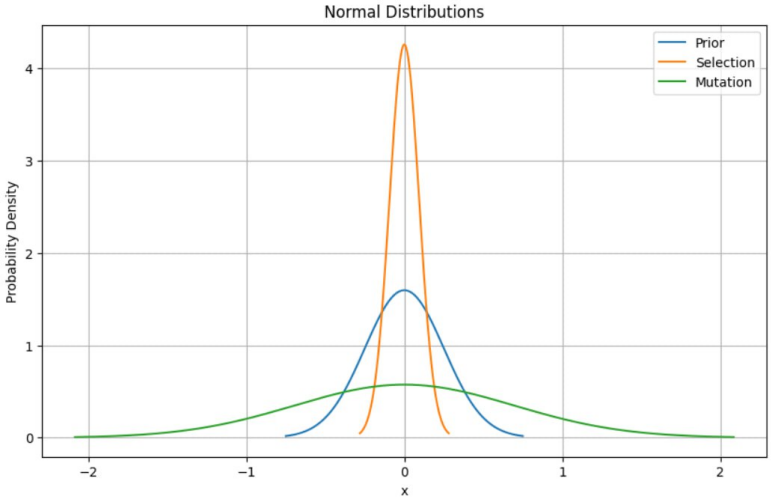

Figure 4.14:

Already we see that, given the low 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.

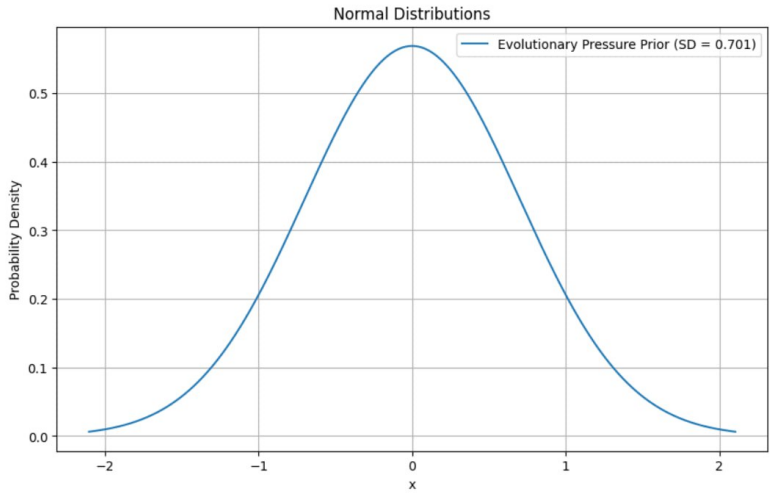

Figure 4.15:

So our prior for evolutionary pressure is above, and mutational pressure explains over 70% 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, where omnigenic traits are important, are a biologically realistic scenario where drift is extremely small due to 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.

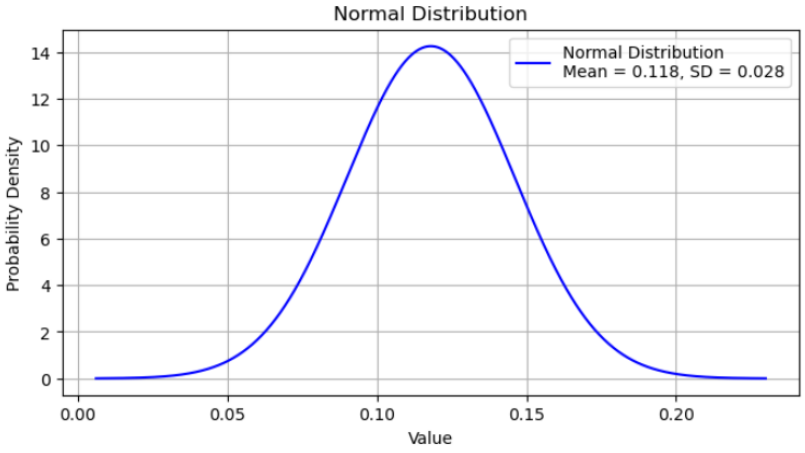

Figure 4.16:

After Bayesian analysis, the posterior distributions for the r values basically go to their point estimates +/- their standard errors. Above is the one for $r_{g,a}$ without factoring in the association between father's age at breeding and father's genetic leftism.

By the OVB formula, the partial correlation of paternal age with leftism controlled for father's leftism should be the nonpartial correlation minus the correlation between father and child leftism (approximately h^2) times the correlation between father's breeding age and father's leftism (figure 4.11). We got that the latter has posterior $N(.0252, .031)$. Subtracting this from the naive posterior above will give us a posterior with a slightly lower mean and higher variance, increasing the chance that the true correlation is nothing by a slight amount. For maximum charity to the skeptical, we will

use this distribution:

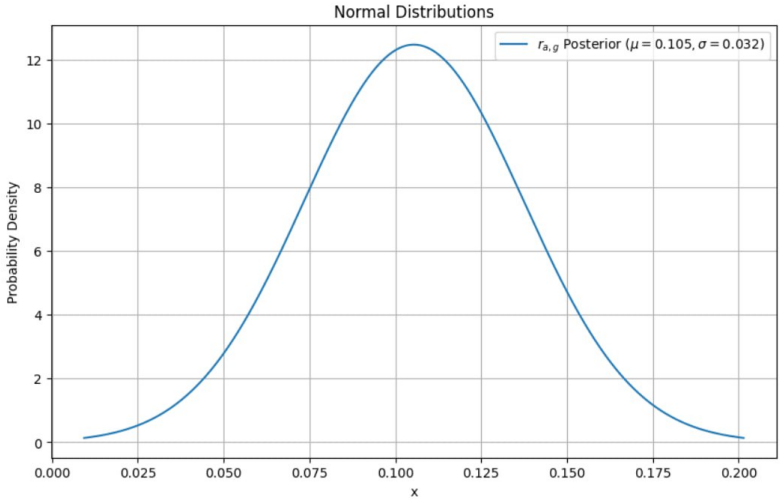

Figure 4.17:

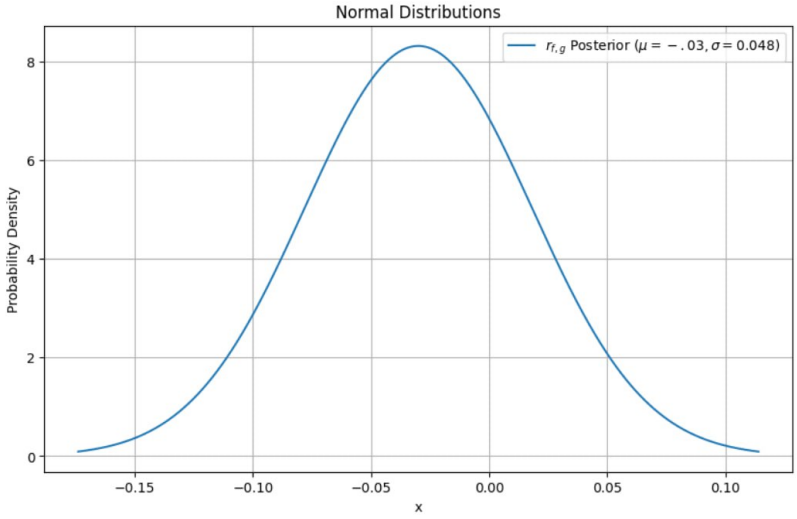

Figure 4.18:

Above is the posterior for $r_{f,g}$. The posterior for evolutionary pressure is $N(2.78\mu_1 + 0.375\mu_2, \sqrt{(2.78\sigma_1)^2 + (0.375\sigma_2)^2})$.

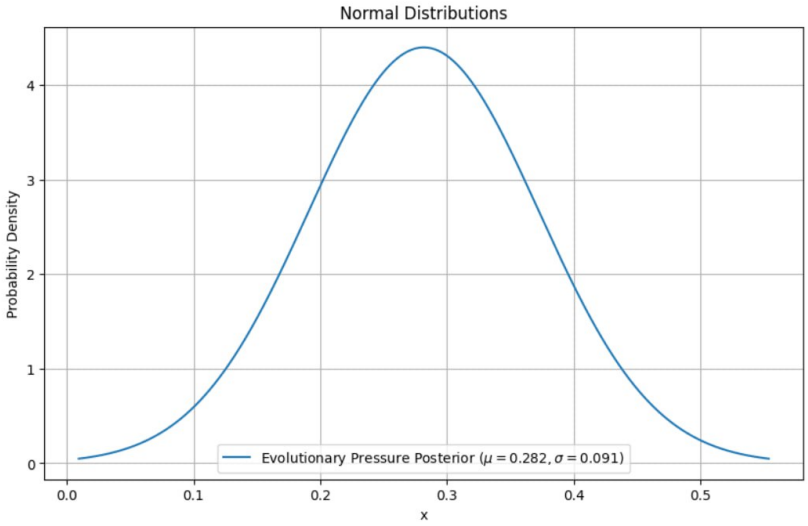

Figure 4.19:

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:

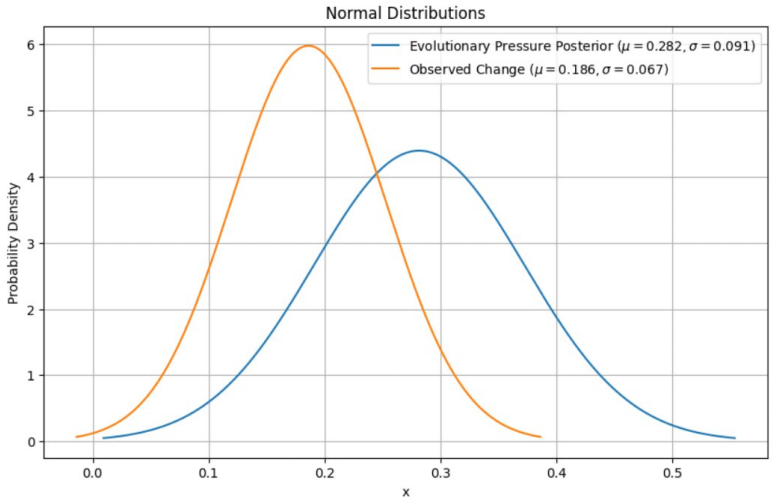

Figure 4.20:

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.

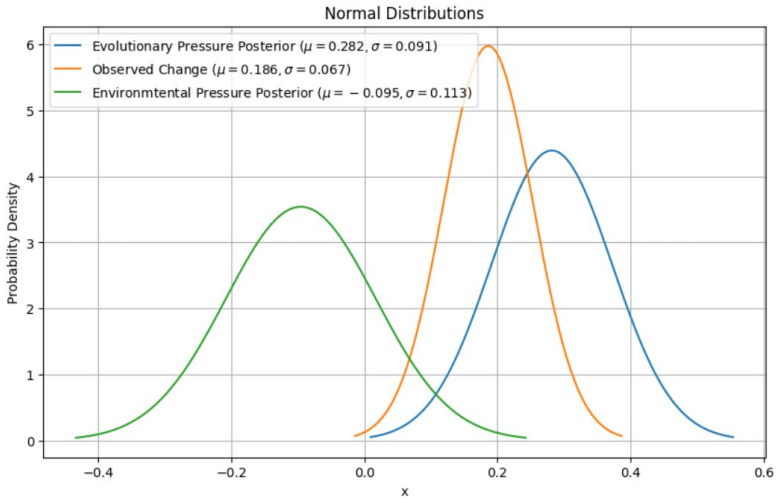

Figure 4.21:

We now have these posteriors. Now we want the mean genetic drift (MGD) statistic (equation 3.27). We get that the most likely estimate is (0.28/0.18) = 1.55. 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 mean genetic drift 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 mean environmental drift (MED) 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 MGD and Environmental Pressure / Observed Change for MED.

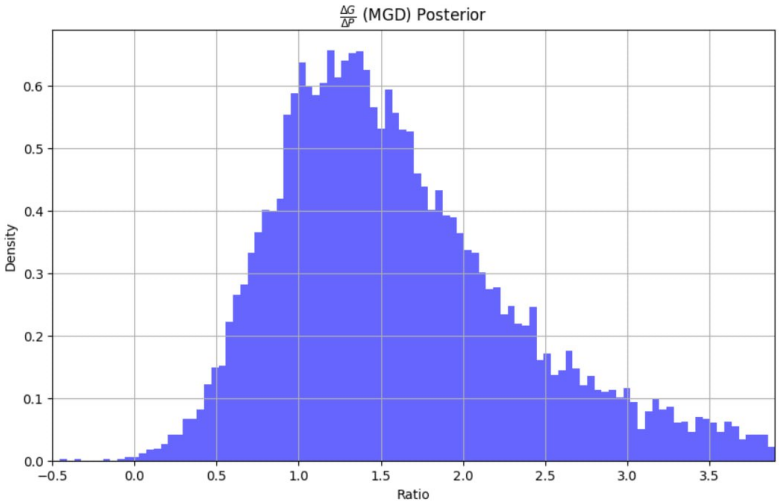

Figure 4.22:

We get the following distribution for MGD. The percentiles for MGD are as follows:
1st percentile: ∼0.256
2.5th percentile: ∼0.453
5th percentile: ∼0.604
15th percentile: ∼0.901

Thus, there is an 85% chance that heretaticity is greater than 0.901, 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 45% or more of the shift was due to genetics and a 99% chance that 25% or more of the shift was due to genetics.

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

Exousiology: The Science of Power

5.1 Mainstream understandings of social power

The mainstream model of social power is neither quantitative nor empirical. For this reason, it must be upgraded. But, before considering how it can be upgraded, the current mainstream understanding of social power should be discussed. After this, we can build on the current model.

5.1.1 The Power Pantheon

In political science, power is understood as the ability to produce an effect, influencing the capabilities, actions, beliefs, or behaviors of actors within a social structure. It extends beyond mere coercion or the use of force, encompassing more subtle forms exerted through institutions, structural dynamics, and discursive practices. Power structures relationships among actors, for instance, between employers and employees or parents and children, and shapes discourse by legitimizing certain behaviors and groups over others. The legitimacy of power, termed authority, is socially approved and can be perceived as either benevolent or malevolent, serving to either empower or oppress.

In the mainstream, it is believed that there are different "types" of power. French and Raven's seminal 1959 study introduced the concept of power bases, differentiating power from influence. They outline five categories: legitimate, referent, expert, reward, and coercive power, with additional bases proposed by other scholars like Gareth Morgan. Legitimate power is said to stem from one's position within an organization, while referent power allegedly arises from personal traits or charisma, enabling an individual to attract loyalty and admiration. Expert power is supposed to come from an individual's skills or knowledge, crucial in specific domains. Reward power is claimed to be the ability to confer valued rewards, and coercive power involves the application of negative influences, such as threats or punishment, to compel obedience.

Each "form" of power is thought to have its implications and effectiveness within social interactions and organizations. For example, reward power can motivate behavior but may require increasingly significant incentives to maintain effectiveness. Coercive power, while obvious, tends to be the least effective form, as it often breeds resentment and resistance. As you can see, this is all very messy and inelegant, verbal and unempirical.

5.1.2 Foucault and meme power

Michel Foucault's analysis adds depth to the understanding of power, emphasizing its diffuse nature and the role of knowledge and discourse in maintaining power relations. Foucault's work suggests that power is pervasive and embedded within the fabric of society, operating through various apparatuses or dispositifs without a central agent.

Michel Foucault's concept of power fundamentally challenges traditional views that portray it as merely repressive and centralized, typically wielded by sovereign states or ruling elites. Instead, Foucault presents a more nuanced and pervasive conception of power that permeates every level of social interaction. For Foucault, power is not simply about domination or coercion by one group over another; it is a complex network of forces that operates throughout society, influencing how individuals act, think, and understand their reality.

Foucault argues that power is everywhere and comes from everywhere, meaning it is not just top-down but also circulates through the minutiae of social relations. Does this sound like a meme? Maybe a replicator being transmitted in any social interaction, which has average effects on behavior? It is not solely held or exercised by a central authority but is diffused and decentralized, embodied in discourse, institutions, architectural arrangements, regulations, and everyday practices. This view of power as capillary suggests it flows through society like blood through veins, reaching into the very grain of individuals, shaping their perceptions, identities, and relations with others. In other words, it has effects on phenotype.

One of the key aspects of Foucault's theory is the concept of "power/knowledge," which suggests that power and knowledge are not separate entities but are intertwined. Memes! Knowledge is used to exert power by categorizing, defining, and controlling subjects, while power relations give rise to bodies of knowledge that justify and perpetuate those relations. Does this sound like meme creator bias?

Foucault's analysis of power is revolutionary because it moves beyond seeing power merely as something that is held and used to oppress. Instead, it views power as dynamic, relational, and productive, creating subjects and shaping social realities. His work encourages a critical examination of the ways in which power operates in everyday life, the relationships between power and knowledge, and the possibilities for resistance and change within power structures.

5.1.3 Conclusion

We can clearly see that both of these understandings of power are pre-scientific. Neither are quantitative, nor can they make verified quantitative predictions. As such, neither are quantitative and empirical. However, both give some potentially useful starting points for a quantitative-empirical model of power.

The first understanding more concerns personal power and starts us off with different bases of it. We should consider how we can measure these bases, and which really exist. It also indicates that power is often legitimate — in this case, perhaps power is earned through merit? Maybe IQ plays a role? Maybe people have power due to natural superiority and others, via economic rationality, defer to them.

The second understanding, Foucault's, understands power from a bird's eye view, looking down on society. Power may have something to do with knowledge or ideas, and everyone plays a role in it. This sounds like power as memes or as some other type of replicator or average effects model. Perhaps one type of power is memetic power, and other types could be modeled as average economic effects proceeding from each individual. Every individual is pulled in multiple ways by the power of multiple others, and the strongest combined effect wins out.

5.2 Improving the concept of power

5.2.1 Against Turchin on power: proposing a better model

In April of 2023, Peter Turchin wrote a blog post titled "On Social Power." In this post, he, predictably, explains his model of social power. In this section, I will go over my several critiques, as well as my model, which I believe to be better, since it is more empirical and quantitative and therefore more useful to science.

The genealogical critique

My first issue with Turchin's model is its source. It comes from Michael Mann, a UCLA pseudo-scientist. Michael is a psuedo-scientist because he is a historian who claims to be a scientist of the generally pseudo-scientific field "sociology." Sociology, and Michael Mann's work, are pseudo-scientific because they are insufficiently quantitative and empirical. If you do not understand this claim, you need to read the beginning of the book. Turchin, for what it's worth, already agrees with me on this point, given the first chapter of his book Historical Dynamics.

You can see that sociology is insufficiently empirical and quantitative by studying the methods of the father of sociology, Max Weber. Weber did not collect data and derive quantitative predictions from the data, as a science does. Instead, Weber practiced a qualitative method, amounting to something

one might call "social botany." He was a mediocre conceptualist, who would break "society" down into disparate, immeasurable, non-predictive verbal components. The proof of this is in his Wikipedia page. Weber never allowed one to predict which societies would be democratic and to what degree, if a society was democratic or not, how much power someone has and who would grow up to have what amount of power from birth. These are some of the basic questions a real science of society must answer. Instead, for example, Weber divided "political leadership" into three "types": charismatic, traditional, and legal. The coherency and utility of these types is very little, for charisma is fake and "legal" is circular.

This sort of "thinking" is the main quality of Weber's whole body of work. Likewise, he is known for dividing the causes of social stratification into three components: class, status, and party. He never measured social stratification or provided any quantitative evidence for this assertion. He was truly pseudoscientific. One wonders if he had any mathematical aptitude at all. If he did, he surely would have been a physicist. Thus we cannot fully blame this behavior on the lack of data; Galton, Spearman, and Fisher did just fine collecting social data and inventing the framework needed to analyze it. It is likely that Weber was quite low IQ, likely under 120, and was therefore incapable of producing real science.

Now enter Michael Mann and his book The Sources of Social Power. What a promising title! I ctrl-f "Weber" and get 77 results. I ctrl-f "Marx" and get 101 results. I ctrl-f "genetic" and get 4 results. Two instances say:

> Original stratification had little to do with the genetic endowment of individuals. Nor had any subsequent social stratification. The range of difference in the genetic attributes of individuals is not great, and it is not cumulatively inherited.

Another instance says:

> The genetic constitution of human beings gives a fundamental equality of most mental attributes relevant to the acquisition of general knowledge of the world.

LOL! I suspect social stratification is genetic and does have to do with differences in general intelligence, which impacts capacity for the acquisition of general knowledge of the world.

So Mann was a pseudo-scientist more concerned with Marx and Weber than with real human biology. This is why his book, which spans multiple volumes amounting to over 800 pages of unreadable pomobabble, contains no data or math whatsoever. Like Weber, Mann presents us with a typology of power. This is not scientific, and is not worth taking seriously, because it does not enable quantification and prediction.

The logical critique

We now get to the substance of the theory. I hold that one of the concepts is illogical: administrative power. Turchin says:

> Administrative power: I can order you to do something by virtue of being your boss, a superior in an organization.

This is circular reasoning. I suspect this happens because the idea of the organization is being reified in Turchin's mind. An organization is an abstraction, it does not exist or at least cannot be taken as given in a science of power. The alleged existence of organizations is something that must be explained in terms of biology and individual relations. You absolutely cannot say "organizations exist, Joseph is the boss of the organization, Peter is the employee, therefore Joseph has power over Peter because he is the boss of the organization", as if the organization were the MPD from Call of Duty: Black Ops (this allowed whoever happened to be in it to control the zombies).

Instead, you must ask why Joseph is the boss and Peter is the employee. Saying "administrative power" amounts to saying "because I said so" or "because the boss is the boss." Joseph can order Peter to do stuff, i.e., Joseph is Peter's boss, because he is Peter's superior in the organization, i.e. he is Peter's boss.

To be non-circular, you have to explain Joseph's superiority in a more basic way. If we stay inside of the framework, Joseph must have economic, coercive, or persuasive superiority over Peter. This makes more sense, logically speaking. The boss must be the boss for an exogenous reason.

The empirical critique

We have just abolished one of the concepts of the theory. The next concept we will abolish cannot be rejected as easily. It requires a good empirical understanding, not just a little bit of logic. Turchin says:

> Persuasion, or ideological power: this is the most subtle, but extremely effective (when it works) form of power. It is especially effective because it is often not appreciated enough, or even not considered as a form of power. After all you end up doing what I want because you want it, right? Persuasion is exercised by aspiring politicians, orators, religious figures, thought leaders, and opinion influencers working for the traditional media or, more recently, on social media.

I hold that, to the contrary, persuasive power is overrated, because it is fake. Those who hold that it does not exist and is not a form of power are correct. Therefore, one person thinking persuasion is power is too many, making it overrated and not underrated.

It is not that trivial to prove that persuasion is not power. Check the memetics appendix. Essentially, we have more or less found that deception is not effective en masse. As evolutionary psychology predicts, people are not very gullible. If they were, they would be at a very serious fitness disadvantage. Evolution is not perfect and diseases emerge all the time, so while we predict most people will not have this disease, it is fair to ask how many have gullibility. The statistics I am currently collecting on this suggest that, across situations, it is less than 1% of people, confirming the theory.

If deception is not effective, then information must be true and useful in order to effect someone's behavior. The other day, I filled up a beggar's gas tank. This influenced the beggar to continue driving around. Was this power? Obviously not. New useful information can be modeled as a resource like gasoline. It is scarce and worth paying for. But if you are great at supplying new useful information, wouldn't that make you an economic elite, someone who is powerful because they excel at creating value from which they can differentially profit?

Thus, one empirical step undercuts the alleged uniqueness of persuasive power. The following logical step recognizes that we are left with an empty husk which is essentially no different than economic power — distinguishing persuasive power makes about as much sense at this point as distinguishing food power from water power from $COMMODITY_N power.

The quantitative critique

We are left with "coercion" and "economic power." We now must ask, how do we measure these concepts? Why are they both called power? Shall power be a two-dimensional vector, [coercion, economic]?

I can answer these questions. Turchin can't. My model collapses power into one quantity known as credit. There is another quantity from which credit flows known as alpha. The distinction between coercion and economic "power" is halfway retained in my model as a distinction between two different types of alpha, that which is based on increasing overall utility, granting one the ability to withhold oneself, and that which is based on domination and violence, the capacity to diminish utility beneath a counter-factual "default value", the value utility would assume if you had not been born. I call these, clumsily, negative-death alpha (NEA) and positive-death alpha (PEA) respectively, because a solid response to the latter is to just kill the one trying to wield it (they are tasked with making sure this is not trivial).

Alpha is stolen from finance where it denotes the excess return of an investment relative to the return of a benchmark index. Alpha is taken to be an intrinsic property of a person, in theory essentially a product of their genetics, although different genotypes can have different alpha in different environments.

Power is modeled as someone's credit stream, the amount of resources they are currently extracting from others measured in credit. Credit is an abstraction like distance. Concrete measures of credit include the USD, the Chinese yuan, and the Roman denarius, while concrete measures of distance include the meter, the yard, and the cubit. Alpha is potential credit stream, it predicts how large of a credit stream, say, a baby might be able to acquire when they grow up.

So, on the one hand, power becomes a single number, but on the other we could, if we care to, break down a credit stream into a NEA and PEA component which sum to produce total power.

This model is clearly more quantitative than Turchin's, making it more useful to science. It is also easy to deploy. Someone's power is the total value of the resources they extract per time period. This can be approximated by wealth or standard income, although it is not exactly the same. For example, U.S. Supreme Court Justices often hang out with billionaires and take fancy vacations on their yachts. This is not reported as income, even though it is, and it's what makes them observably more powerful than some engineer who also makes 6 figures.

The best model I am aware of

I will leave off by saying that in all my extensive reading on modeling power, I have never found a more coherent and quantitative model than this one. By the process of elimination, I therefore propose that this is the best existing model of power, and should consequently be adopted and further refined. I believe this model can help bring insight to Turchin's work on elites and the structural-demographic cycle in which wealth and economic elites figure heavily (because they are the real elites).

Now, let us dive into this model more deeply.

5.2.2 Credit Theory

The model that follows supposes that people have a utility function that they maximize while behaving economically. While it is not an empirical model per se, it is the basic model of theoretical economics [41] [42] [43] [44].

Mechanism of marginal influence independent of direction of influence is identical to credit

Let \$ denote a person's net worth. That is, \$ is the monetary value of all credit he currently possesses. He can, in theory, transfer this credit to anyone, who can then passively convert the credit to cash. Let ψ denote a person's *power* or *marginal influence*, the amount of change in the social state that results when this person changes their desires. Let ψ be measured by the kneeling coefficient, the number of people a person can have kneel for him simultaneously at one time.

Money is power when $r_{\$,\psi} = 1$. This is true if and only if:

$$\psi \leftarrow \psi + n \implies \$ \leftarrow \$ + cn \quad \forall n \in \mathbb{R} \tag{5.1}$$

$$\$ \leftarrow \$ + n \implies \psi \leftarrow \psi + \frac{1}{c}n \quad \forall n \in \mathbb{R} \tag{5.2}$$

In other words, a change n in one of the metrics produces a proportional change in the other metric. Thus, $r_{\$,\psi} = 1$ if both 1) and 2) are true. Condition 2) is easy to prove. Say a person's \$ increases by n. If the average price of kneeling among the population of non-kneelers is p, the person can now afford $\frac{n}{p}$ new kneelers, which he will always find if the population is arbitrarily large and he can effortlessly sample. Thus $c = p$ and $\$ \leftarrow \$ + n \implies \psi \leftarrow \psi + \frac{1}{p}n \quad \forall n \in \mathbb{R}$.

Now for condition 1). If a person can cause n people to kneel before him through some mechanism of power, then under a single-dimension utility model, that person can induce n utility functions to be raised beyond their defaults, each by a factor which is over the threshold for state transition. In other words, upon being asked to kneel, a person kneels if $U(E_k) + U(E_r) > U(E_0)$ where E_k is kneeling, E_r is the "reward" that makes kneeling preferable ($U(E_k) < U(E_0)$) and E_0 is the default or null environment, e.g. the environment where they do not kneel after being asked, where $U(E_0) = 0$ by definition ($U(E_x)$ should be interpreted as $U(E_x \cup E_0) =: U(E_x + E_0)$).

Thus, if a person gains n kneelers ($\psi \leftarrow \psi + n$), he has gained the ability to grant $nU(E_r) > n(U(E_0) - U(E_k)) = |nU(E_k)|$. But if he has this ability, he can ask each person to pay money with utility equal to $U(E_0) - U(E_k) = |U(E_k)|$. This, on average, is as much money as it would take to pay a person to kneel. Thus if the average price of kneeling is p, when n is arbitrarily large, $\psi \leftarrow \psi + n \implies \$ \leftarrow \$ + pn \quad \forall n \in \mathbb{R}$.

Fungibility assumption

The main assumption here is that the reward can be paired with any reduction in utility. Kneeling thus becomes fungible. When kneeling is fungible, it is identical to money. Kneeling is fungible when the effect of E_r on utility is independent of E_k: $U(E_k + E_r + E_0) = U(E_k + \neg E_r + E_0) + U(\neg E_k + E_r + E_0) =: U(E_k) + U(E_r)$. If $U(E_k + E_r) > U(E_k) + U(E_r)$, then k is *susceptible* to r, whereas if $U(E_k + E_r) < U(E_k) + U(E_r)$, k is *resistant* to r.

Extending over time

The above models how net worth at any given time relates to potential marginal influence at that time. A more realistic model would consider cash flow. Continuous power over a person should translate into a continuous income from that person, and continuous income should translate to continuous marginal influence over persons.

We can rewrite the above model with new variables ψ_t and $\$_t$ where these are kneels per time unit (e.g. year) and income per time unit respectively.

$$\psi_t \leftarrow \psi_t + n \implies \$_t \leftarrow \$_t + cn \quad \forall n \in \mathbb{R} \tag{5.3}$$

$$\$_t \leftarrow \$_t + n \implies \psi_t \leftarrow \psi_t + \frac{1}{c}n \quad \forall n \in \mathbb{R} \tag{5.4}$$

Condition 4 is easy, like condition 2. If a person's income per year increases by n, and the market price of kneeling for a year is p dollars per year, then that person can now afford to employ n/p new kneelers per year. Thus $c = p$ and $\$_t \leftarrow \$_t + n \implies \psi_t \leftarrow \psi_t + \frac{1}{p}n \quad \forall n \in \mathbb{R}$.

Condition 3 means that, if a person somehow can make someone kneel for a year, they could instead allow them to not kneel, and make them pay the market price of kneeling every year, increasing income. This is true under the same conditions as condition 1, extended over time. In the instantaneous case, a person kneels if $U(E_k) + U(E_r) > U(E_0)$. Over time, it makes more sense to take the expectation of U. A person stays kneeling if $\mathbb{E}[U(t \mid w(t), E_k + E_r + E_0)] > \mathbb{E}[U(t \mid w(t), E_0)]$ where $w(t)$ is time preference (w is the weight of time t). We can let $\mathbb{E}[U(t \mid w(t), E_0)] = 0$ by definition.

As above, this can be derived by the fungibility assumption as long as it hold through time. If at one moment, $U(E_k + E_r + E_0) = U(E_k + \neg E_r + E_0) + U(\neg E_k + E_r + E_0) =: U(E_k) + U(E_r)$, and this holds over time, then $U(t|E_k + E_r + E_0) = U(t|E_k + \neg E_r + E_0) + U(t|\neg E_k + E_r + E_0) =: U(t|E_k) + U(t|E_r)$. Given this, because $U(t \mid w(t), E_x) := w(t)U(t \mid E_x)$, $U(t \mid E_k + E_r + E_0) = U(t \mid E_k) + U(t \mid E_r) \implies U(t|w(t), E_k + E_r + E_0) = U(t|w(t), E_k) + U(t|w(t), E_r)$ since $U(t|w(t), E_k + E_r + E_0) = w(t)U(t|, E_k + E_r + E_0) = w(t)(U(t \mid E_k) + U(t \mid E_r)) = w(t)U(t \mid E_k) + w(t)U(t \mid E_r) = U(t \mid w(t), E_k) + U(t \mid w(t), E_r)$.

Now if someone kneels over time when $\mathbb{E}[U(t \mid w(t), E_k + E_r + E_0)] > \mathbb{E}[U(t \mid w(t), E_0)]$, and the fungibility assumption holds, then they kneel when $\mathbb{E}[U(t \mid w(t), E_k + E_r + E_0)] = \mathbb{E}[U(t \mid w(t), E_k) + U(t \mid w(t), E_r)] = \mathbb{E}[U(t \mid w(t), E_k)] + \mathbb{E}[U(t \mid w(t), E_r)] > \mathbb{E}[U(t \mid w(t), E_0)]$.

Thus, a person kneels over time when $\mathbb{E}[U(t \mid w(t), E_r)] > |\mathbb{E}[U(t \mid w(t), E_k)]|$. If p is the market price of kneeling for a year, the kneeler be transferred elsewhere to kneel for a paying kneelmaster. The kneeler's income becomes income of the person who can force the kneeling for whatever reason. Thus, $\psi_t \leftarrow \psi_t + n \implies \$_t \leftarrow \$_t + pn \quad \forall n \in \mathbb{R}$.

Aside: now we have annoying math problems

We can now troll undergrads with obnoxious math problems in Exousiology 101 just like the economists. If $U(t|E_k) = -1$ and $U(t|E_r) = t$, and $w(t) = 1 - \frac{1}{2}t$, given the fungibility assumption, what is $\mathbb{E}[U(t|w(t), E_k + E_r)]$ over a time period $t \in [0, 2]$?

Answer: the fungibility assumption states:

$$\mathbb{E}[U(t|w(t), E_k + E_r)] = \mathbb{E}[U(t|w(t), E_k) + U(t|w(t), E_r)] \tag{5.5}$$

Because expected value is linear:

$$\mathbb{E}[U(t|w(t), E_k) + U(t|w(t), E_r)] = \mathbb{E}[U(t|w(t), E_k)] + \mathbb{E}[U(t|w(t), E_r)] \tag{5.6}$$

And by the definition of the time preference function:

$$\mathbb{E}[U(t|w(t), E_k)] + \mathbb{E}[U(t|w(t), E_r)] = \mathbb{E}[w(t)U(t|E_k)] + \mathbb{E}[w(t)U(t|E_r)] \tag{5.7}$$

By the mean value theorem for integrals:

$$\mathbb{E}[w(t)U(t|E_k)] + \mathbb{E}[w(t)U(t|E_r)] = \frac{1}{2}\int_0^2 w(t)U(t|E_k)dt + \frac{1}{2}\int_0^2 w(t)U(t|E_r)dt \tag{5.8}$$

Filling in with the given equations:

$$\frac{1}{2}\int_0^2 w(t)U(t|E_k)dt + \frac{1}{2}\int_0^2 w(t)U(t|E_r)dt = \frac{1}{2}\int_0^2 (1-\frac{1}{2}t)(-1)dt + \frac{1}{2}\int_0^2 (1-\frac{1}{2}t)(t)dt \tag{5.9}$$

Deception isn't a thing in rational utility land

We have shown that power can offer either the carrot or the stick to manipulate the utility function of a rational utility maximizer. Some, however, have claimed that there is a third type of power: deception via information control. This is not possible when dealing with utility maximizing agents.

To see why, consider a utility maximizer who behaves as follows:

$$arg\max_e \mathbb{E}[U(e, \omega)|\mu] \tag{5.10}$$

Where $e \in E$, such that E is the set of possible behaviors, ω is the actual state of the world, and $\omega \in \Omega$, where Ω is the possible world states; and μ is knowledge or the "prior" about the world, $\mu \in \triangle(\Omega)$, the set of possible probability distributions on Ω.

A power player can send a signal to the utility maximizer, changing his μ in an attempt to change his choice of e. Do do this, he has to send both a signal and the likelihood of a signal under each possible world state. This is Bayes' theorem:

$$P(H|D) = \frac{P(D|H)P(H)}{P(D)} \tag{5.11}$$

$$\mu_n(\omega) \propto P(s|\omega)\mu(\omega) \tag{5.12}$$

The posterior μ_n is proportional to the probability of the signal s given some potential world state times the probability of that world state under the prior μ. The question is, how does a utility maximizing agent verify the signal s and the meaning of s, $P(\cdot|\omega)$? By definition, he does so in a way which maximizes his utility.

He is therefore an epistemic pragmatist a la William James. As an epistemic maximizer, he will trust the information if the information improves his utility. If it lowers his utility (we assume it wouldn't be exactly the same if he changes his action), he will reject the update. Doing otherwise would mean he is not a utility maximizer.

It follows from this that, where deception is designed as lying for the purposes of extracting resources from others, rational Bayesian utility maximizers will not be decieved in the long run, because they would revert updates that failed to give their promised utility returns.

Alpha and Credit Streams

We can model income by understanding what determines a person's credit stream, $\frac{d\$}{dt}$. First, let's consider credit as a function of time, $\$(t)$. We are interested in how these functions vary between individuals – understanding this will tell us how credit streams vary, which will tell us how marginal influence varies. We could try this:

$$\$(t) = \alpha_i \$_i(t-1) + \alpha_l \$_l(t-1) + 0\$_w(t-1) \tag{5.13}$$

Where

$$\$(t) = \$_i(t) + \$_l(t) + \$_w(t) \tag{5.14}$$

And $\alpha_i \$_i(t-1)$ is credit allocated into investments at time t-1 times the return on investment, l is for labor, and w is wasted money.

But it might make more sense to combine the terms and just have this:

$$\$(t) = \alpha\$(t-1) \tag{5.15}$$

This can represent a person's best return on investment given the optimal allocation of all of their current credit. This model encompasses all imaginable activities – labor can be conceived of as taking an investment of personal calories, housing, a car, even capital. Putting excess money in the stock market takes time, even if it's only a minute – that's labor. Starting a business might take up all of your labor time just like digging a ditch, but unlike digging a ditch, starting a business takes more seed funds, e.g. $\$(t-1)$.

This model indicates that credit functions vary in just two key ways: alpha and starter credit. This makes sense, alpha very generally denotes skill and natural differences, but it's hard to make $\$20,000,000$ starting with $\$50,000$. It's not as hard if you're starting with $\$19,000,000$.

This model also follows from some basic assumptions: everyone maximizes their alpha and realizes their maximum potential alpha given their starter credit for each time period, and everyone has the same amount of time to spend to allocate said credit. If this is the case, then any difference between credit functions between two people starting with the same amount of money must be in alpha. Furthermore, anyone's alpha given a starting amount of credit over a time period is just $a(\$(t-1)) = \frac{\$(t)}{\$(t-1)}$, where alpha becomes a function of starter credit, since it can vary with starter credit (if you can make $150,000/yr on $50,000 of housing and calories, your alpha given $50,000 is 3, but it does not follow that you can achieve a return of 3 on the $100,000 extra you have to allocate the next year. It is more likely you put it in the stock market and get standard returns on it. Others will blow it all and their alpha will plummet to 1).

So, based on these assumptions, we get:

$$\$(t) = \alpha(\$(t-1))\$(t-1) \tag{5.16}$$

This implies:

$$\frac{d\$}{dt} = \alpha_{-1}(\$(t))\$(t) \tag{5.17}$$

Where

$$\alpha_{-1}(\$(t)) = \alpha(\$(t)) - 1 \tag{5.18}$$

Conclusion: The Limits of Theoretical Economics

We have attempted to understand social power rationally using the key logical tool the social sciences has at the moment. This tool has severe shortcomings, including being un-empirical and not apparently biological.

Nonetheless, the preceding sections have revealed an interesting way of seeing social power that might be able to be empirically verified. Social power is above painted as rational and optimal. Deception makes little sense under rational utility assumptions (indeed, in the memetics appendix, the evidence suggests deception is very weak force in society).

Why do power differences exist if not deception? Differences in natural merit leading to greater importance of some people to the collective than others.

Imagine there is a death curse in a town that kills 3 people once per year. If there is one man in the entire world who can save these people, this gives him a measureable amount of power in terms of lives. He can refuse to save those who he dislikes or demand the sacrifice of someone he dislikes in exchange for saving the others. He could not demand such sacrifices if he did not have the unusual power.

It only makes sense biologically that this would emerge – it's a better equilibrium to sacrifice an average member of your village on the demand of a medical authority each year in exchange for him saving 3 average members. The village is better off losing one than 3.

If one person is as productive as 5, that gives him power over at least 4 rationally speaking. We are motivated here then to look at social power as evolutionarily rational (based on above average abilities),

limited, and measureable. We endeavor to measure it with money, because money represents resources which represent energy which life needs to reproduce. In a sense, taking 5 incomes from the village, which has only n incomes, leaving 4 other people to starve to death is the same as demanding their sacrifice, in the short run. This we have seen throughout history and we theorize that this is core to the heart of what social power is.

The idea is that humans have evolved to divide resources unevenly along rational lines for the benefit of the species, because some people are economically better than others and a richer species equals a fitter species under most conditions. This is why capitalism is unequal and brings riches and communism is the opposite, mostly.

Many look at social power like it is top-down, deception or luck based. But this view encourages one to look at it as a mass process operating mostly at the individual level linearly. Powerful people are like beings with invisible links of credit to other individuals who except those links because it will benefit them individually. A general is powerful because he is a good commander and his men could find no better and neither could they find anything better to do with their lives. A dictator is powerful because he is a good decision maker who is genuinely popular among his group of supporters.

We will use this view throughout the rest of the chapter to try to understand elites and class differences and how power is distributed in the population and why.

Appendix: Defining slavery

Let $U(E_d)$ be the utility of the default environment E_d. The default environment can be defined as the environment where the boss in relationship r was never born. Someone enters into a relationship of *free subordination* when $U(E_r) > U(E_d)$ where E_r is the environment which includes the relationship and when the cost of reverting to the default environment $C(E_r \longrightarrow E_d) = 0 = U(E_d) - U(E_r)$. Under free exit, the subordinate should depart the relationship when the juice is no longer worth the squeeze.

When $U(E_d) > U(E_r)$, there is a cost of leaving, as otherwise the subordinate would have already left. $C(E_r \longrightarrow E_d) = U(E_d) - U(E_r) > 0$. We can conceptualize the cost as follows: E_r represents the environment with a consensual relationship. As soon as consent is revoked, E_r transforms into E_d^*. $C(E_r \longrightarrow E_d^*) = 0$ because this transformation is merely semantic. Under free subordination, the costs of exiting the no-longer-desired relationship are null: $C(E_d^* \longrightarrow E_d) = 0$. Under slavery, $C(E_d^* \longrightarrow E_d) > 0$. In other words, the master continues to disturb the slaves default environment, modifying it to have less utility than the default environment. If the cost is feasible, the slave may initiate the process of escape, "paying off" the cost of transitioning to the default environment from the coercive environment. Sometimes the cost may be only partially payable, such as when a slave can escape but can't stop his master from hunting him; sometimes it is totally unpayable, like when a prisoner can't escape from prison. The key lesson is that the master essentially degrades the default environment of the slave, making the slave choose between cooperation or costly pollution that may be impossible to clean up.

Thus, analyzing slavery comes down to imagining a social counterfactual without the enslaver, and assessing the ways in which the enslaver pollutes the environment of the slave.

You are therefore enslaved to anyone who has *positive death alpha*. In other words, you would be better off if they died. They extract from you by polluting your environment and offering to pollute it less if you give them things, like labor or obedience or tax dollars. An example is a medieval knight who could kill a whole village if he isn't given tribute. He might generate a lot of credit going around threatening villages. They would be better off if he had a heart attack. In contrast, there is *negative death alpha*, where one promises to improve your environment in exchange for credit. An example is someone inventing the iPhone and offering to let you have one for $500. Through their power to create, they might generate a lot of credit, but as creators, people would be worse off if they died.

A second way of categorizing alpha are by the types of actions involved. In general, it seems that a good typology for this is violence, deception, and wealth creation. As the techno epoch changes, variation in the marginal influence of these types of alpha changes. For example, the firearm lowered the marginal influence of an advantage in violence capacity, because it equalized the potential violence output of the population. If violence and deception are positive death alpha, and wealth creation is negative death alpha, then when the capacity for wealth creation increases in its share of marginal influence, we should expect society to improve, as it has.

5.2.3 The Ruling Class: Domhoff's Evidence for the Patriciate

Introduction

G. William Domhoff is a professor at the University of California, Santa Cruz, and a long-time power researcher. His career started in the 1960s and was massively inspired by C. Wright Mills and his work *The Power Elite.* Domhoff runs a website called *Who Rules America,* and writes a textbook under the same name, which is on its 8th edition.

This review focuses on the content on his website, which is broad and, by our estimation, more complete than any one of his books. We have, however, read the 7th edition of his book *Who Rules America?* as well as his book *Diversity in the Power Elite.*

Domhoff's model

Previously, we considered the logical aspects of individual power. But those with power and wealth (the same thing?) tend to associate with others at their level much more than random. Domhoff provides evidence for this fact of coordination and describes it.

We consider Domhoff's work to be a foundation of Patriciate theory, the biological theory of ruling classes.

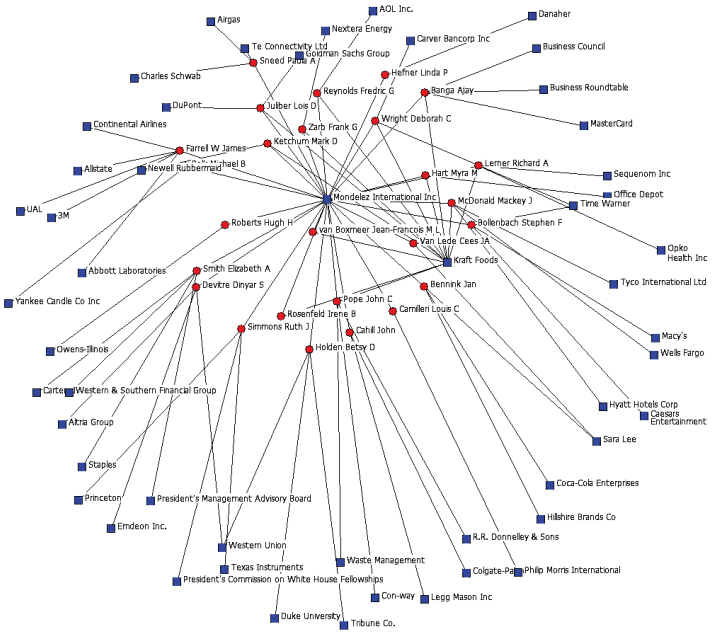
In Domhoff's formulation, the Patriciate can be uncovered by four power metrics. Three of these are key; they are the "who sits?" metric, the "who benefits?" metric, and the "who wins?" metric. The fourth metric is reputation for power. Domhoff's research focuses on the first three metrics, and among those the "who sits?" metric recieves the most of his attention, following in the footsteps of Mills.

The "who sits?" metric looks at who has formal positions of power in institutions of great influence. "Who benefits?" just asks who has the most money, and "who wins?" looks at direct policy influence, trying to see what people get their way when there is conflict over what policies to implement. Domhoff claims that one class of people have the highest scores on all three metrics, and that (in our terms), these people are the Patriciate. This is consistent with the idea that money and power are the same thing – the ruling class rules and also always has the most money.

The way he uncovered this was by starting with the "who sits?" metric. He simply looked at official positions of power in big businesses, government, and what he calls the policy planning network (think tanks, academia, and planning groups). He documented institutional interlocks in this network – this is the phenomenon where one member of an institution can be a member of several others. For example, the President of Harvard might sit on the board of directors at Twitter and might be a fellow at the Hoover Institute. This creates interlocks between Twitter, the Hoover Institute, and Harvard. These are institutional interlocks; personal interlocks can also be examined; these are, for each person, the people who belong to the same organization and oneself. The president of Harvard in this instance would be considered to be connected to the other directors at Twitter, the other fellows at the Hoover Institute, and anybody else of concern at Harvard. Obviously, a whole network is created with this approach. Twitter might be connected to the Hoover Institute, Harvard, Columbia, Visa, Salesforce, and more. The President of Harvard would then be only one degree of connection away from the people at Visa.

Under the pluralist system many laymen imagine, there should be few connections. Powerful institutions should tend to form islands. Maybe Twitter is connected to a few other newer Big Tech companies, but surely Big Tech as a whole is not well connected to every other giant corporation, government positions, think tanks, and academia. More ideally, each company should tend to be an island unto itself. Many people imagine that if they just work hard and rise through the ranks, they might be a CEO one day. If they are aware of what a board of directors is, they might also imagine that they could rise to that position as well, through merit, under the pluralist, decentralized democratic system. Mondelez Inc. executives and leaders should be people who have worked at Coca-Cola for decades. They are not expected to be connected to dozens of other corporations, in a giant, well connected network, with massive over-representation in government, policy planning networks, and little-known, upper class social clubs.

Domhoff is not a pluralist, because he did not find what was just described. Instead, he found a cohesive, well-connected, super-rich ruling class that also constantly wins its policy battles.



Above is a small taste of what Domhoff found. It is a visualization of just the connections of the Mondelez Inc. network taken from Domhoff's website. It shows institutional connections ranging from Goldman Sachs, Princeton University, the Business Roundtable (a power policy planning group for the Patriciate few have heard of), Mastercard, TimeWarner, Duke University, and more.

Domhoff summarizes the totality of his data in tables using centrality scores. These simply measure which institutions have the most well connected members. They are a decent, but not infallible, metric of power.

Table 2: The 15 most central organizations in the corporate/foundation/ think tank/policy-planning group/university/charity/advisory committee network.

Organization	Sector/Subsector	Centrality score
Committee for Economic Development	Think Tank	140.81
University of Chicago	University	3.66
Conference Board	Think Tank	3.60
Verizon	Business	3.29
Proctor & Gamble	Business	3.21
National Bureau of Economic Research	Think Tank	3.01
Network Reliability and Interoperability Council	Government Advisory Board	2.41
President's National Security Telecommunications Advisory Committee	Government Advisory Board	2.38
Allied Signal	Business	2.36
Exxon Mobil	Business	2.36
President's Export Council	Government Advisory Board	2.32
Columbia University	University	1.66
Ford Foundation	Foundation	1.66
Sara Lee Corporation	Business	1.66
National Petroleum Council	Government Advisory Board	1.66

Above is a table showing the most central institutions in a data set containing top corporations, foundations, think tanks, policy planning groups, universities, charities, and federal advisory committees. The latter type of institution are not well known. They are boards which the executive branch erects for advice on executive policy. They are much more likely to be filled with rich, ruling class members than with the average American. In fact, Domhoff reports they are basically filled with either academic experts or corporate executives. Verbatim:

> Another recent study used a comparison of committees with open or closed meetings to test various theories concerning their role (Karty, 2002). It first of all found that 58% of all federal advisory committee members in the years from 1997 through 2000 were from universities and independent research institutes, reflecting the large role of professors and

researchers in reviewing scientific grant proposals and in providing advice on medical and technical issues. Another 18% of committee members were from corporations or business trade associations. They served on very different committees than the professors and researchers. Another 13% of members came from the government. The remainder came from a wide range of areas, including nonprofit organizations, foundations, public interest groups, and trade unions. ...

A study of high-level executives from the largest 50 financial corporations and largest 150 non-financials revealed that 72% of the companies had an executive on at least one advisory committee in 1973, with the figure falling to 47.5% in 1977 (Priest, Sylves, & Scudder, 1984). The researchers suggest that the decline was due to the legislation leading to greater publicity for committee members. When they looked at business representation by executive department, they agreed with Useem (1980) on state, defense, commerce, and interior, but added the Department of Treasury and the newly founded Department of Energy to the list. In fact, business involvement was greatest in 1977 with the various agencies that were put into the Department of Energy.

Domhoff also shows the centrality of just business organizations:

Table 6. The 40 highest-ranking organizations in the combined Fortune 500 and policy-planning networks

1	Business Roundtable	21	National Bureau of Economic Research
2	Business Council	22	Chevron
3	Committee for Economic Development	23	Deere
4	Brookings Institution	24	Eli Lilly
5	Center for Strategic and Int'l Studies	25	General Electric
6	Institute for International Economics	26	Pfizer
7	National Association of Manufacturers	27	3M
8	Atlantic Council	28	AT&T
9	Chamber of Commerce	29	American Express
10	Council on Foreign Relations	30	Boeing
11	Aspen Institute*	31	FedEx
12	Marathon Oil	32	Medtronic
13	American Enterprise Institute	33	Aetna
14	Caterpillar	34	Coca-Cola
15	IBM	35	ConocoPhillips
16	RAND Corporation	36	General Mills
17	United Technologies	37	McDonald's
18	Alcoa	38	Verizon
19	Conference Board	39	Wells Fargo
20	Ford Motor	40	Abbott Laboratories

*Although the Aspen Institute is usually listed as a think tank, it does not issue specific policy recommendations with a corporate imprimatur and is best described as a general discussion center.

And the role of foundations, both their connections with the broader network and their funding of think tanks:

Table 7: Foundation funding of the top 50 think tanks, 2003-2012

foundation	total amount	grants	% of total
Bill & Melinda Gates Foundation	$264,045,194	128	13.1
Ford Foundation	$142,322,132	378	7.0
The John D. and Catherine T. MacArthur Foundation	$92,616,000	172	4.6
The William and Flora Hewlett Foundation	$84,030,190	151	4.2
Carnegie Corporation of New York	$74,421,800	181	3.7
The Rockefeller Foundation	$69,752,237	159	3.4
The New York Community Trust	$69,414,835	383	3.4
The Annie E. Casey Foundation	$57,250,059	352	2.8
Charles Stewart Mott Foundation	$52,185,862	206	2.6
The Starr Foundation	$47,044,314	75	2.3
The Robert Wood Johnson Foundation	$45,007,450	117	2.2
Smith Richardson Foundation, Inc.	$43,725,030	307	2.2
The Lynde and Harry Bradley Foundation, Inc.	$29,909,328	289	1.5
Open Society Institute	$28,551,839	163	1.4
Alfred P. Sloan Foundation	$25,623,042	80	1.3

Table 8: Corporate and think-tank linkages for the ten largest foundations and the Rockefeller, Carnegie, and Sloan foundations for 2011-2012

rank	foundation	total trustees	trustees with corporate connections	total corporate links	think tank links
1	Gates Foundation	27	10	26	7
2	Ford Foundation	17	1	1	2
3	Robert Wood Johnson Foundation	26	5	10	3
4	Lilly Endowment	13	1	2	0
5	W. K. Kellogg Foundation	18	3	4	0
6	The Annenberg Foundation	4	0	0	0
7	Packard Foundation	19	3	13	2
8	Gordon/Betty Moore Foundation	14	1	2	1
9	MacArthur Foundation	21	2	6	2
10	Hewlett Foundation	17	2	3	2
20	Rockefeller Foundation	25	3	4	3
62	Carnegie Corporation	21	4	9	1
66	Alfred P. Sloan Foundation	18	6	12	2

The emerging picture is clearly that it's a club, and we aren't in it.

Table 1: Individuals with more than one organizational connection

number of ties	count	percentage
2 or more	3,215	35.2%
3 or more	1,701	18.6%
4 or more	837	9.2%
5 or more	390	4.3%
6 or more	195	2.1%
7 or more	106	1.2%
8 or more	51	0.6%
9 or more	29	0.3%
10 or more	16	0.2%
11 or more	10	0.1%

Above, Domhoff gives us the size of the Patriciate and its coordination-distribution. This data allows us to estimate values for "centralization" and "coordination", concepts I have written on in the past. The total size was estimated to be about 9000 people out of 350 million, and the inner component is between 1000 and 3000 people. If the average organization is a dozen Patricians strong, then the average personal connections per Patrician is probably about 20, only counting official institutional connections.

What has been established at this point is that there is a network of highly interconnected people who possess powerful official positions over society's important institutions. Domhoff proceeds to ask a number of questions about these people, such as what their personal origins are like, their demographics, their net worths, how they influence government policy, how they interact with politicians, who are not found in the network yet who make the immediate decisions of State, and so on.

Beginning with their personal origins, Domhoff investigated whether these people have something approximating a cohesive set of social norms. To Domhoff, the existence of some sort of culture is important for class consciousness, so if it does exist, this group can properly be called a social class. Domhoff found that they do have a cohesive culture, and it revolves around often being born into wealthy families, frequently going to pre-university prep schools, attending prestigious private universities, and joining exclusive social clubs as an adult.

On wealth, Domhoff thoroughly rebuts Burnham's predicted "managerial revolution:"

> This chapter demonstrates that the corporate community and the upper class are closely intertwined. Such a demonstration is important for three reasons. First, it shows there is no separation between corporate ownership and corporate control in the United States, a separation that seemed possible as the number of hired managers expanded in past decades. ... the evidence presented in the final third of this chapter shows that (1) members of the upper class own a large share of all privately held corporate stock; (2) many super-wealthy stockholding families in the upper class continue to be involved in the direction of

> major corporations through family offices, various types of investment partnerships, and "holding companies," which exist to hold the controlling stock in other companies; and (3) the professional managers of middle-level origins are assimilated into the upper class both socially and economically and share the values of upper-class owners. (Who Rules America, 8th edition, p.108).

He also discusses class-consciousness:

> Evidence for the overlap of the corporate community and the upper class is important for a second reason: research in social psychology shows the most socially cohesive groups more often succeed in arriving at consensus when asked to deal with a problem. The members are more likely to listen to each other and seek common ground because they are proud of their identification with the group, and they come to trust each other through their friendly interactions. As a classic study of the upper class in New York in the 1930s concluded: "The elaborate private life of the plutocracy serves in considerable measure to separate them out in their own consciousness as a superior, more refined element. (Ibid).

Social clubs are key for class consciousness in adults. Domhoff reports findings regarding Bohemian Grove, one of the most central clubs:

> An even more intensive study, which included participant observation and interviews, along with a membership network analysis, extended the sociological understanding of the Bohemian Grove into the 1990s. Using a list of 1,144 corporations, well beyond the 800 used in the studies for 1970 and 1980, the study found that 24% of these companies had at least one director who was a member or guest in 1993. For the top 100 corporations outside of California, the figure was 42%, compared to 64% in 1970. ...
>
> In 2008, in a study carried out for an earlier edition of this book, there were 101 directors of 116 companies among the 2,259 members. This percentage is lower than in the previous studies because it does not include guests, only members, at the Grove. (p. 127).

Going beyond Bohemian Grove, elite social clubs were traditionally segregated by race and religion. In fact, in his book *Diversity in the Power Elite,* Domhoff claims that WASP clubs disallowed Jews until the 1970s, when they were spurred by the Civil Rights movement to begin accepting outsiders. They began accepting some amount of outsiders, but Jews had already established their own parallel social clubs, which still exist to this day. Occasionally, they accept non-Jewish minorities, as one Jewish club did with Barack Obama (whose campaign was massively funded by the Jewish Pritzker family). Understandably, Domhoff mainly recounts late 20th century data on the WASP club network.

First, he states that the club network is deeply interlocked:

> An indication of the nature and extent of this overlapping is revealed in a membership network analyses of 20–30 clubs in several major cities across the country in the late 1960s, including the Links Club in New York, the Chicago Club in Chicago, the Pacific Union Club in San Francisco, and the California Club in Los Angeles. There was sufficient overlap among 18 of the 20 clubs to form three regional groupings and a fourth group that provided a bridge between the two largest regional groups. The several dozen men in three or more of the clubs, most of them very wealthy people who sat on several corporate boards, were especially important in creating the overall pattern. The fact that these clubs often have from 1,000 to 2,000 members made the percentage of overlap within this small number of clubs relatively small, ranging from a high of 20– 30% between clubs in the same city to as low as 1 or 2% in clubs at opposite ends of the country (WRA, p. 122).

Next, he establishes the link between this network and the corporate network:

> The overlap of this club network with corporate boards of directors provides further evidence for the intertwining of the upper class and corporate community. In a study in the 1960s, for an earlier edition of this book, the club memberships of the chairpersons and outside directors of the 20 largest industrial corporations were counted. The overlaps with upper-class clubs, in general, were ubiquitous, but the concentration of directors in a few

> clubs was especially notable. At least one director from 12 of the 20 corporations was a member of the Links Club, which is the New York meeting ground of the national corporate establishment. Seven of General Electric's directors at the time were members, as were four from Chrysler, four from Westinghouse, and three from IBM. In addition to the Links, several other clubs had directors from four or more corporations (Domhoff 1967 p. 26). Another study, using membership lists from 11 prestigious clubs in different parts of the country, confirmed and extended these findings. A majority of the top 25 corporations in every major sector of the economy had directors in at least one of these clubs, and several had many more. For example, all of the 25 largest industrials had one or more directors in these 11 clubs. The Links in New York, with 79 connections to 21 industrial corporations had the most (Domhoff 1975). (Ibid).

Regarding children, Domhoff gives some data on social mobility:

> Forbes, the business magazine that began publishing an annual list of the 400 richest Americans in 1982, has taken up the Horatio Alger storyline. "Forget old money," said the article that introduces the 1996 list, a theme that has been repeated since the list was first compiled in 1982. "Forget silver spoons. Great fortunes are being created almost monthly in the U.S. today by young entrepreneurs who hadn't a dime when we created this list 14 years ago" (Marsh 1996). But the Horatio Alger story is no less rare today than it was in the 1890s. In 2011, 21% inherited enough money to make the list, another 7% inherited $50 million or more, and another 11.5% inherited $1 million or more or received a significant amount of startup money from a relative to found a company. Another 22% had upper-class backgrounds or received a significant amount of start-up money for a business from a relative. Thirty-five percent came from a middle-class or lower-class background (Moriarty et al. 2012). As for the immigrants often extolled on the Forbes list, they too sometimes come from wealthy families; contrary to the stereotype, not all immigrants to the United States arrive poor (Zweigenhaft and Domhoff 1982, 2018).

Only about a third rise into the ruling class from the lower classes. This data is similar to Mills' in his 1950s book *The Power Elite*.

How many in the ruling class attend top secondary and post-secondary schools?

Table 2: Undergraduate degree from top 50 schools (*US News and World Report*, 2011) among *Fortune* 500 directors and CEOs

	Fortune 500 directors	*Fortune* 500 CEOs
White males	31.3% (n=1717)	21.3% (n=122)
White females	38.6% (n=487)	37.2% (n=43)
African Americans	24.5% (n=265)	29.4% (n=17)
Latinos	28% (n=100)	24% (n=20)
Asian Americans	34.2% (n=76)	25% (n=16)
ALL	32% (n=2491)	27.8%
	$\chi^2 = 17.90$ $df = 4$ $p < .001$ $r = -.01$	$\chi^2 = 2.87$ $df = 4$ n.s.

A big chunk, but not a majority apparently. As for elite high schools, Domhoff does not seem to give data on how many elites come from those schools directly. Instead, he tells us that as many as 80% of students from elite high schools go to elite colleges. Apparently, it's hard to find out what high schools elites went to, because, like most people, they often don't report it on resumes or public documents. Still, it follows from these figures than less than 30% of elites went to those schools, at a maximum. Obama's high school has 2700 people enrolled in K-12, which is about 280 12th graders. If 80% go to elite colleges, that's 220 people. If there are 10 of these elite high schools and they send the same amount of students to elite schools, then they send 2800 per year. This is about the size of 1.5 Ivy League school graduating classes, leaving the rest of the elite colleges for the plebs. There are 8 Ivy League schools alone, plus other top schools like MIT, Stanford, and Caltech the liberal arts colleges like Amherst, and down the line there are the Southern Ivies like Duke, Vanderbilt, and Emory, and then finally there are highly respected, large public institutions like UC Berkely, UCLA, University of

Virginia, and University of Michigan, before finally descending down the latter of typical public state schools into garbage colleges that shouldn't exist.

Domhoff claims that exclusiveness increases with firm size (WRA 8th ed, p 139):

> The findings presented in this section explain how rising corporate executives are assimilated into the upper class and come to share its values. The aspirations of professional managers for themselves and for their offspring lead them into the upper class in behavior, values, and style of life. To begin with, they are educated and trained in a small number of private universities and business schools. Several different studies reveal that about one-third of those who manage the nation's largest firms graduated from Harvard, Yale, or Princeton, and two-thirds studied at one of the 12 most heavily endowed schools (Useem 1980). People of color who are not from wealthy families show the same educational patterns as other upwardly mobile corporate executives in terms of attendance at these same schools, due, in part, to the talent-search programs discussed earlier in this chapter (Zweigenhaft and Domhoff 2003, 2018).

He also gives some old data on how many of those who make it in send their kids to top schools (Ibid):

> Upwardly mobile executives also become personally connected to members of the upper class through the educational careers of their children. As their children go to day schools and boarding schools, the executives take part in evening and weekend events for parents, participate in fund-raising activities, and sometimes become trustees in their own right. The way in which the children of upwardly mobile middle-class managers become involved in upper-class institutions also can be seen in their patterns of college attendance. This is demonstrated very clearly in a study of upwardly mobile corporate presidents. Whereas only 29% of the presidents went to an Ivy League college, 70% of their sons and daughters did so (Hacker 1961).

One can conclude that a significant minority of elites come from prestigious colleges; a smaller, though significant minority come from prestigious high schools, and two-thirds come from significant wealth, while one-third are born poor or middle class. Assuming IQ equality of everyone, as many sociologists do, it would seem that being born to money has the largest effect on joining the ruling class, and going to prestigious institutions while young has a smaller, though significant effect. It is of course not the case that people are born equal in intelligence. Later, we will see that the elite is mostly a meritocracy, meaning for the most part people with high IQs rise into it. This is foundational for the biological view of the Patriciate as an elite breeding group, a sub-ethnicity perhaps, which contains those of the high IQ breed.

There is a class-background shared by a significant portion of the people Domhoff decided to study. Most people are probably not friends with anyone who went to Harvard, much less Exeter, yet the average member of this ruling network is, if they did not go themselves. Neither the clubs, nor the schools, nor growing up rich are universal, but rates of thirty to sixty percent of people of this network having these things compared to the based rate of less than 1% in the general population is a big finding.

Domhoff has shown that these people control most of the economy and have a vast network of thought producing machinery, including corporate media, prestigious universities, and policy planning organizations like think tanks and round tables. They also often advise the federal government, especially on economic matters. In terms of the IEMP model, the idea, which Domhoff subscribes to, that four networks (ideological, economic, military, and political) are important in administering power, this network essentially controls the first two. In the US, the military is most directly subordinate to the political. For centuries American soldiers have sworn to uphold the Constitution, and the President has served as commander-in-chief. For the purposes of this review, we can consider the military to be a subset of the political. This means one question remains: what of this network's relation to the political elite? Do people from this network find themselves in public office frequently? Do politicians find themselves on director boards? Do they all belong to the same clubs? Are the corporations and the policy planning networks powerful enough to determine what politicians win elections or what politicians can say? Or are politicians different and independent from this unelected class? Finally,

what is the legislative win record of this ruling class? Do politicians do what they want while legislating and issuing executive decisions, and if so how frequently and why?

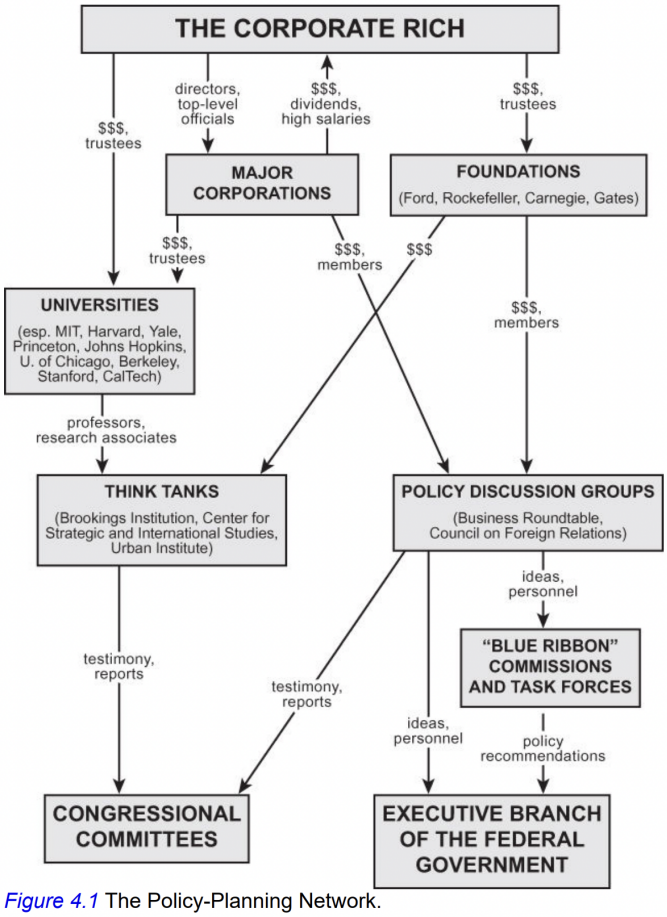


Figure 4.1 The Policy-Planning Network.

Above is Domhoff's overall view of the system. He says, in this regard,

> Who rules America? The owners and managers of large income-producing properties; i.e., the owners of corporations, banks, other financial institutions, and agri-businesses. But they have plenty of help from the managers and experts they hire.

The above chart shows how the corporate community influences the decisions of the government at any given point in time. It does no show the candidate selection process or the existence of members of the corporate rich in public office.

Distinct from the ruling class is the Power Elite. The ruling class is pseudo-organic for Domhoff, while the Power Elite is like their shadow-state. He says:

> The foundations, think tanks, and policy-discussion groups in the policy planning network, in concert with the large corporations and financial institutions in the corporate community, provide the organizational basis for an institutionalized leadership group for the corporate rich. This leadership group is called the power elite. The concept of a power elite makes it possible to integrate class and organizational insights in order to create a more complete theory of power in America. Once again, as in the case of the boards of directors of corporations, the key point is that any differences in perspective between class and organizational concerns can be taken into consideration and worked out in meetings of the boards of trustees of the nonprofit organizations in the policy-planning network, where wealthy owners and CEO's from major corporations meet with the top employees of the nonprofit organizations.

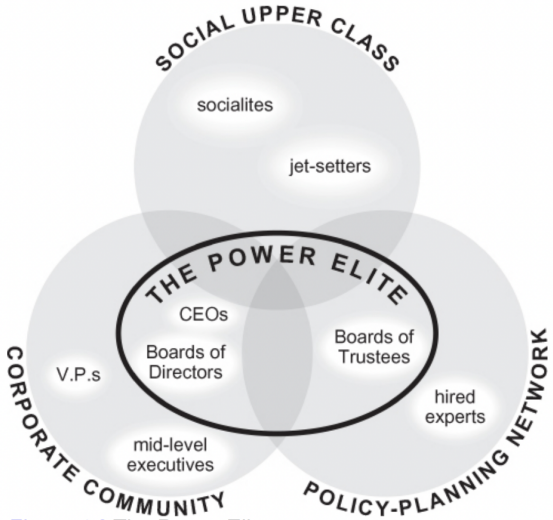


Figure 4.2 The Power Elite.

On legislative wins, Domhoff says the following (Ibid, p 188):

> Even when a majority clearly expresses a vigorous preference for one or another alternative concerning a specific piece of legislation, it is not usually adopted against the opposition of the corporate community. Instead, a large body of evidence suggests the majority's opinion is often ignored. This point is demonstrated historically by the conservative directions taken by the Carter and Reagan administrations from 1978 to 1983, even though a majority of people remained liberal on many of the issues being discussed: "Throughout that period the public consistently favored more spending on the environment, education, medical care, the cities, and other matters, and it never accepted the full Reagan agenda of 'deregulation'" (Page and Shapiro 1992, p. 117). Another detailed analysis of survey data, which also related to the alleged rightward shift in public sentiment in the 1970s and 1980s, found little support for this repeated assertion by party leaders and media outlets, except on issues related to crime. Democratic and Republican leaders embraced conservatism in the 1970s, the researcher concluded, but the American electorate did not follow their lead (Gold 1992).

There is a key study on this from 2014 [45] showing this to be the case on a ton of issues. The economic elite's opinions predicted policy outcomes, and the public's opinions did not. However, as we will discuss later, this has failed to reproduce regarding other issues [46].

Domhoff cites this study and another (Ibid):

> These past findings are reinforced by a comprehensive analysis of thousands of questions drawn from several hundred opinion surveys, which were carried out primarily between 1981 and 2002. The analysis was augmented by questions from surveys from 1964 to 1968 and 2005 to 2006. This book-length study discovered the American government was responsive to only the "most affluent citizens" on issues of taxes, economic regulation, and social welfare: "the preferences of the vast majority of Americans appear to have essentially no impact on which policies the government does or doesn't adopt" on these issues (Gilens 2012, p. 1, Gilens and Page 2014). There are too few high-income respondents in standard surveys to determine whether or not this conclusion holds for the top 1–3% of citizens, so the definition of the most affluent citizens includes the top 10%. A further refinement of this pathbreaking study, which utilized three general social surveys, had a large enough sample size to compare the top 4% of income earners with the remaining 96%. It concluded public influence is limited to that even smaller percentage of the income ladder (Page and Hennessy 2010).

The ruling class gets its way electorally. In fact, Domhoff claims they have never lost on unions and other topics for generations. The only thing Domhoff thinks was potentially not a product of the

ruling class is the Civil Rights movement. His statements on this are circuitous, however – he generally avoids the topic, and cites material discussing how the corporate community had prepared for Civil Rights years prior to its arrival. He also talks about how Civil Rights passed because Republicans in congress betrayed Southern Democrats and the behest of business leaders.

The ruling class also shapes public opinion and directly interferes in elections. On public opinion, as I have shown in my essay on centralization, the US media is highly centralized. Something around 95% of it is controlled by five corporations. The internet is hardly loosening this grip – Big Tech censorship gets worse by the day, and according to Domhoff the Big Tech leadership network is integrated with the wider ruling class (Ibid). In fact, today my Twitter account was banned and hidden for posting an ilicit infographic about who controls the media!

On candidate selection, and who politicans are, Domhoff says (Ibid, p 256):

> What kinds of elected officials emerge from a candidate-selection process that narrows down to two political parties and puts great emphasis on campaign finance, personal image, and name recognition? The answer is available from numerous studies. First, politicians come from the top 10 to 15% of the occupational and income ladders, especially those who hold the highest elective offices. Only a small minority was from the upper class or corporate community, but in a majority of cases, they shared a business or legal background in common with members of the power elite. Between 1950 and 2010, the 10% of the workforce in business or law contributed 75% of the members of Congress, whereas less than 2the members of Congress were former blue-collar workers or union officials (Carnes 2012, p. 6). Nonetheless, politicians feel a need to stress the humble nature of their social backgrounds whenever it is possible. ...
>
> In the Roll Call article reporting on their February 2018 analysis, which was based on 2016 financial disclosure statements for those who were in Congress as of January 1, 2018, David Hawkings concluded: "The people's representatives just keep getting richer, and doing so faster than the people represented. The cumulative net worth of senators and House members jumped by one-fifth in the two years before the start of this Congress, outperforming the typical American's improved fortunes as well as the solid performance of investment markets during that time." More specifically, Hawkings explained that in this current report "the median minimum net worth (meaning half are worth more, half less) of today's senators and House members was $511,000 at the start of this Congress, an upward push of 16 percent over just two years — and quintuple the median net worth of an American household, which the Federal Reserve pegged at $97,300 in 2016."

Politicians are upper middle class. How are they controlled? Domhoff discusses campaign finance but gives very little data. This MSM source suggests that the top 100 zip codes give 20% of the campaign dollars, and 12 people give 7.5%. There is also the special interest process:

> The special-interest process, as noted at earlier points in the book, consists of the many and varied means by which wealthy families, individual corporations, and business sectors gain the tax breaks, subsidies, regulatory rulings, and other governmental assistance they need to realize their narrow and short-run interests. The process is based on frequent personal contact with elected officials and their staff. Its most important ingredients are the information and financial support the lobbyists have to offer. Lobbying is practiced by people from a wide range of occupational backgrounds: former elected officials, employees of trade associations, experts who once served on congressional staff or worked for regulatory agencies, corporate executives whose explicit function is government liaison, and an assortment of lawyers and public relations specialists (Luger 2000, Schlozman et al. 2005, Schlozman, Verba and Brady 2012). In 2012, for example, 521 former Congressional and agency employees worked for the TV/movie/music industry, 423 for the automotive industry, and 279 for finance and credit companies (OpenSecrets 2012a). At the same time, a large number of lobbyists are part of a few big firms that are major businesses in and of themselves, with revenues of several hundred million dollars each year. Several of these lobbying firms, in turn, are owned by the public relations firms, which were discussed in Chapter 5 as part of the opinion-shaping network (OpenSecrets 2012b).

> The special-interest process often is used to create loopholes in new legislation that was accepted in principle by the corporate community. "I spent the last seven years fighting the Clean Air Act," a corporate lobbyist in charge of PAC donations for his company told researchers. He then went on to explain why he gave money to elected officials who voted for the strengthening of the Clean Air Act in 1990: "How a person votes on the final piece of legislation is not representative of what they have done." Most members of Congress voted for the act, he continued, "But during the process some of them were very sympathetic to some of our concerns" (Clawson et al. 1998, p. 6). Translated into results, this means there were 40 pages of exceptions, extensions, and other loopholes in the 1990 version of the act after a 13-year standoff between the Business Roundtable's Clean Air Working Group and the liberal-labor alliance's National Clean Air Coalition.
>
> Intricate and arcane tax breaks are one of the most important aspects of the special-interest process, starting with a variety of legal loopholes, which save individuals and families many hundreds of millions in taxes each year (Johnston 2003, 2007). In addition, corporations also benefit from similar strategies. In 2020, 55 corporations, including Fed Ex and Nike, did not pay federal taxes, and a few of them received tax rebates (Gardner and Wamhoff 2021).

This is how the ruling class has structured the tax system such that it is progressive (taxes rich people more) up until the 99.5th percentile, where taxes suddenly regress (they are lowered compared to the 90th-99th percentiles).

Next is the policy making process. Bills are hard to write; the general public can't do it. Specialized organizations do.

> The impact of major policy-discussion groups on legislative outcomes is demonstrated systematically in a study of 295 policy statements that representatives of the Council on Foreign Relations presented to several different Congressional committees between 1982 and 2002 (Luther-Davies et al. 2020). The legislative influence of these statements was analyzed by means of a quantitative method (multivariate logistic regression analysis), which can determine the relative importance of several organizations in effecting a legislative outcome. The study therefore could compare the relative success of the CFR with that of 24 interest groups (mostly business trade associations) and a sample of well-off citizens, most of whom were very conservative (Gilens and Page 2014, Page and Gilens 2017). In addition, the positions taken by the CFR, the interest groups, and the wealthy conservatives were compared with the majority opinion of the general public on each issue, as determined earlier in a comprehensive analysis of thousands of survey questions (Gilens 2012). The results from the multivariate analysis agreed with earlier studies that showed public opinion has no influence on the legislative outcome on a wider range of policy issues (Gilens 2012, Page and Gilens 2017). Nor did any of the 24 interest groups have any impact. However, the study did find that the preferences of the CFR were consistent with the legislative outcomes on 75% of the proposals. When the CFR and the welloffconservatives shared the same policy preferences, their shared preferences prevailed on 89.5% of the issues (Luther-Davies et al. 2020, pp. 18–19).

Finally, elites are appointed to important positions:

> There have been numerous studies of top-level governmental appointees. They are unanimous in their conclusion that the majority in most Republican and Democratic administrations have been corporate directors and their corporate lawyers, or members of boards of trustees in the policy-planning network, and hence members of the power elite. For example, 64% of the appointees to the major cabinet, diplomatic, and court posts were members of the corporate community from 1934 to 1980, but with only 47% during the New Deal, and most of them had connections to the policyplanning network (Burch 1980). A second study, which focused more narrowly on the 205 individuals who served in presidential cabinets between 1897 and 1972, reported that 60% were members of the upper class and 78% were members of the corporate community. There were no differences in the overall percentages for Democrats and Republicans or for the years before and after 1933 (Mintz 1975).

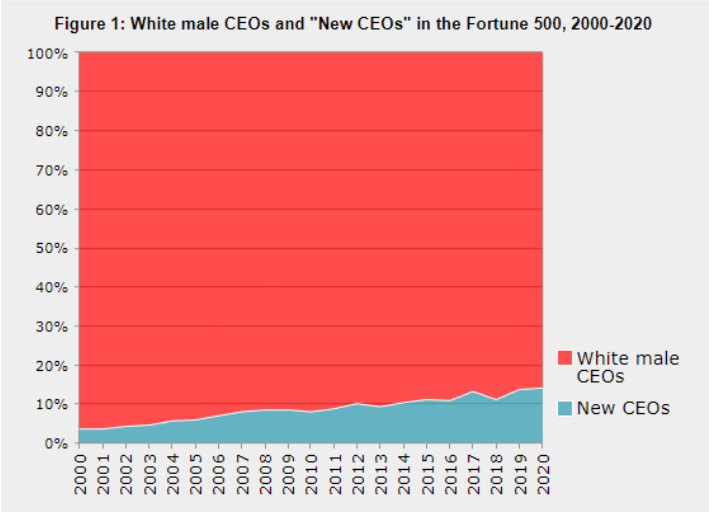
Conclusion

What can be said with certainty based on Domhoff's work? The key claim he verified is that there is a well-connected network consisting of those who hold leadership positions in top corporations, which includes the corporate media, exerts strong marginal influence over the universities or controls them directly as trustees, exerts very strong marginal influence over the foundations and policy writing organizations, and exerts strong marginal influence over politicians via money, media control, and positions on boards such as FACs. This network, defined by their virtual positions, scores extremely high on two other metrics of power: cui bono and qui vincit. They control the economic positions, are extremely wealthy, exert vast influence on thought producing organizations and politicians, and their policy wins reflect this.

This is the Patriciate. Domhoff has done great empirical work in giving us the labels for our dataset, which we now must model and understand in biological terms, a task which Domhoff is prevented from doing by his leftist political commitments.

Appendix: Diversity Data

Diversity data is also provided by Domhoff. My commentary will be sparse – but this data may help with explaining the rise of diversity ideology in the future.



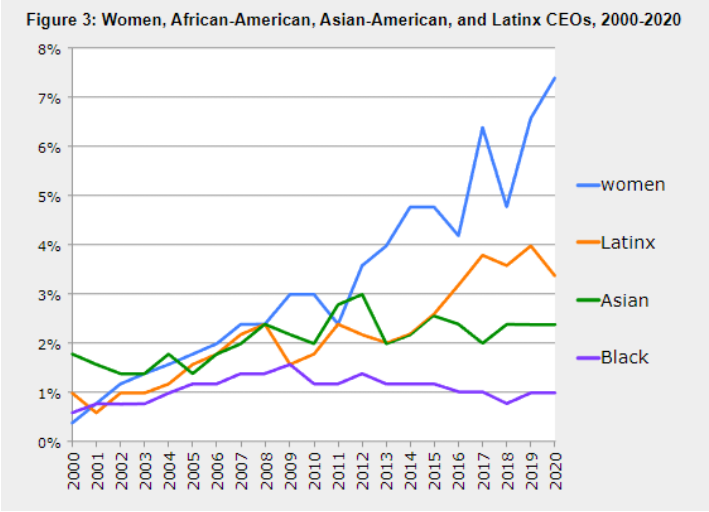


Table 2. *Fortune* 500 CEOs by ethnicity and gender, 2005 & 2015

2005

	All CEOs	Men	Women	% men
Whites	477	467	10	97.9%
Latinos	9	9	0	100.0%
Asian Americans	8	7	1	87.5%
African Americans	6	6	0	100.0%
TOTAL	500	489	11	97.8%

2015

	All CEOs	Men	Women	% men
Whites	470	445	25	94.7%
Latinos	13	13	0	100.0%
Asian Americans	11	9	2	81.8%
African Americans	6	5	1	83.3%
TOTAL	500	472	28	94.4%

Table 1: *Fortune 500* directors by race, ethnicity and gender

	% of U.S. population	% of directors	% male directors	% female directors	M/F ratio
Whites (n=3791)	74.6%	87.2%	74.4%	13.3%	5.6 to 1
African Americans (n=293)	13.6%	6.8%	5.3%	1.5%	3.5 to 1
Latinos (n=136)	16.3%	3.1%	2.4%	0.7%	3.4 to 1
Asian Americans (n=104)	5.6%	2.4%	2.0%	0.4%	5 to 1
TOTAL (n=4324)			84.5%	15.5%	5.5 to 1

Table 4: Rankings of the *Fortune 500* companies on which directors sit, by race/ethnicity

	Mean ranking
African Americans (n=282)	188.2
Latinos (n=131)	199.3
White females (n=565)	222.4
Asian Americans (n=100)	231.4
White males (n=3143)	238.6

$df = 3$, $F = 10.66$, $p < .001$.

Table 2: Percentage of corporate directors serving on one vs. multiple boards, by race/ethnicity

	1 board	2+ boards
Whites (n=3791)	82.2%	17.8%
African Americans (n=293)	67.7%	32.3%
Latinos (n=136)	73.7%	26.3%
Asian Americans (n=104)	83.7%	16.3%

Table 3: Proportions of interlocking directors by race/ethnicity and gender

	1 board only (n=3501)	2 boards (n=650)	3 or more boards (n=173)
Whites (n=3791)	89.0%	82.9%	78.6%
men	75.8%	69.4%	64.2%
women	13.2%	13.5%	14.4%
African Americans (n=293)	5.7%	10.3%	16.2%
men	4.6%	7.4%	12.1%
women	1.1%	2.9%	4.0%
Latinos (n=136)	2.9%	4.6%	3.5%
men	2.3%	3.2%	2.9%
women	0.6%	1.4%	0.6%
Asian Americans (n=104)	2.5%	2.2%	1.7%
men	2.0%	2.0%	1.2%
women	0.5%	0.2%	0.5%

Table 2.1. Jews in the Corporate Elite

Year	*Jews in the Corporate Elite (%)*	*Jews in the Population (%)**	*Source***
1900	3.4	—	Newcomer
1925	4.3	3.4	Newcomer
1950	4.6	3.3	Newcomer
1972	6.9	2.9	Alba and Moore
1976	7.0	2.7	Burck
1976	6.0	2.7	Sturdivant and Adler
1986	7.6	2.5	McComas
1986	7.4	2.5	Bennett
1995	7.7	2.3	DJN technique
2004	11.1	2.2	DJN technique
2011	8.7	2.1	DJN technique

* The figures in this column are from the *American Jewish Yearbook* and the *Encyclopedia Judaica*; prior to 1925, the estimates included only those Jews who were members of Jewish congregations, so no figure appears for 1900. The 2011 estimate of 2.1 percent is based on Ira M. Sheskin and Arnold Dashefsky, *Jewish Population in the United States, 2011* (Storrs, CT: North American Jewish Data Bank, 2011), http://www.jewishdatabank.org/studies/downloadFile.cfm?FileID=2919), 15.
** Mabel Newcomer, *The Big Business Executive: The Factors That Made Him, 1900–1950* (New York: Columbia University Press, 1955); Richard D. Alba and Gwen Moore, "Ethnicity in the American Elite," *American Sociological Review* 47 (1982): 373–83; Charles G. Burck, "A Group Profile of the Fortune 500 Chief Executive," *Fortune*, May 1976, 174–75; Frederick D. Sturdivant and Roy D. Adler, "Executive Origins: Still a Gray Flannel World," *Harvard Business Review* (November–December 1976): 125–33; Maggie McComas, "Atop the Fortune 500: A Survey of the C.E.O.," *Fortune*, April 28, 1986, 26–31; Robert A. Bennett, "No Longer a WASP Preserve," *New York Times*, June 29, 1986.

There is some other interesting information on Jews in *Diversity in the Power Elite* by Domhoff and Zweigenhaft. A massive wave of Jewish immigration from Germany and Poland occurred from 1880 to 1920 when it was closed off by the major immigration act of that decade (p. 26). Franklin D. Roosevelt was accused of being a "negro loving Jew" named Rozenfelt by Henry Ford, and 50% of Americans before WWII thought that Jews were the biggest threat to the country because they were sneaky, and therefore they should have legal disabilities, which were never given (p. 27). Attitude apparently changed because of the Holocaust narrative and anti-Nazi propaganda (p. 28). Jews were not admitted to WASP social clubds until the 1970s when the ADL and similar organizations pressured them severely. Despite this, before the 1970s Jews were known to be very active behind the scenes in politics:

> When a journalist of German-Jewish heritage, Stephen Isaacs, who grew up in Kentucky, published his book on Jews and American Politics in 1974, he reported widespread Jewish involvement in all aspects of politics, motivated in fair measure by the fear that "It could happen here." But his interviews also made clear that it seemed too risky to most Jews to run for office anywhere outside of New York in the face of lingering anti-Semitism. (p. 28).

In the mid-1970's, 50% of Yale Law School professers were Jewish, 33% of Harvard professors were Jewish, and 25% of HYPSM students were Jewish (p. 27). In 1993, Jews headed 5/8 of the Ivy

Leagues as Presidents. While WASP clubs let Jews in in the 1970s, Jewish clubs did not let in WASPs; although occasionally they allow in non-whites, like Obama (p. 28).

Jews vote 70% Democrat, including Patrician Jews, despite their wealth (p. 28). 45% of Jewish CEOs give only to Democrats and are 4.5 times more likely to give to Democrats than gentile CEOs. This pattern goes back to 1948.

> In 1968, when the Democrats raised money for a last-minute flurry of ads to tip the presidential election to Senator Hubert Humphrey of Minnesota, fourteen of the twenty- two donors who gave $95,000 or more for these ads were Jewish. In our view, the fact that Jews continue to vote Democratic, and donate to Democrats, the political party that is clearly identified with the liberal-labor coalition, is a sign that most Jews, even wealthy Jews, still feel a certain amount of wariness about the strong conservatism of the Republican Party and its clear identification with white Christians and their desire to eliminate some if not all of the barriers that have separated church and state since the founding of the country.

From 1900 to about 1950 Jews were only about three or 4% of corporations, however, they were concentrated in the media (p. 32). They did not to rise through the ranks like the Gentiles; rather, they would come in from the outside because they were experts in public relations or finance.

On the causes of increased woman diversity, the book point to Catalyst, which was founded by Jews:

> In 1977, a women's advocacy group that had been founded in 1962, Catalyst, began a program called the Corporate Board Resource. This program was designed to draw on Catalyst's database of women of achievement "to help board chairmen carefully select and recruit female directors." By the late 1970s, Catalyst was systematically monitoring the progress of women on boards and simultaneously working with boards to increase the presence of women. (p. 47).

On the origins of black diversity, the book reports:

> Obviously, the appointment of two black men to corporate boards in 1964 was a product of the civil rights movement, but why these particular companies at this particular time? ... Has it been more typical for boards to integrate because of socially conscious CEOs or as a reaction to protest? According to sociologist Sharon Collins, who has conducted extensive interviews with black executives, most were hired not because of a commitment to equality and diversity on the part of senior management, though some senior managers may have had such a commitment, but because of pressures of one kind or another on their companies. In addition to the specific protests against individual companies for particular policies, such as the refusal of some W. T. Grant stores to serve blacks at their lunch counters, federal laws created general pressures to integrate the higher levels of management. Not only did companies have to deal with overt protests, or the threat of them, but they had to adhere to newly legislated guidelines in order to obtain government contracts. Most of Collins's interviewees attributed the opportunities that opened for them to both overt protests and federal policies against discrimination. As she puts it in Black Corporate Executives, the black executives she interviewed "believe that new job opportunities emerged because of this federal affirmative action legislation and because of community-based political pressures, including urban violence." (pg. 99).
>
> James Roche, CEO and chairman at GM, who had been on his feet for most of the troubled six-and-a-half-hour meeting, made an embarrassing slip of the tongue. He was challenged by a young minister from Dayton, Ohio, about Blacks in the Power Elite GM's failure to send a representative to a television station in Dayton to respond to some of the criticisms of GM. Was GM not, the minister asked, a "public corporation"? Roche responded by claiming, "We are a public corporation owned by free, white—" At this point, as some people in the audience gasped and others laughed at his use of a well-known racist phrase, Roche lamely added, "umm—and—and—and black and yellow people all over the world." Though Roche later tried to downplay any meaningfulness to the slip and asserted that he simply had become confused by the audience's laughter, it was clearly an embarrassing episode in a long and difficult day.

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Roche's decision to pursue Sullivan for the GM board therefore is quite revealing, for Sullivan certainly differed from the other early black corporate directors both in his academic background and in his professional and political experience. It is likely that Roche and the GM board assumed that naming a highly visible and politically active minister would serve as an effective response to those shareholders who were protesting various of the company's policies.

One of Sullivan's first acts as a board member was to vote against the entire board on a controversial resolution. In its coverage of GM's 1971 shareholders meeting, the Wall Street Journal reported, "The meeting's dramatic highlight was an impassioned and unprecedented speech by the Rev. Leon Sullivan, GM's recently appointed Negro director, supporting the Episcopal Church's efforts to get the company out of South Africa. It was the first time that a GM director had ever spoken against management at an annual meeting." This challenge to boardroom hegemony may have been just what Roche needed to demonstrate GM's willingness to tolerate criticism. As Forbes magazine explained, "Such public dissent is rare in big business, and it certainly didn't harm GM's reputation."

...

People and organizations within the power elite continue to support the kinds of programs founded during the uprisings and riots in inner cities in the 1960s. In doing so, they have been able in part to offset a small part of the Republican-led decline in government support for equal opportunity. In particular, they have supported a set of corporate-sponsored programs designed to identify and educate academically talented African American youngsters who can be groomed for elite universities and possible incorporation into the power elite. These programs begin in elementary school in some areas of the country, then carry through to private high schools, Ivy League universities, and corporate internships. These programs are also financed by donations from the large charitable foundations that the corporate rich in turn influence through financial donations and directorship positions, as well as by a myriad of small family foundations that donate a few hundred thousand to a few million dollars each year. Since we have written about these programs elsewhere, with a special emphasis on the first and largest of them, A Better Chance, founded in the early 1960s by a handful of New England boarding school headmasters with help from the Rockefeller Foundation, we will provide only three examples here.

Despite hesitation among pro-integration Americans about breaking the taboo on quotas and preferences, including on the part of the social psychologists and black activists who had been working toward integration for decades, affirmative action policies were hurriedly adopted by political and business elites in 1967. These leaders within the power elite acted in haste in the face of the estimated 329 major disturbances in 257 cities between 1964 and 1968, which resulted in 220 deaths, 8,371 injuries, and 52,629 arrests. At the urging of first President Kennedy and then President Johnson at off-the-record meetings with the Business Council, at the time the most central organization in the power elite, corporate CEOs took the lead in calling on all businesses to provide more jobs for African Americans as quickly as possible. They thereby helped legitimize what they knew was preferential hiring because job programs were seen not only as the fastest and surest way to restore domestic tranquility but also as a means of avoiding larger government programs and expanded welfare benefits as well. Moreover, it was the corporate-backed Nixon administration in

1969 that created the stringent guidelines for hiring by government contractors (under the guise of "good faith" efforts at meeting numerical "targets"), which were soon attacked by ultraconservatives as a "quota" system once the upheavals and the burning of cities had subsided.

Figure 4: Women CEOs, Women in the U.S. Senate, and Women in the U.S. House of Representatives, 2000-2020

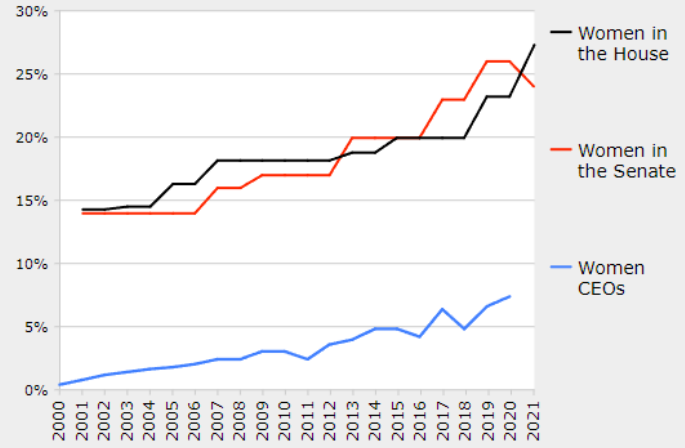


Figure 5: Black CEOs, Black members of the U.S. Senate, and Black members of the U.S. House of Representatives, 2000-2020

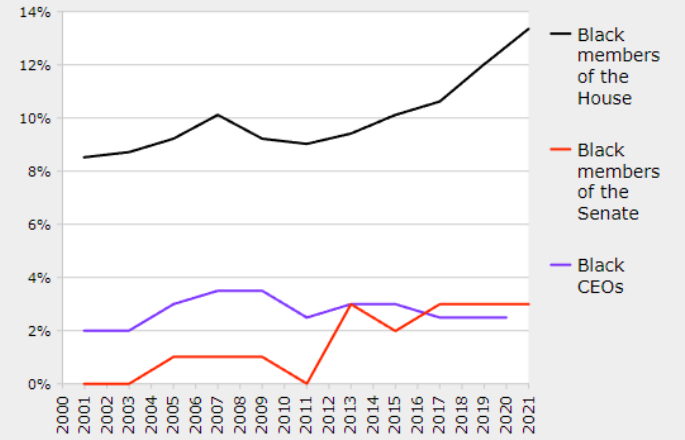


Table 2. Median net worth of members of Congress: white males and minority groups

group	net worth
White males (*n*=362)	$576,510
Jews (*n*=30)	$1,136,062
White females (*n*=67)	$972,021
African Americans (*n*=49)	$90,011
Latinos (*n*=39)	$28,008
Asian Americans (*n*=14)	$949,019
LGBT (*n*=7)	$91,004

Table 3. Proportion of each group in Congress with negative net worth

group	percent with negative net worth	raw numbers
White males	21%	77 of 362
Jews	20%	6 of 30
White females	15%	10 of 67
African Americans	41%	20 of 49
Latinos	42%	16 of 38
Asian Americans	7%	1 of 14
LGBT	29%	2 of 7

> Although this was not the case when we began doing research on diversity in the power elite,[10] Jews now are well-represented in Congress. In 1975, there were only ten Jews in the House, mostly from districts in New York, and there were three Jews in the Senate. As of 2017, there were 22 Jews in the House (5.1%), and eight in the Senate (8%). Given that only about 2% of the national population is Jewish, Jews are now over-represented in Congress.
>
> The Jews in Congress fit with the general finding that Jews have become economically successful. The list of 43 who qualified as superrich (reported net worth of more than $10.4 million) included five Jews: Congressman Jared Polis (D-CO), who is also openly gay, was #3 on the list, with holdings of at least $122.6 million; Senator Richard Blumenthal (D-CT) was #9 on the list with at least $70 million; Dianne Feinstein was #10, with at least $58.5 million; Representative Brad Schneider (D-IL), was #33 at $14.9 million, and Representative Nita Lowey (D-NY) was #41 at $10.9 million. On the other hand, six of the 30 Jews (20%) reported negative net worth.

Every Jew was a democrat.

Finally, some data on the number of corporate boards of directors that are minimally diverse: 2/3 boards have brown director and 99% have woman director. Since women are 7% total this is weird, 0.93^{12} is 41%.

5.3 Moving on from Domhoff

Domhoff showed that there is a class that largely associates with itself, that has much more power than its population would predict. I hypothesize this is because this class is highly intelligent – it selects for intelligence, it holds wealth, political sway, and media influence by intelligence, it identifies its members by intelligence, etc. It may also have above average conscientousness.

In what follows we will see if these hypotheses align with the existing data.

5.4 The economic elite is a meritocracy

What predicts wealth and power? Some claim it's all nepotism or in group preference. There are many lines of evidence showing that, to the contrary, the mundane truth is that wealth acquisition is mostly a meritocracy revolving around IQ and conscientiousness.

A recent paper studied the causal impact of being admitted to an Ivy+ university in the US. To do this, it decomposed wealth accumulation into merit and networking, essentially. Consequently, this paper gives us an estimate of how much of a meritocracy we live in[20].

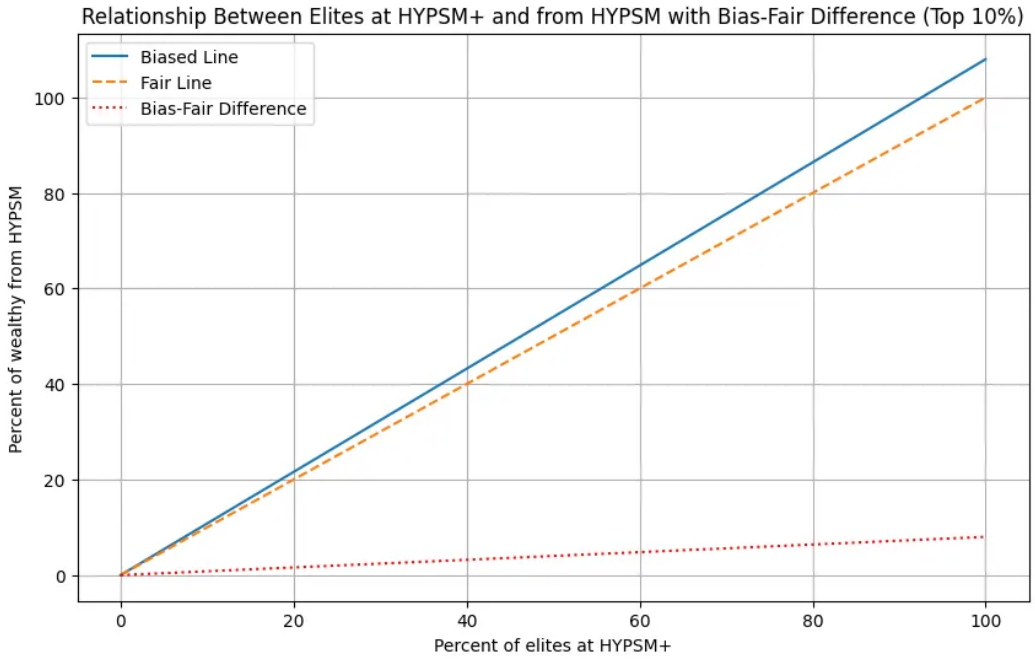
Table 4: Causal Effects of Attending an Ivy-Plus Instead of State Flagship College on Post-College Outcomes

	Treatment Effect of Attending Ivy-Plus Relative to Public Flagship			Observed Means For Highly Selective State Flagship Attendees	Implied Means Had Ivy-Plus Students Attended State Flagships	Observed Means For Ivy-Plus Attendees	Percentage Gain from Attending Ivy-Plus
	Rescaled Waitlist Admissions Design (1)	Matriculation Design (2)	Observational VA Estimate (3)	(4)	(5)	(6)	(7)
Panel A: Treatment Effect on Income							
Predicted Probability of Earning in Top 1%	4.70	4.18	5.41	8.10	10.36	15.05	45%
	(1.17)	(0.36)	(0.01)				
Predicted Probability of Earning in Top 10%	3.98	4.51	4.87	41.86	47.47	51.45	8%
	(1.78)	(0.86)	(0.01)				
Predicted Probability of Earning in Top 25%	1.70	2.75	2.91	65.56	70.04	71.75	2%
	(1.31)	(0.75)	(0.01)				
Predicted Mean Income Rank	1.20	1.36	1.66	76.49	78.58	79.77	2%
	(0.74)	(0.44)	(0.00)				
Panel B: Treatment Effect on Non-Monetary Outcomes							
Attend Elite Graduate School at Age 28	5.54	2.81	8.94	2.65	6.19	11.73	89%
	(2.74)	(0.82)	(0.01)				
Attend Non-Elite Graduate School at Age 28	-0.04	0.02	-0.06	13.22	13.85	13.81	-0.3%
	(0.02)	(1.94)	(0.01)				
Work at Elite Firm at Age 25	18.30	13.91	23.66	3.74	7.19	25.49	254%
	(4.03)	(0.82)	(0.03)				
Work at Prestigious Firm at Age 25	16.43	13.02	22.45	3.88	8.03	24.46	205%
	(4.18)	(0.85)	(0.02)				
Work at Elite Firm in Occ. that Precedes Govt. Leadership	6.08	4.73	8.02	0.83	0.36	6.44	1693%
	(2.17)	(0.31)	(0.01)				
Work at Prestigious Firm in Occ. that Precedes Govt. Leadership	4.60	4.27	6.86	0.76	0.91	5.52	505%
	(2.12)	(0.31)	(0.01)				

Notes: This table presents regression estimates of the causal effects of attending an average Ivy-Plus college relative to the mean highly selective flagship public college (listed in Appendix Table 1). The first column shows treatment effects based on the waitlist design, calculated by multiplying the waitlist TOT effect on the relevant outcome (as estimated in Figure 10 or Figure 13) by the ratio of the difference in mean observational value-added between the Ivy-Plus and nine flagship public schools and the waitlist TOT effect on value-added of college attended (for the relevant variable). In the second column, we present estimates of the causal effects of colleges based on the matriculation design, following the approach in Figure 14b; see the notes to that figure for details. The third column shows the difference in mean observational value-added (VA) between Ivy-Plus college and public flagship colleges, where observational VA is estimated using a regression of the relevant outcome on college fixed effects and controlling for a quintic parental income, a quintic in SAT scores, race, gender, and home state. Standard errors are reported in parentheses. Columns 4 and 6 show observed means of outcomes for highly selective flagship public and Ivy-Plus attendees in our pipeline sample, respectively. Column 5 shows the implied mean counterfactual outcome were Ivy-Plus students to attend the average highly selective public flagship college, calculated by subtracting the waitlist design causal effect estimates in Column 1 from Column 6. Column 7 reports the percentage difference between Columns 6 and 5. In Panel A, the outcome variables are an applicant's predicted likelihood of reaching the top 1%, top 10%, and top 25% based on their firm at age 25 and predicted income rank based on their firm at age 25 (see notes to Figure 10a for details). In the first four rows of Panel B, the outcomes are indicators for attending a highly selective (elite) graduate school at age 28, a non-elite graduate school at age 28, working at an elite firm at age 25, and working at a prestigious firm at age 25. See Section 2.5 for definitions of these outcomes. The last two rows of Panel B define an indicator for working at an elite or prestigious firm at age 25 in an occupation that commonly precedes holding a leadership position in government. We identify such occupations by looking at the top occupations that congressional members worked in prior to Congress from the Brookings Vital Statistics on Congress data (Brookings 2022), which we map to 2-digit SOC codes. We then define the outcomes in the last two rows as indicators for working at elite or prestigious firms in a (self-reported) occupation in one of these SOC codes.

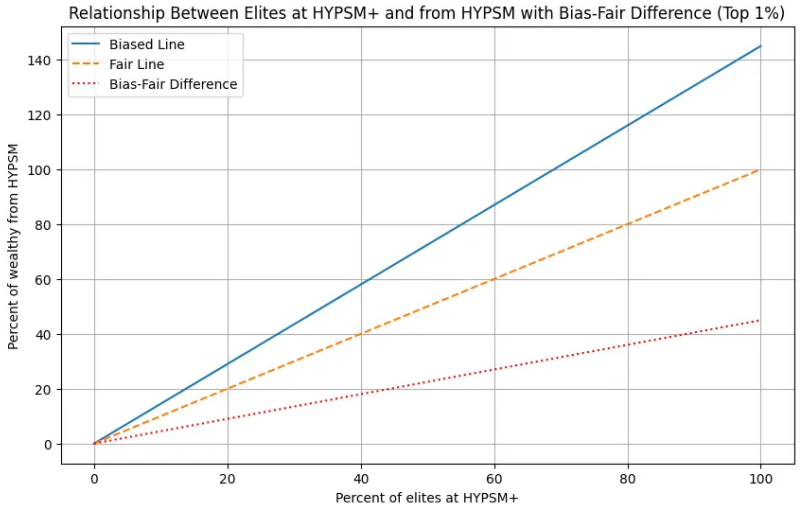
Most of the causal effect is on tail end effects, not the mean.

If we suppose that elites, who are elite by nature, go to HYPSM+ or not HYPSM+, and HYPSM+ causally increases their chance of becoming wealthy (top 10%) by 8%, and only elites become wealthy, then the line y=1.08x represents the how many of the wealthy are from HYPSM+ at different levels of elite attendance, while the line y=x is the fair counterfactual where there are no causal effects from HYPSM+ attendance; rather, only being elite by nature matters.



For the top 10%, HYPSM+ matters very little. The red dotted line is the percent of elites who are there due to nepotism. At the extreme, it's not more than 10%.

Among the 1%, the situation is a bit more nepotistic.



Here, at the extremes, up to about 30% of the elite can be there due to nepotism. That's still 70% due to merit.

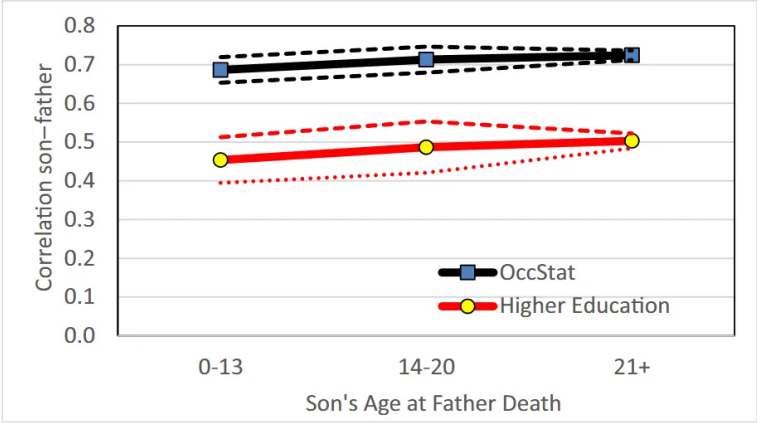
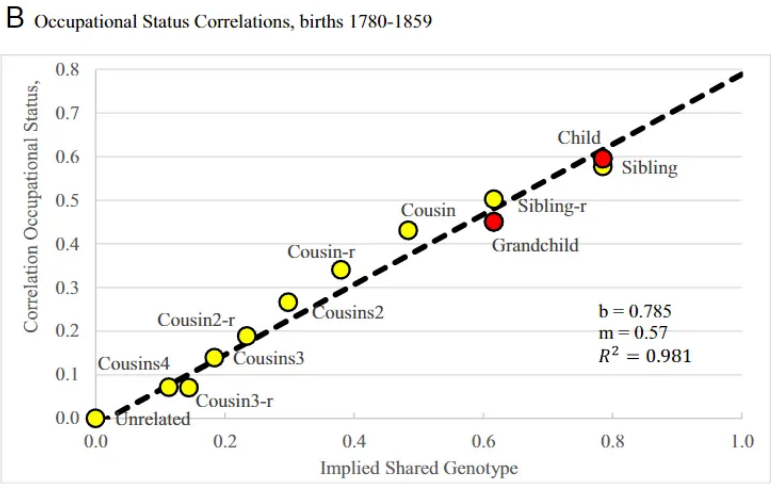


Fig. 4. Correlation with biological father and age at father's death. Notes: Sons born from 1780 to 1919. Correlation of occupational status and higher education. Dashed lines indicate 95% CIs. Families of England database.

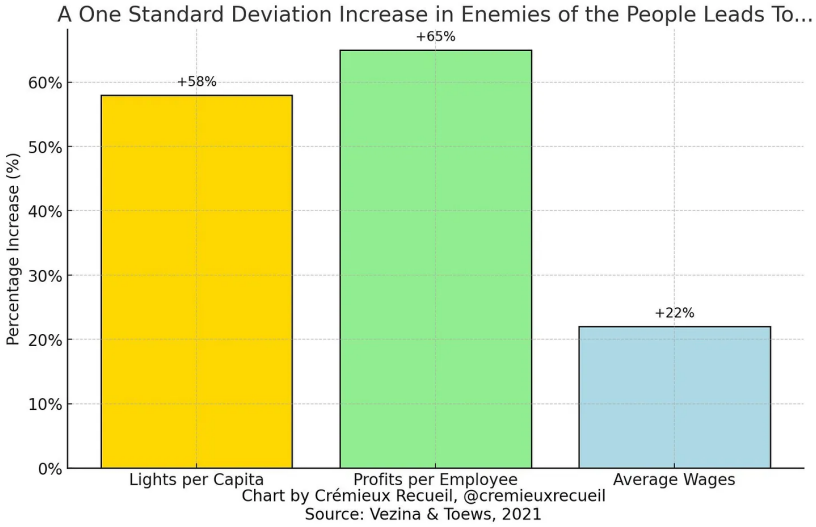
This is consistent with Gregory Clark's work on social status[21], in which he claims SES is essentially transmitted by additive genetics (natural merit) and not social nepotism. He finds, among other things, that it matters very little as to the correlation of son and father SES when a man's father dies, something nepotistically transmitted SES would not predict.

He also finds mother is as predictive as father, consistent with genetics but not a nepotistic patriarchy, and that SES correlations with other family members are tightly predicted by genetic, not social, degrees of relatedness.

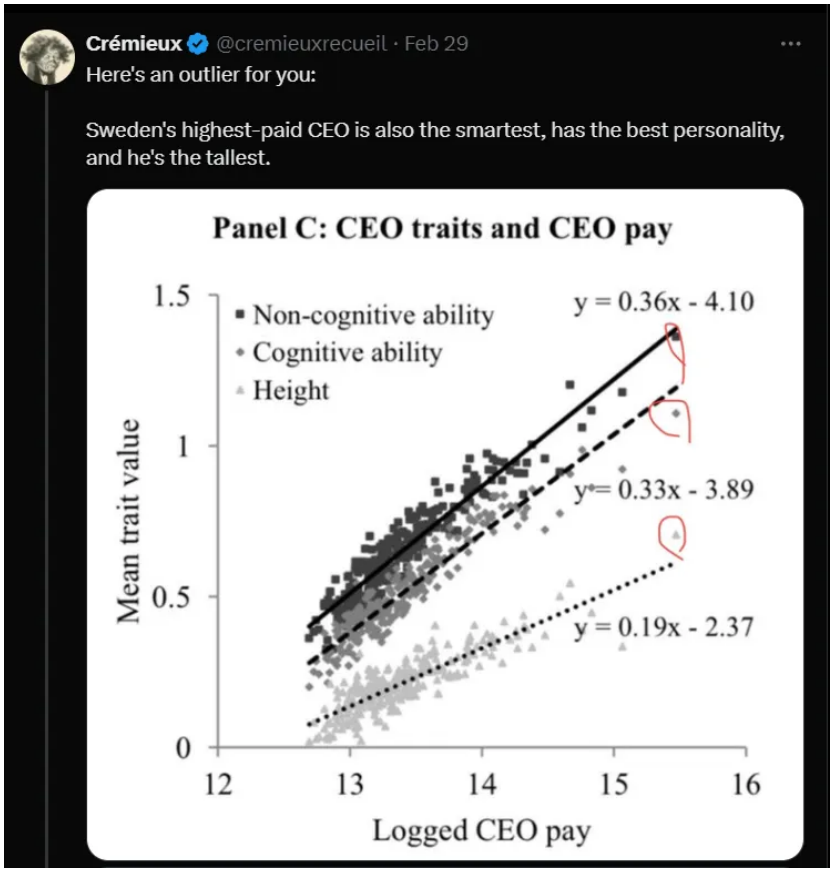


In addition to Clark, there is a type of study that backs up the genetic merit idea, which looks at Communist countries and the effects of persecuting natural elites.

This happened in China (above)[3] and the USSR (below)[23].



Now we have evidence that we live in a meritocracy, and it has something to do with HYPSM+ and genetics. HYPSM+ selects for IQ and conscientiousness, and these traits are highly heritable.



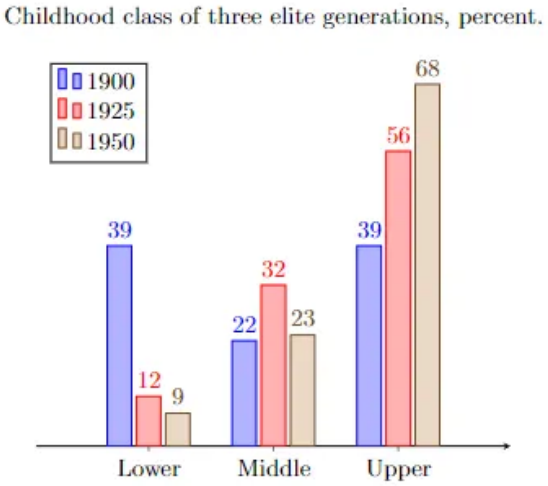
This is evidenced by a paper[1] that found that the more paid a CEO was, the more his IQ and conscientiousness were. Top CEOs are basically the top 1% of the multiplication of these traits, which makes them in the top 10% on either.

TABLE 2 Estimates from models of the general factor of the Social Progress Index. Weighted by square root of population size. Standardized betas, with standard errors in parentheses.

	SPI model 1	SPI model 2	SPI model 3	SPI model 4
		Regression residualization		
Mean IQ	0.77 (0.069***)	0.80 (0.062***)	0.78 (0.067***)	0.80 (0.062***)
95th percentile resid.		0.29 (0.060***)		0.35 (0.084***)
5th percentile resid.			−0.20 (0.081)	0.10 (0.106)
R2 adj.	0.571	0.656	0.595	0.656
N	93	93	93	93
		Direct residualization		
Mean IQ	0.77 (0.069***)	1.06 (0.087***)	0.74 (0.068***)	1.13 (0.113***)
95th percentile resid.		0.39 (0.080***)		0.46 (0.113***)
5th percentile resid.			−0.21 (0.083)	0.10 (0.108)
R2 adj.	0.571	0.656	0.595	0.656
N	93	93	93	93

* = p < .01, ** = p < .005, *** = p < .001

This goes with Smart Fraction Theory. Smart Fraction Theory[29] (see above) is basically the finding that the 95th percentile of a county's IQ distribution is more predictive than national wealth than just the mean IQ. This is interpreted to mean that a country's wealth depends mostly on the very few who produce most the wealth, and these few are overwhelmingly smart. It is well known that wealth falls along a Pareto distribution in basically every country, meaning most of it goes to very few people.



There's also a good amount of class recirculation as predicted by this theory. Every generation, the elite is only 50% to 66% composed of those born to existing elites. This is consistent with Clark showing the correlation of offspring SES with parent SES is about 0.70 at almost all times and places surveyed. This means there are the rises that one expects in a meritocracy, though it is not complete every generation since the offspring of the elite tend to be more meritorious than the offspring of the underclasses.

Based on the totality of evidence, it would seem that those people are the smart and conscientiousness. In other words, the elite is a meritocracy.

5.5 We mostly live in a democracy

Domhoff goes far in saying the ruling class controls everything. To the contrary, I believe the evidence says they have a lot more power than their size would predict, but not all of it. We mostly live in a democracy.

To see this we will discuss an exchange I had with Keith Woods. Keith Woods wrote a response to a critique of him I wrote[40]. In his response, the thesis is the following:

> Democracy does not produce responsive governments, and that all of the intellectual defences of Democracy fail when put up against what we know about voter behaviour.

I will argue that democracy actually does produce governments that are significantly more responsive than imaginable alternatives, such as random government selection or elite battle royale.

In general, the book[4] Woods is supporting is like this: once upon a time there were massive differences in human intelligence due to random variance of genes. Eugenicists promised to reduce variance by making everyone's genes the same. The mean IQ becomes 130 with a standard deviation of 2 points.

Larry Bartels and friend write a book called "Eugenics for Realists" where they argue for the "random IQ score." They note that "In one study, only about 70 percent of people had an IQ of about 130. The rest randomly had IQs in between 124 and 136." "The ideal of equal intelligence behavior is further undermined by accumulating evidence that people can be powerfully altered by lead exposure in the womb. Michael Hagen, and Kathleen Hall Jamieson tracked prospective humans' responses to changes in the lead exposure and found that lead exposure can decrease IQ by as much as 0.7 points!"

Keith Woods reads this and concludes that "eugenics does not produce egalitarian IQ distributions, and that all intellectual defences [sic] of eugenics fail when put against what we know about the IQ distribution." This parable may be cryptic to some of you. But you will understand by the end of the article.

5.5.1 How rational are voters?

To understand, we need to define voter rationality. Bartels claims that voters are completely irrational.

A voter is rational if he can, under certainty, 1) rank candidates 2) these rankings are consistent and 3) his rankings are continuous. In practice, this means a voter is rational to the extent that, under informatic certainty, he is not an RNG. An irrational voter deficient in 1 cannot even vote, at least not non-randomly. If a voter is deficient in 2, he will vote randomly over time, displaying inconsistent preferences. If a voter is inconsistent in 3, there would be no parties or party preference, and his preferences would have no pattern, effectively being random between candidates. In other words, the irrational voter is a random number generator. A voter might be ignorant, petty, small minded, and naïve, and still be rational.

Informatic uncertainty is not the same thing as essential irrationality. Some uncertainty is avoidable. Some is rational, because there is a cost to attaining information. This means that, in practice, if uncertainty is below a certain risk threshold, voters are essentially "rational" even though there is some randomness in how they vote.

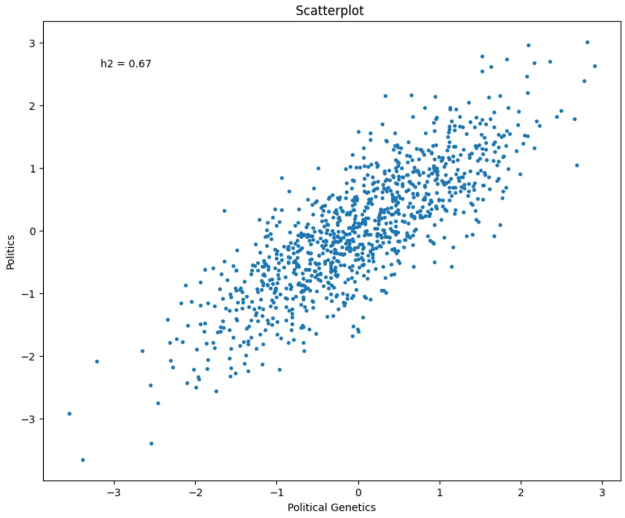
But for now we can't untangle rational irrationality and essential irrationality. Therefore, to be maximally charitable to Bartels and Keith, we will just count all randomness as essential irrationality. This will give us an upper bound for the amount of essential irrationality there really is in the voter-pool.

The key insight here is that some people might be irrational, and others might not be. Some might be more irrational than others. If there is a scale of ideology, someone who one day is on the far right and the next day is on the far left (horseshoe theory aside) is more irrational than someone who sometimes feels like a moderate liberal and sometimes feels like a milquetoast conservative.

Essentially, we can quantify rationality as political variance explained. If political beliefs are in between -3 and 3 in this society, and the average person or polity randomly votes somewhere in between -3 and 3, then there is total irrationality. If they vote on a smaller range, then we can explain some variance if we can predict what the mean of each person's range is with, say, genetics. Total rationality means we can perfectly predict how someone votes.

5.5.2 Views are stable through lifetime

Political views and party preference are mostly stable throughout an average voter's lifetime. The heritability of conservativeness is relatively high, in the range of 0.50 to 0.70[5]. That doesn't leave a lot of room for randomness especially considering that some fraction of the non-genetic variance is going to be accounted for by economic incentives. Thus voters are mostly maximizing their genetic utility when they vote.



Here is what that looks like. What this means is an average person (genetics = 0) will not vote for someone with position = 2 (an extremist to the left or to the right). Thus they are only "random" within certain bounds. This makes sense because you can predict that if Trump said the n-word and started quoting Hitler approvingly that this would completely destroy his election odds.

In other words, non-rational voter theory says a voter, come election day, is like this:

$X \sim N(0, 1)$.

They vote for any position on [-3, 3] randomly. Rational voter theory says they are actually maximizing something and therefore they are not random at all. They have no variance once you know what they maximize:

$X \sim N(g, 0)$.

In between is something like this. They vote around their genetic and economic preference with a little bit of randomness:

$X \sim N(g, 0.2)$

Where

$g \sim N(0, 1)$.

What this means is that there might be some randomness within bounds. Political scientists might find that two parties that take position .2 and position -.2 respectively randomly changed offices depending on who gets lucky. However, what they are missing is that anyone who takes position 4 will not win, because voters are not that random. In fact, people who take position 1, like libertarians, or position -1, like democratic socialists, also basically just don't win. There has to be a lot of rationality if we can predict that, no, there will not be a sweeping Libertarian Party victory in 2024 by chance. Rather it will, as usual, be a coinflip between the guy who takes position -.2 and the guy that takes position .2.

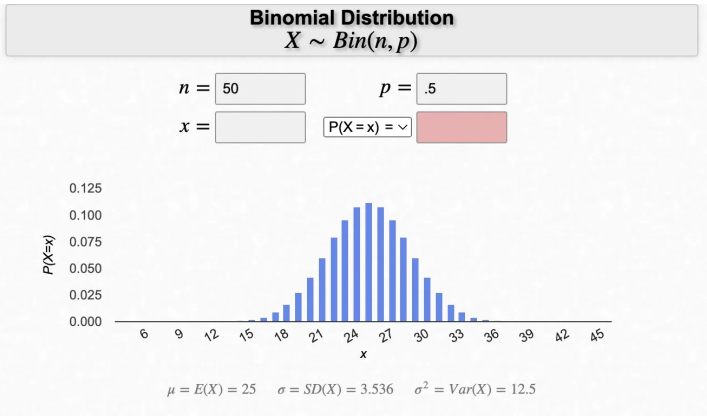
As high heritability predicts, views are also stable through the lifespan[31].

Table 3: Percent Individual-Level Change in Self-Reported Ideology between 1973 and 1997, MSS Cohort

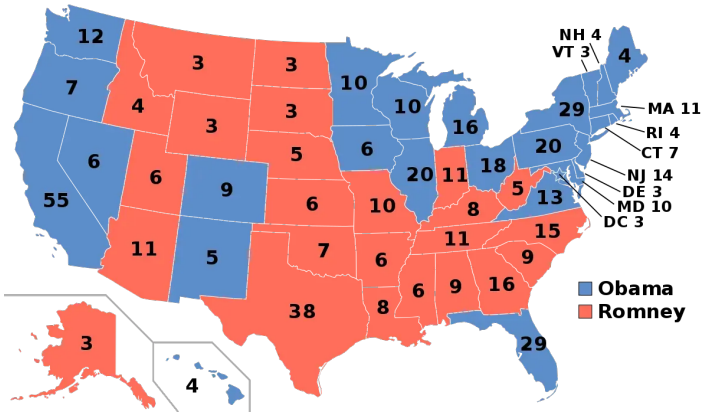
	No Change	Shifted to Moderate	Shifted to Liberal	Shifted to Conservative
Liberals	**44** (145)	**22** (72)	**--**	**34** (113)
Moderates	**48** (184)	**--**	**13** (49)	**39** (148)
Conservatives	**67** (149)	**14** (32)	**19** (43)	**--**
Total	**51** (478)	**11** (104)	**10** (92)	**28** (261)

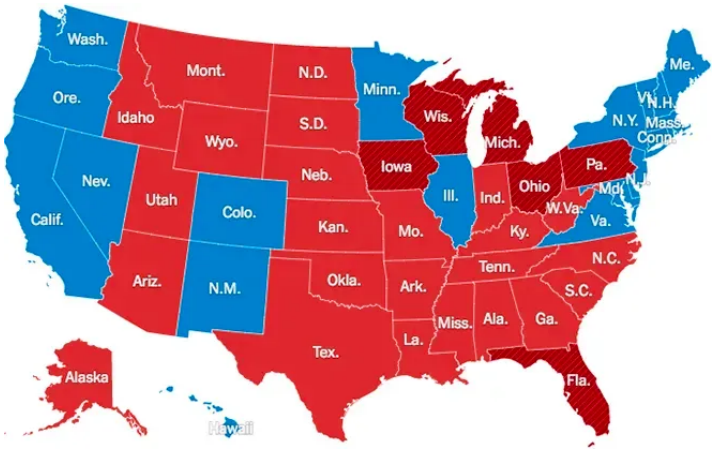
Half of all people never change their views meaning they vote for the same party their whole life. This is not randomness. Also, as the gene pool has accumulated mutational load, shifting to the "left", more than half of the view-changers report moving to conservatives. This is rational given the background. Thus only about 21% of people are pseudo-irrational, although their flip can probably be explained by extrinsic factors. And again, they are likely very average people genetically and therefore are only random within certain bounds. These people will not randomly join the Communist Party of America, which is what irrationality theorists predict.

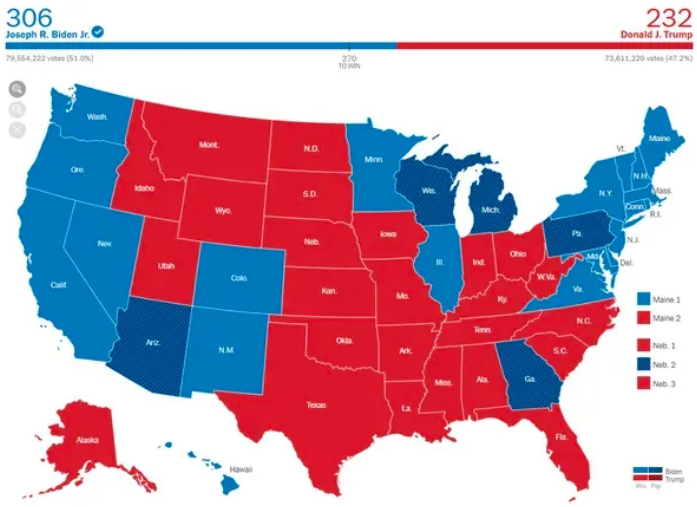
Polity level preferences are also very consistent. In a two party system, a voter irrationalist predicts the following polity flip distribution:



In between 15 and 36 states will flip. Mostly, 21 to 30 will flip in any given election.







But how many flipped from 2012 to 2016? 6 states. What about from 2016 to 2020? 5 states. And this is again for candidates that don't actually vary as much as they could. Thus it seems that the makeup of most states means they will basically always vote on one side of 0 while in a few states the results will be in between 0.3 and -0.3, roughly speaking. But Georgia won't suddenly vote for the American Nazi Party. There isn't that much randomness. This is equivalent to about 66% of polity-level variance explained by past views, since the variance of the irrational distribution is about 12 and the observed variance is about 4.

5.5.3 The parable explained

At a minimum, about 66% of the variance of political views can be explained, indicating that voters are mostly not irrational. Now you have the tools you need to understand why this is a dumb argument from Bartels:

> The ideal of rational voting behavior is further undermined by accumulating evidence that voters can be powerfully swayed by television advertising in the days just before an election. A major study of the 2000 presidential election by Richard Johnston, Michael Hagen, and Kathleen Hall Jamieson tracked prospective voters' responses to changes in the volume and content of campaign ads as well as to news coverage and other aspects of the national campaign. Their analysis suggested that George W. Bush's razor thin victory hinged crucially on the fact that he had more money to spend on television ads in battleground states in the final weeks of the campaign.

How different is Bush from Gore, actually? If the range of political opinions is -3 to 3, and Bush is at 0.2, and Gore is at -0.2, and Bush got less than a percent of people to flip from -0.2 all the way to 0.2 with an ad, how much does that actually say about voter irrationality?

Can I get voters to vote for my plan of Total Economy Death in 2024 with an ad? That would be "powerfully swaying" voters. Bartels does not prove that "voters can be powerfully swayed by television advertising." Rather, it's clear that a few voters can only be weakly swayed by television advertising. Voters are mostly rational.

Keith Woods says:

> Democracy does not produce responsive governments, and that all of the intellectual defences of Democracy fail when put up against what we know about voter behaviour.

If preferences are $X \sim N(0, 1)$, that means that the majority view is 0. Therefore, a maximally responsive government is always at 0. A random government is in between -2 and 2 95% of the time. If democracy causes the government to be between -0.20 and 0.20 95% of the time, does democracy not produce responsive governments?

Bartels argues that the government randomly varies between -0.20 and 0.20. Woods says this means democracy does not produce responsive governments. But isn't it much more responsive than

alternatives? Just like how in the eugenics parable, there is much less variance under eugenics, even if it isn't exactly 0?

What we know about voting behavior implies a democratic government will be at most 1/3 as irresponsible as alternatives. How then does democracy "fail" by this metric, compared to alternatives?

Now you can understand what Keith misses here. Actually, 75% of voters know who their PM is. I can't name the PM of Australia. Furthermore, Australians do not vote directly for their PM like Americans almost do for their President. De jure, the PM is actually appointed by the Governor-General who is appointed by the King of Britain. Australia is, on paper, not a democracy at all. In practice, the Parliament makes a recommendation to the Governor-General, who obeys the recommendation. The Parliament is like the US Congress and consists of local members elected by small constituencies. This would be like if the House of Representatives appointed the President in the US.

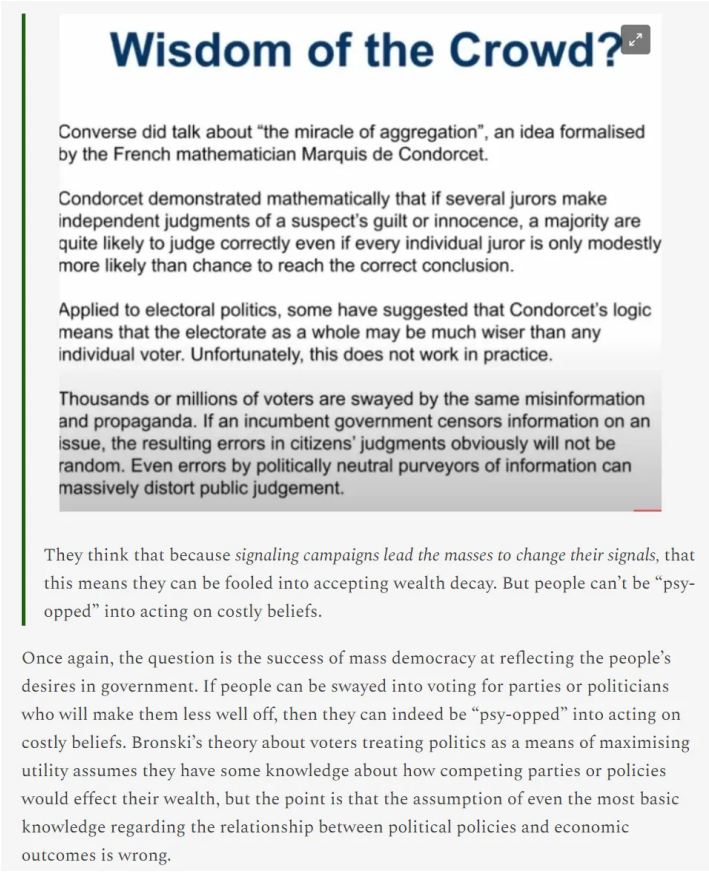
In real life, the House and Senate appoint Speakers which lead the chambers. A PM is perhaps most like that position — and I'm not sure who the Speaker of the House is currently because I don't vote for that. I do know that I will vote Republican for my Representative next election, because I am against woke and other Democratic gayness.

You can also see why the Agrabah question is stupid. My life did not improve in any way after the war in Afghanistan ended. How did that war effect me? Moreover, why would I need to know the entire geography of Afghanistan to whether I support the US drone bombing random foreigners?

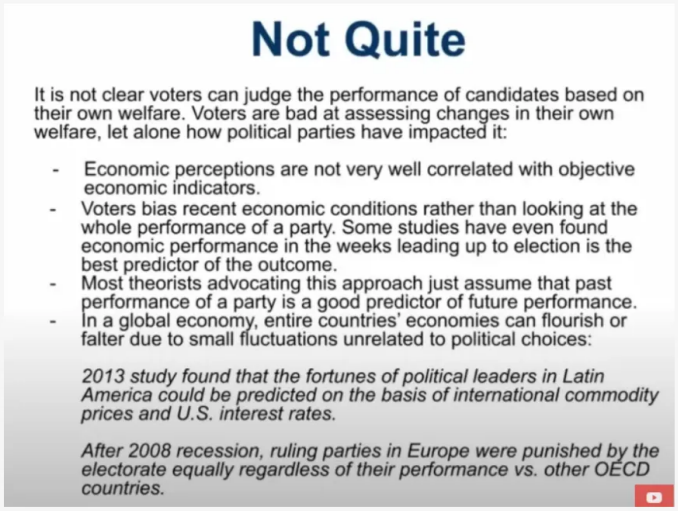
On Party leaders, I think you can decide whether you support Republicans or Democrats without being able to name the DNC chairman. Who cares?

On branches of government: dare I say that again this doesn't matter. An American voter casts four votes that are relevant to the federal government: he votes for a Representative, two Senators, and the President. Say you genetically care a lot about abortion. The economy never seems to change much depending on who you vote for, probably because democracy reduces government variance.

One party supports baby murder and the other is against it.
Do you need to be a constitutional scholar to decide who to cast your 3 votes for?
Obviously not.



Same issue here as above. Maybe psy-ops work a little bit. But they don't work that well[6]. Imagine a flock of sheep that are frequently slaughtered by wolves. One day, a eugenicists modifies the sheep to have sharp horns that can impale a wolf. Wolves get impaled and stop attacking, but the sheep are still plagued by ticks that suck their blood. A blank slatist says "look, the horns don't matter because the wolves disappeared, and the sheep still let the ticks suck their blood. What retards!" The sheep know when a wolf is going to rip their organs out. They don't need to be zoologists to do this. Public judgment is never "massively distorted" — recall the Bush and Gore example.



This slide indicates that idealists have a verbal tilt. It says that parties were punished for the 2008 recession but then acts all shocked when it's discovered that voters don't care about micro-fluctuations. Maybe voters have a threshold? You're telling me they don't notice when they're a cent poorer but they do notice when they lose thousands? Wow!

This time he's not even responding to the what's in the slide. The point about the weakness of the theory of retrospective accountability (which is the same kind of theory Bronski is defending) isn't that the masses aren't perfectly responsive to minor economic fluctuations, but that their response to the macro fluctuations don't make any sense even as a punish/reward mechanism. I cited ample examples in the video, like how ruling parties were equally punished by the European electorate after the 2008 financial crash, regardless of whether they were left or right, and regardless of their performance relative to other OECD countries. The masses might respond to economic hardship in their voting patterns, but it isn't in a way that expresses any desire other than voting for whoever the other guys are, even if they might have handled things much worse.

This one is a little different. Keith is making a logic error here. He says because the masses sometimes have false positives, that this means that don't respond to bad economic performance. In other words, the masses don't vote out politicians that totally loot the coffers, because sometimes they vote out politicians who merely oversaw, and did not cause, an economic downturn. This is fallacious reasoning. If the masses vote politicians out when the economy goes bad, then if a politician destroys the economy, he will be voted out of office. Therefore, even if the other guy would have done worse, a politician knows he will be punished if he ruins the economy.

5.5.4 Conclusion

Contrary to Keith, Democracy does produce mostly responsive governments, and the intellectual defense of democracy which argues that democracy increases government stability is compelling. In fact, countries with strong records of democracy are far less likely to experience civil wars than hybrid regimes[32]. This is what voters being mostly rational predicts: the likelihood of an illegitimate government coming to power is greatly reduced. Thus, there is no cause for a civil war, which by definition is the violent removal of an illegitimate (i.e. an unpopular and insecure) state.

5.6 It's probably 30% meritocratic elite, 70% genetic-rational democracy

How much of a democracy do we live in exactly?

Political science is not a fully scientific field. This is trivial to demonstrate. In general, the textbooks for the field are sparse, opinionated, and lack certainty. Nothing much is known for sure in the field. "Perspective" in emphasized over real findings. This is a sign that a field is not a developed science. Developed sciences have canonical findings; pre-sciences do not. One of the best textbooks I have found is a "handbook"[25], meaning it contains a lot of diverse perspective instead of a unified consensus, as there is no unified consensus in the field, because it is not fully scientific.

Another sign of an immature field is its level of mathematical rigor. In the handbook we find the first two parts after the introduction concern "political theory" and "institutions." We are told, essentially, the political theory is fake activism.

> Political theory is an interdisciplinary endeavor whose center of gravity lies at the humanities end of the happily still undisciplined discipline of political science. Its traditions, approaches, and styles vary, but the field is united by a commitment to theorize, critique, and diagnose the norms, practices, and organization of political action in the past and present, in our own places and elsewhere. Across what sometimes seem chasms of difference, political theorists share a concern with the demands of justice and how to fulfill them, the presuppositions and promise of democracy, the divide between secular and religious ways of life, and the nature and identity of public goods, among many other topics.

Having a "humanities end" of your discipline is an admission that the subject is not a full science. Physics has no such end.

Now for institutions. For years I have criticized political scientists for taking institutions and their rules for granted. In analyses I saw, there was never any attempt to explain why institutions exist. When pressed on this, "institutionalists" would appeal to a kind of Rawlsian rational founding myth, or a social contract myth, where the rules are laid out in some kind of other-worldly Agarthic constitutional convention; these rules are completely binding and everything to do with the state consequently is explained by its official rules. I have said, the rules are not real, they are always changing, institutions are "not real", they are just individuals behaving; we must explain why they behave in this patterned way we call a "state" or a "company." There is no such explanation found in institutionalism, even though one would think this is the primary job of political science.

Sometimes I was told I was strawmanning or being unfair. I have thought, maybe I am strawmanning, because I am not very well read in traditional political science. Nevertheless this is what I have absorbed from interacting with them. But now I read this:

> The study of political institutions is central to the identity of the discipline of political science. Eckstein (1963, 10–11) points out, "If there is any subject matter at all which political scientists can claim exclusively for their own, a subject matter that does not require acquisition of the analytical tools of sister-fields and that sustains their claim to autonomous existence, it is, of course, formal-legal political structure." Similarly, Greenleaf (1983, 7–9) argues that constitutional law, constitutional history, and the study of institutions form the "traditional" approach to political science, and he is commenting, not criticizing. Eckstein (1979, 2) succinctly defines this approach as "the study of public laws that concern formal governmental organizations." The formal-legal approach treats rules in two ways. First, legal rules and procedures are the basic independent variable and the functioning and fate of democracies the dependent variable. For example, Duverger (1959) criticizes electoral laws on proportional representation because they fragment party systems and undermine representative democracy. Moreover, the term "constitution" can be narrowly confined to the constitutional documentation and attendant legal judgments. This use is too narrow. Finer (1932, 181), one of the doyens of the institutional approach, defines a constitution as "the system of fundamental political institutions." In other words, the formal-legal approach covers not only the study of written constitutional documents but also extends to the associated beliefs and practices or "customs" (Lowell 1908, 1–15). The distinction between constitution and custom recurs in many ways; for example, in the distinctions between formal and informal organization. Second, rules are prescriptions; that is, behavior occurs because of a particular rule. For example, local authorities limit local spending and taxes because they know the central government (or the prefect, or a state in a federation) can impose a legal ceiling or even directly run the local authority. Eckstein (1979, 2) is

> a critic of formal-legal study, objecting that its practitioners were "almost entirely silent about all of their suppositions." Nonetheless, he recognizes its importance, preferring to call it a "science of the state"—staatswissenschaft—which should "not to be confused with 'political science'" (Eckstein 1979, 1). And here lies a crucial contrast with my argument. Staatswissenschaft is not distinct from political science; it is at its heart.

This is an acknowledgement of what I noticed, and also of the fact that these people tend to gaslight about it when pressed, like Standard Social Science Model[35] people in general.

Tooby and Cosmides[6] provide several comparisons between the SSSM and the IM, including the following:

Standard Social Science Model	Integrated Model
Humans are born as a blank slate.	Humans are born with a bundle of emotional, motivational and cognitive adaptations.
The brain is a "general-purpose" computer.	The brain is a collection of modular, domain-specific processors.
Culture/socialization programs behavior.	Behavior is the result of interactions between evolved psychological mechanisms and cultural and environmental influences.
Culture is free to vary any trait in any direction.	Culture itself is based on a universal human nature and is constrained by it.
Biology is relatively unimportant in understanding behavior.	An analysis of interactions between nature and nurture is important in understanding behavior.

Criticism of the coining of the term [edit]

Richardson (2007) argues that, as proponents of evolutionary psychology (EP), evolutionary psychologists developed the SSSM as a rhetorical technique: "The basic move is evident in Cosmides and Tooby's most aggressive brief for evolutionary psychology. They want us to accept a dichotomy between what they call the "Standard Social Science Model" (SSSM) and the "Integrated Causal Model" (ICM) they favor ... it offers a false dichotomy between a manifestly untenable view and their own."[7]

This is likely because the SSSM is partly dishonest, partly irrational. When made logical and clear, the irrationality and dishonesty are exposed, and this is embarrassing, so practitioners deny that they believe for example that "biology is unimportant to understanding behavior." Then they go back to ignoring biology is all of their studies, showing their effective view is indeed that biology is unimportant to understanding behavior.

5.6.1 Invading political science

Since this is the norm in political science, perhaps the field is ripe for a shakeup, a paradigm shift, or even a scientific revolution. If we view the field as a marketplace of ideas about states, power, and politics, maybe we can apply startup-logic to such an invasion. Peter Thiel talks about how radical shakeups are fueled by secrets that current providers don't know or can't accept[33]. I think I know a few "secrets" that the vast majority of political scientists don't know:

- Biology is the prime determinant of human behavior
- After that, probably economic pressures
- Wealth is power
- A science is its verified mathematical models
- Use probability and statistics to measure uncertainty and model error. Avoid deterministic calculus models.

I think if most current political scientists believed these and could execute on them, the field would already look like how I imagine it can.

5.6.2 A theory of democracy

Let's apply these secrets to democracy. Just what is democracy? How can we predict where it will be and when it will fall? Applying the secrets, we want to break democracy down into a mathematical model based on human biology, wealth, and economics. This model should be estimatable, meaning its parameters can be measured, unlike traditional neoclassic economics "models."

Applying secret 1, we can predict that some populations lack the biology for democracy. In other words, some races can't be democratic without biological evolution. The biggest trait involved is

probably IQ, and after that social conservatism or some sort of conformity factor. If this is true, we could predict, unlike political scientists, that Iraq and Afghanistan would never be democracies. If gene flow of less democratic races enters a more democratic race, democraticness will fall.

Applying secret 2, let's hold race constant and just look at white people. What predicts more or less democracy within whites? I hypothesize it's the distribution of resources; democracy is about formally acknowledging a spread out distribution of power. If power is just wealth[**?**]wikipedia2) (secret 3), then democracy just recognizes a relative egalitarian wealth distribution.

This should mainly predict deviances of democraticness within self-claimed white democracies. Some democracies are more democratic than others. This within-democracy deviance, within a race, should vary mainly with wealth concentration,[1] if this theory is correct. If this is true, then we can devolve down to economics, which can be flattened to biology with theories like Smart Fraction Theory.

Applying secrets 4 and 5, we want to translate these into math, ideally probability. This is pretty simple, a basic regression can verify these ideas.

$$D_i = \beta_1 R_i + \beta_2 W_i + \epsilon_i \tag{5.19}$$

Where D is democraticness, R is race, W is wealth concentration. In theory the betas are positive and the variance explained is quite high. If it is too low, we need to look for other factors.

Is there anything to this theory?

Table 2 The results of multiple regression analysis in which MT, national IQ, and IPR are used to explain variation in ID-2008 in the goup of 172 countries

Variable	Coefficient	Std. Error	Std. Coeff.	t-Value	P-Value
Intercept	1.353	6.621	1.353	0.204	0.8383
MT	0.123	0.093	0.086	1.329	0.1856
National IQ	-0.026	0.075	-0.026	-0.351	0.7259
IPR	0.537	0.046	0.875	11.695	<0.0001

R = 0.801

R squared = 0.641

Yes[34]. The only analysis I can find is from 14 years ago in Mankind Quarterly.[2] It looks promising, explaining 64% of the variance with MT (a race proxy, Median Temperature), national IQ, and IPR (resource concentration). This should have been followed up on with a better measure of race, and then race should be broken down into the specific racial characteristics thought to cause the association.

Political scientists, of course, never did this, because on average they're allergic to race. That leaves this an open area of research. Maybe someone will pursue it.

[1] Vanhanen in Democratization: A Comparative Analysis of 170 Countries reports that there is a well-known association between democraticness and economic development (pg. 8). However, this is corrupted by SSSM heuristics. "the usual explanation [is] economic development produces the middle class, which is the primary promoter of democracy, whereas the upper class, and especially the lower class, are seen as the enemies of democracy." (pg.9). The idea that "democracy concerns power, and democratization represents an increase in political equality. Therefore, power relations determine whether democracy can emerge, stabilize, and then maintain itself. Capitalist development tends to change the balance of power among different classes and class coalitions. Industrialization empowers subordinate classes and makes it politically difficult to exclude them" (pg. 9) is a dissent position. And of course, but a handful dare to add in anything about race.

[2] The author was Tatu Vanhanen. He apparently knew Richard Lynn and was a political scientist in Finland. It would seem we independently came to the same ideas; I found his article after forming these hypotheses. The race part is pretty easy to come to, of course. The resources part is less intuitive and my path to it is more interesting. First, I read a lot of elite theory, but this was mostly a waste of time. Still, it taught me there wasn't much out there to compete with in this field. Then I did a lot a thinking and basically reasoned that the most logically coherent, Occam's razor following model of power is one that just reduces it to resources, which is known as wealth in humans. This is contrarian

5.7 Elite deviance: rebutting elite theory and towards measuring social power

Race seems to win out over wealth concentration when it comes to predicting democracy. Perhaps powerful elites of certain races allow more democraticness due to their genetics. But if elites are all powerful, why wouldn't they be all rich as well? Perhaps they are not all powerful, or they allow wealth to spread out in equal accordance with their democraticness.

To test which of these ideas are true, we should figure out how to actually measure elite power. I propose a way here.

Previously, we reviewed Domhoff discussing policy wins by the elite, but his evidence was not systematic or definitive. Here, I offer a mathematical framework for precisely measuring elite influence in different policy domains. I developed it in response, again, to Keith Woods.

On October 2022, Keith Woods and Academic Agent (also referred to as Neema Parvini) debated on what the prime mover of history is. It started when Academic Agent produced a video titled Against Ideology, wherein he argues that ideology is not very important when it comes to explaining historical events like the rise of leftism. Rather, Machiavellian power struggle (almost Darwinistic!) motivated by Paretian sentiments (instincts!) is key. Keith Woods responded with his own video, Against Academic Agent, where he counter-asserts that leftism is caused by elites being imbibed with leftism morality in university, and that parties and political violence are fundamentally motivated by ideas. Woods also claims that Academic Agent's Machiavellian model lacks the ability to explain the friend-enemy distinction and ideological differences between power centers.

In my first video ever, I commented on this debate and offered my own ideas, emphasizing the need to integrate biology into the discussion as well as math and statistics. I offered up a statistical model based on the Fisher/behavior genetics decomposition of behavioral variance, which dissects the strength of genetic and environmental influences on behavior. If we let the behaviors be political, and add in an "ideas" component, an estimation of the parameters of the model will be highly informative for this debate. I also said we could understand the great shift left by dissecting how the various components changed over time, and how each contributed to the observed change in leftism.

	All twin pairs			High knowledge: Both twins (21%)			Mid-knowledge: One twin (32%)			Low knowledge: Neither twin (47%)		
	A	C	E	A	C	E	A	C	E	A	C	E
Three knowledge groups – all five are correct (Both, One, Neither)												
W-P index	**59.3**	5.4	35.4	**74.0**	0.0	26.0	**57.6**	0.0	42.4	**31.6**	27.0	41.4
W-P item average	**25.3**	7.7	67.0	**40.2**	2.9	56.9	**22.6**	7.8	69.5	**14.7**	12.0	73.3
Ideology ID	**50.4**	0.0	49.6	**61.3**	5.7	33.0	**48.4**	0.0	51.6	**33.3**	0.0	66.7
W-P constraint	**29.9**	17.4	52.7	**45.8**	2.2	52.0	**30.6**	0.0	69.4	**17.8**	30.7	51.5

Figure 5.1: source[47]

I ended the video with just one piece of evidence. It shows that the biggest contributor to variance in liberalism-conservatism is additive genetic variance. Therefore, this solves Keith's question as to from where comes the friend-enemy distinction and ideological differences between power centers. Primarily,

as it is more popular today to believe in a Pantheon of different "types" of power. I later found out this mirrors the concept of resource holding potential, which is good because I wasn't thinking as biologically as I should have been but the product turned out similar nonetheless. Next, I reasoned that whether a country is democratic or not reflects its "real" power distribution, which is to say it reflects the wealth distribution, which is of course thought to mostly be a function of biology (smart fraction and so on) and perhaps some exogenous economic factors. This is determined prior to institutions, and institutional rules, like voting laws, come to reflect this "real", and not "symbolic" or "constructed", distribution of resources. In theory, nominal democracies will also vary from true democraticness precisely to the extent that wealth is concentrated; the richer the "rich" is, the more they can mess with elections and influence politicians directly. At complete wealth equality, there is no way to mess with elections. In the middle, elections take place but strong top down incentives constrain politician action. At the extreme, the wealthy rule directly and we call it an autocracy, no point in bothering with elections because the masses are so powerless. It's nice to see someone else came up with a similar view independently, it gives more weight to the ideas. It's a shame political scientists have neglected his work just as SSSM people neglect hereditarian work generally.

the source of these is genetic differences. Friends are genetically similar, politically, and enemies are different.

Based on this data, ideas, at best, can only a minor cause of political differences, secondary to genetics. At worst, they could be nothing, the environmental variance instead coming from random noise, economic incentives, or something else.

Now, the debate is being recapitulated. On February 5th, Academic Agent published The James Lindsay Debate Club Theory of History[48]. His post essentially restates what I call the Lindsay Fallacy (see the Memetics chapter).

In essence, the idealist asserts correlation = causation, and the Paretian[1] points out that this correlation cannot be causation, due to some detail here or there.

Then, on February 21, Keith Woods responded again with Academic Agent Is Still Wrong About Ideology[49].[2] 2 In it, he essentially restates his opposition to AA's Machiavellianism, saying that great men throughout history are obviously motivated by something higher than personal benefit:

> What drives people when they get into power? What drives them to seek power in the first place? Presumably, Parvini's answer is self-interest, power for the sake of personal benefit. But history is littered with the graves of failed would-be kings who were willing to die to advance their ideas. If the masses are driven by fraudulent ideologies handed down from on high, has there never been one of them who ascends to power himself and implements them as a true believer? If we were consistent with this, we would have to affirm that all the kings and queens of the Middle Ages were paying lip service to Christianity as a means of sociological control, making them all extreme outliers of rationally self-interested atheists in a world of religion.
>
> ... The historical record shows us that ideologues and fanatics often drive history. Humans are not entirely rational, but neither can their behaviour be entirely reduced by some rational calculation to discrete computations of self-interest or power maximisation. We are a species driven by narratives and big ideas, and in a time where obvious truths are aggressively suppressed by a system increasingly incapable of justifying itself, it would be a ludicrous act of self-sabotage to abandon our greatest weapon: the truth.

Woods basically conflates idealism (information being the fundamental driver of political variation and change through time) and ideological behavior. But, as I've shown, Liberalism-Conservatism variation is mostly explained by genetic variation. Thus, while Leftist vs. Rightist conflicts are not merely about personal power, they are about genetics, and not ideas. And this has been revealed by math and statistics; the Woods-Parvini exchange is quite vague in terms of conceptualization, because of the duo's reliance on words over math. They should come to embrace more math!

Academic Agent responded on the same day with Reply to Keith Woods on Power, Ideology and History[51]. Here, he claims Woods strawmanned him. His theory is not about whether there are true believers or not. It's fundamentally about what actually happens in the process of power; describing the actual patterns of history, and noticing that it isn't primarily a debate club. Rather, it's a battlefield, those who win must be fit — " power does have its own logic, and its own disciplining mechanisms for those who hold it. For example, Power cannot stand rival castles and seeks to eliminate them." And, more importantly, Parvini circles around genetic explanations, citing both a study from Emil Kirkegaard on Jewish gene flow influencing the coming of Civil Rights in the US, and Jonathan Haidt, who, in The Righteous Mind, comes close to grasping the idea of leftism as genetic, ascribing it to inborn moral impulses ("moral foundations") which have been found to be highly heritable[52].

In his response, Surfing Against the Tide of History[50] (this is getting exhausting), Woods doubles down on his same angle, avoiding the question as to how much genetics and economic/physical/Darwinistic/military/Machiavellian realities shape stated and realized political goals compared to pure verbal philosophy, and again emphasizes the importance of ideas.

> The same goes for the Islamic Revolution: there were a lot of groups opposing the Shah, but if Khomeini's followers were not true believers in his brand of Islam and the necessity of it ruling Iran, he would not have had an organised minority to wield against the failing regime. On the level of organising a regime change in a modern mass-society, wanting to reward your friends and punish your enemies isn't a strong enough organising principle to win out, except when that friend/enemy distinction is broadened beyond the personal, uniting men in their commitment to ideals.

The fundamental essence of this article is again that Woods thinks Parvini's view is that power is fundamentally economic, and Woods thinks this means that we shouldn't see any real ideological variation; that variation is implied to come from the debate club. We know it comes from genetics, and Parvini weakly alludes to this as well.

5.7.1 Parameterizing their views

We can split up ideological variance into variance due to genetics, economics, and ideas. With this, we can summarize the AA view, the Woods view, and the Woods view of AA's view, which I think is significantly off from AA's actual view, but not extremely far off.

Academic Agent's view:

- Genetics: 30%
- Economics/Machiavellian factors: 65%
- Ideas: 5%

Keith Woods's view:

- Genetics: 30%
- Genetics: 1%3[3]
- Economics/Machiavellian factors: 10%
- Ideas: 89%

Woods's view of AA's view:

- Genetics: 30%
- Genetics: 1%
- Economics/Machiavellian factors: 98%
- Ideas: 1%

Now, here is my view, which I think is best supported by scientific-quantitative evidence:

- Genetics: 30%
- Genetics: 70%
- Economics: 15%
- Ideas: 15%

If this is correct, that makes Parvini more correct than Woods, which is my own evaluation of their exchange. However, Parvini is still understating the importance of biology in favor of economic/-Machiavellian analysis. I agree with Parvini that ideas are a small but measurable factor.

Importantly, these numbers are for at-a-time, and my numbers are specifically for the analysis of leftism. I permit that things are different in different behavioral domains. For example, when it comes to policies and politics around tobacco, I hypothesize that information is a lot more important. When it comes to the rise of leftism through time, I believe it was 100% genetics as of now. Woods and Parvini do not make either of these distinctions in the writings I have read, so I will assume their "numbers" just stay the same for this.

5.7.2 What the evidence says

For the through-time, at-a-time distinction, I have shown that that the accumulation of deleterious mutations can explain all of the measured rise of leftism since at least 1960[9].

There is also a lot of circumstantial evidence around this: evolutionary pressures are faster than most believe, leftism probably happens at the end of all empires and civilizations as a part of their deaths[10] (suggesting a common biological cause, not a specific 21st century chemical or informational cause), a thorough review of contrary work revealed nothing (no one has actual evidence of environmental or ideological causation)[11], meanwhile there are a lot of signs of genetic degeneration. People are sicker, leftists have higher levels of mental illness, left-handedness is increasining, etc.[12] Similar things happen for rats who succumb to weak selection pressures. Rat-leftism emerges.[13]

On domain specificity, I did a small online survey of people asking if they would change their view from any imaginable information in specific domains. As I thought, they would not change their views on feminism no matter what you prove about women: immaturity, infertility, and so on, supporting the idea that feminism (and with it the rest of leftism) is caused by genetic degeneration. Meanwhile, on coffee (similar to tobacco), people were open to changing their view on banning it if it was shown that it causes cancer or something similarly harmful. High school politics were in between, suggesting limited but measurable potential to achieving high school funding reductions with propaganda.

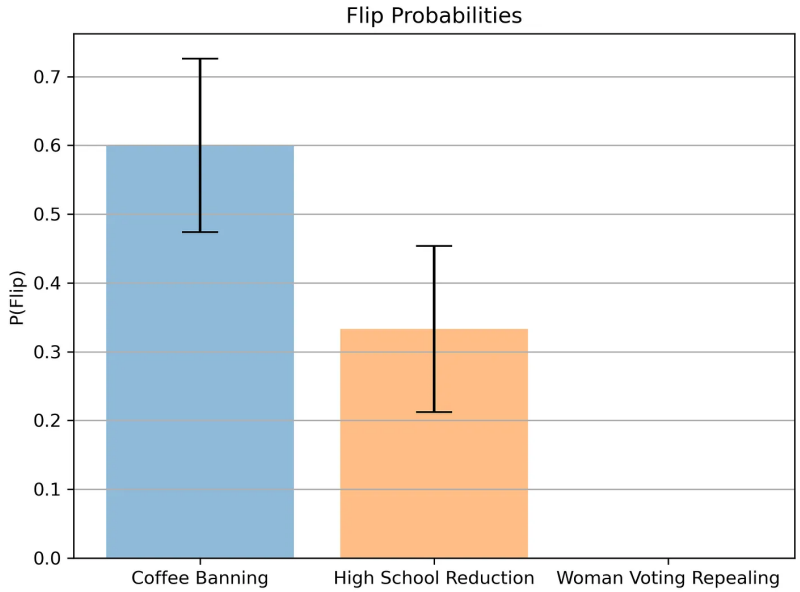


Figure 5.2: Probability someone would change their view on a domain due to information

On at-a-time causation, the evidence on heritability is very clear. That means we need to estimate what the remaining variance is due to. For leftism, my priors shifted from economics towards ideas over the last year.

An upper estimate for the effect of HBD on leftism suggests it might shift people right by at most 0.5 SDs.[14] This suggests ideas may explain 10-20% of variance in political behavior. This explains why people spend time on propaganda; on some domains, there is some response, but in leftism-conservatism the response is weak, though it may be there. However, basically the most powerful ideas cannot make a 70th percentile leftist shift right of the center; it can only make them centrists. HBD facts might be able to turn Democrat hardliners into never-Trumpers slightly to the left of Richard Hanania, but it will not make up for what is fundamentally a moral and mental illness going on beneath (the lack of right-wing mental constitution stemming from genes).

Soon, I want to run a comprehensive study on the maximum effect known ideas have on leftism-conservatism.

As for elite theory and economics, it's unclear exactly how much influence it has, but I think Parvini overstates the case generally. In a debate with Woods I had, I did a review of some basic evidence

and found that democracies are responsive and people vote with only a little randomness[15]. Gregory Clark shows that social mobility ("class recirculation" for Parvini) rates are stable between societies and mostly meritocratic, seemingly relying on IQ and conscientiousness[22].

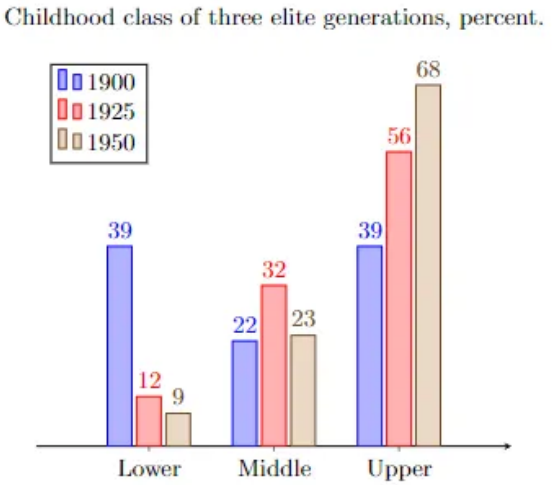


Figure 5.3: Source: The Power Elite. Per Clark, the apparent trend is fake

So, something like half of the elites are actually born to the lower classes every generation. Thus, everyone is related, and ruling class ideological genetics will move with lower class ideological genetics. Combining this with democracy being real and not an illusion, the deviance due to elite uniqueness is likely pretty low, though not exactly 0 per se.

There is some evidence that elites are a bit more leftist[30], though not much, and their descent obviously seems to go at the same pace as the masses. I suspect their genetic degradation process started earlier.

I have a model for estimating the amount of deviance due to elite power and genetic differences. First, imagine we can estimate a regression of class or personal genetic/phenotypic values onto a society's general policy leftism:[4]

$$F_i = \beta_E E_i + \beta_U U_i + \epsilon_i \tag{5.20}$$

This is basically how much the policy changes when one of the class positions (E = elite, U = underclass) changes. Power can be measured as

$$\psi_E = \beta_E - \mathbb{P}(E) \tag{5.21}$$

The null hypothesis is that, in a democracy, the elite class is influential according to their vote count, and so policy is just F' = P(E)E + P(U)U, which is the population mean. So, as the regression beta gets bigger, the elites have more power.

The deviance due to elites not agreeing with the masses can be written as

$$\delta_{i,E} = F_i' - (\mathbb{P}(E)U_i + \mathbb{P}(U)U_i) = F_i' - U_i \tag{5.22}$$

This is just how it would be in a democracy where elites have say proportional to their size minus how it would be if elites agreed completely with the underclasses.

Now, deviance due to elite power is

$$\delta_{i,\psi} = F_i - F_i' = \psi_E E_i + \psi_U U_i + \epsilon_i \tag{5.23}$$

Thus total deviance equals F - U.

So assuming the error term is very small, we can estimate the total deviance by estimating the betas and the class positions. To actually do this, one would have to survey elites, the masses, as well as figure out how to estimate the value of society level policies. The first two steps are definitely

doable in theory. The last step is a little harder but imaginable. It would be like if the government itself took a leftism test. Perhaps leftism of groups could be measured by their agreement with a set of existing and debated policies in one dimension. Society's score is the policies that are currently in place. In the racism domain, you could ask about:

- Slavery
- Segregation
- Miscegenation
- Affirmative action
- Reparations
- Mass immigration
- Extra nonwhite senators
- Anti-racist education in public schools

Etc. The State would be anti-racist on 4 or 5. Maybe give it a 4.5. The elites could conceivably get as high as an 8. The masses might get a 4. This would imply democracy. Repeat with only domains for better estimates of general power.

For now though, I'll use two tricks to estimate the deviance on leftism. First, let's assume that money is power[16]. This makes sense, because generally speaking, if you can control people with some ability, then it's worth money. If you have more money, you have more influence than if you have less money. So if elites have 50% of the wealth, for every point their leftism goes up, societal leftism would be expected to go up 2 times more than if elites only had 25% of the wealth; they can spend double on it. So, we will set beta to be the proportion of wealth the two classes owns. We'll define the elite as the top 1%.

Next, let's assume U is 0 and set E to be the SDs the elite mean is from the the U mean in terms of U SDs. A good upper estimate for this number is .8[17], because about 90% of college professors are Democrats, compared to 50% of the voting population each presidential election. The SD of a binary variable with mean 0.5 is 0.5, so .4/.5 = 0.80. This is likely too high, because actual elites tend to be less liberal than college professors.

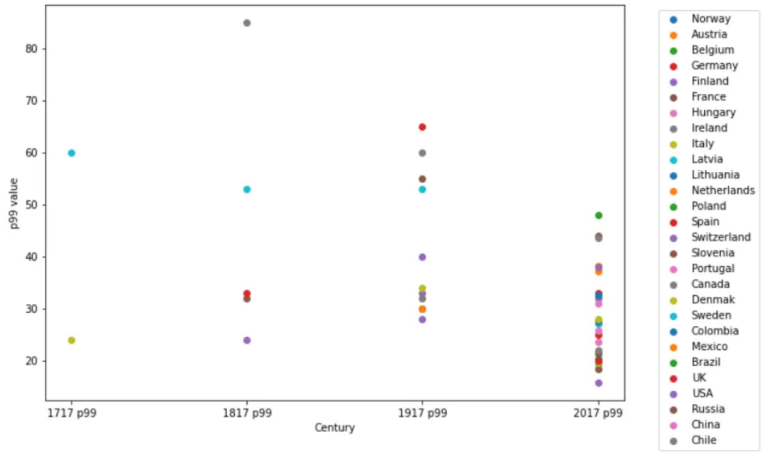


Figure 5.4: [19]

Now, Western elites tend to own maybe 30% of the wealth, so we can set their beta at .3. This yields a deviance of 0.24 SDs.

If this was interpreted for the list above, and the item mean was 4, and the responses were on a binomial distribution, then this would be equivalent to .24 / 1.4 = 0.17 items.

Figure 5.5: Binomial Distribution

So this, with generous assumptions, would not be enough to actually shift general policy on leftism-conservatism significantly. Elites would both have to be a lot more powerful than wealth indicates, and a lot more leftist than the general population.

It's hard to equate this to variance explained, but it vaguely suggests that masses and elites tend to travel together, and elites are not as powerful as some "elite theorists" would think. I would currently argue that something like mass-elite holism is a good descriptor for how politics works; any viable political attitude will tend to have mass and elite supporters, and the attitude is embodied at each level of society by its relevant supporters at that level. There have never really been any society-accepted policies, religions, attitudes, etc that did not find significant support at all levels of society.

This informs What We Should Do, which is the real and useful part of this discourse. AA's tightly organized minority will actually not overpower a genetically leftist mass,[5] nor will it persuade a genetically leftist elite. Keith Woods will never persuade AOC to be based with his discourse. Instead, we need to be thinking about genetic interventions, probably genetic segregation and the initiation of a based breeding society as I discuss here[18].

5.8 Autocracy and War

Academic Agent and similar elite theorists want to have something like a Pol-Pot style far-right dictatorship. Is this possible? Is it possible to have an elite so deviant and so powerful that such a regime exists? Under what conditions can it come about?

Recall that research into the origins of leftism suggests that leftism was neither increased by the proliferation of new ideas, nor are differences in leftism between people at the current time mainly caused by differences in idea exposure. A good upper estimate of the variance of leftism explained information is 20%. Exposing everyone to HBD will almost certainly move the mean by less than 0.50

[1]Both AA and I are influenced by Pareto, who currently stars in my profile picture. AA says, "This most controversial thesis of mine ultimately comes from the work of Vilfredo Pareto, but I had not fully committed to it at the time of writing The Populist Delusion and somewhat left it hanging in that book."

[2]In another exchange, I responded to a video Keith Woods made claiming, essentially, that the masses are too irrational for democracy to be real. He responded once, loosening his idealist position a little bit. I responded again, arguing that democracies are responsive to the masses; for the most part, democracies are democracies, with some caveats in some policy domains that don't effect the masses. I believe leftism is a total-population genetic phenomenon, although the elite might be slightly ahead due to having lighter selection pressures sooner.

[3]Note on 2-24-24: changed from 0% to 1% so everyone can avoid talking about absolutes.

[4]In theory, this could be directly estimated by getting the policy positions of all of society in different domains, and the positions of elites and masses in those same domains, and then just running the regression. When the i subscript is dropped, I mean the leftism scores specifically, and not just any score.

[5]Unless, of course, it has a mean leftism-conservatism that is extremely outlier, and comes to own basically all of the wealth in a country. This is likely how historical military dictatorships worked; typically after extremely bloody civil war, a sometimes radical elite could come to own everything for a time. Class recirculation and the failure to perform eugenics leads to their downfall. The beginning of the AA elite takeover route is gathering a 3 SD political elite that is genetically based; this is the same as the start of the breeder route. The elite takeover route is more likely to fail overall as compared to the breeder route, however, unless some sort of extreme external chaos occurs that allows them to own everything in an existing place. Otherwise, per the breeder route, they should focus on increasing their numbers through selective breeding, perhaps in an isolated, independent place that is founded. In keeping with AA being more right in this debate, the Keith Woods route is more immediately wrong; it focuses on persuading the unpersuadable, instead of gathering the worthy.

SDs to the right. Meanwhile, Cthulu will still swim left due to dysgenics and mutational load. And nothing is stopping leftist counter-ideas from dampening this shift.

If leftism is primarily genetic, as it would seem, then rightwingers are now naturally a shrinking biological minority. In a free marketplace of ideas, leftist ideas will tend to outcompete rightist ones, due to genetic bias. Ideas are expensive to make; HBD is now supposed to be the right's trump card, but the actual effects of exposure are weak compared to the decades and decades of research it took to produce it. Meanwhile, leftists get to just make stuff up in diversity studies departments with very little opposition, still taken seriously while actual facts are called "pseudo-science."

If the memetability of leftism is 20%, then the correlation between meme-score and leftism is about 0.45. Giving everyone a meme-score 3 SDs to the right would induce a shift of 1.35 SDs to the right. Leftism seems to have increased by about 0.15 SDs per generation, so this would retvrn us to about 180 years ago — pretty good. This agrees with the folkish intuition that in the extremes, propaganda can be powerful.

The problem is that in a free marketplace of ideas, people will not have 3 SD meme scores on average. This follows from the definition of the free marketplace of ideas. The average person randomly samples from this marketplace, and ends up, on average, with a meme score of 0 SDs. Memetability is produced when people undersample, and sample error is generated.

If new ideas are more likely to be right wing, then in the future, today's 3 SD could be the new 0 SD. This is how "memetaticity" or memetic pressure is produced, in theory. If new ideas are uncorrelated with gene scores, we have no reason to expect this to happen in a free market. It hasn't happened in the past. If new ideas are correlated with gene scores, then memetic pressure will amplify evolutionary pressure. I have therefore suggested that, assuming I could command every based person, it would be more effective to start breeding more than leftists by great numbers, ideally in our own space where there is a high concentration of based people of both sexes[7]. This would do much more than based people being isolated in non-based institutions, writing blogs that do little in the grand scheme of things but threaten their salaries. Mutational load aside, the heritability of rightism proves the breeding strategy would be highly effective as long as the numbers are right. The blogging strategy has been tried for decades, with few results, and with no theoretical foundation. The theoretical foundation I have given life to suggests this is to be expected.

But there is another strategy people often ask about, the elite theory strategy. This is perhaps of third strategy of the three great strategies — these strategies are idealism, hereditarianism, and elite theory[8]. The elite theory strategy is fundamentally based on observing societies like North Korea, the USSR, East Germany, and Nazi Germany, and similar autocracies under the assumption that a political minority ruled these regimes with more or less complete power by being elite. Therefore, even if the right is a political minority, somehow, through "focusing on elites", such a society could be formed in an existing country, even though a free people with the current gene pool would never knowingly vote for such a society. Such an occurrence would, of course, allow a small minority to make the average meme score 3 SD, by curtailing informatic freedom.

Therefore, we need to develop the foundations for a science of autocracies. How powerful are they? When to they arise and why? What kind of individuals are needed for one?

We can start by examining features of historically recent autocracies. I compiled a list of 20 such recent autocracies from the 20th century[26]. The first thing to note is that 95% of such regimes were the result of a war or coup. Every regime was manned by a major dictator; there were no examples of a Brave New World style oligarchy. The remaining 5% not established with war were established using the Hitler method. This involves being democratically elected, but it requires a personal militia to enforce rule and consolidate power once office is taken. Donald Trump cannot be a Caesar, because he has no such militia. This means war is important for the "When We Win" theorists. There will be no "When We Win" with no war. So, might a war come about? Who would win?

There is no evidence the far-right could win a war, because they are a minority, and have no army, not even a Trump security force. In the US, the most conservative militias are red state armed forces. These are not very conservative, so a win for these militias in a war would just lead to a country that is governed like current red states, minus interference from the federal government. These armed groups also serve democratically elected states, so it is unlikely a very far right autocrat could come to power on top of these groups.

More than this, such a war is unlikely today, despite all the cyclical conditions being right. There is a civil war cycle outlined by Peter Turchin which follows the economy, political polarization, and time

since a war[2]. As he predicted in 2010, we are now near the top of such a cycle. As a consequence, we have the decayed image of political conflict and autocracy in the US in the form of Donald Trump; he blusters about putting his opponents in prison. His opponents have now brought weak charges against him but have failed to imprison him yet. There is controversy over the 2020 election. He has a weak cult of personality. Red states like Texas are feuding with the questionably legitimate Biden administration over border enforcement. If people today had vigor and vril, there would likely be an outbreak of war. But behind the war cycle lies a dysgenic linear trend, which reduces the cyclical peaks. Because of this, I am predicting no war. This is a Turchin-style prediction that can be observed; if no war comes to fruition by 2030 or so, when the SDT cycle turns around, then the war has been missed until the 2080s or the 2100s.

Thus, after this period, the breeding strategy I have outlined becomes certainly the most viable, as the biological factors will continue to decline severely in this time period; immigration will continue, IQ will keep decreasing, and leftism will keep increasing.

5.8.1 Why war is extremely unlikely

White people are increasingly un-warlike. There are multiple lines of evidence for this. One is white homicide rates[24].

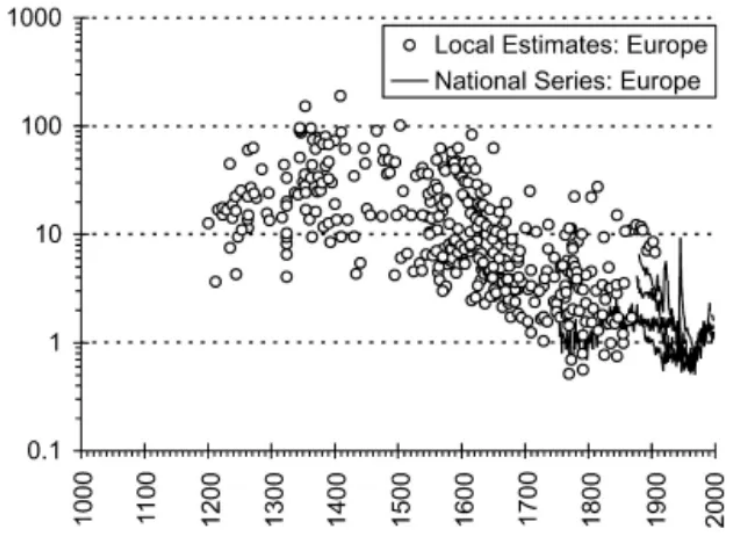


FIG. 2.—Overall trend in homicide rates, all premodern local estimates and four national series. Note: All 398 local estimates from the History of Homicide Database; national series for Sweden, England and Wales, Switzerland, and Italy.

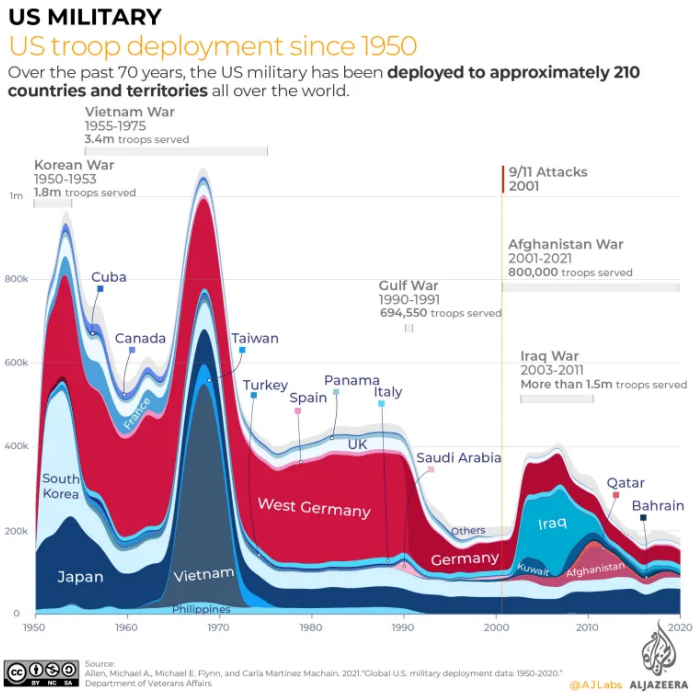
White politicians used to personally fight and kill each other 200 years ago.

Another indicator of growing intraelite conflict was the increasing incidence of violence and threatened violence in Congress, which reached a peak during the 1850s. The brutal caning that Representative Preston Brooks of South Carolina gave to Senator Charles Sumner of Massachusetts on the Senate floor in 1856 is the best-known such episode, but it was not the only one. In 1842, after Representative Thomas Arnold of Tennessee "reprimanded a pro-slavery member of his own party, two Southern Democrats stalked toward him, at least one of whom was armed with a bowie knife —a 6-to 12-inch blade often worn strapped to the back. Calling Arnold a 'damned coward,' his angry colleagues threatened to cut his throat 'from ear to ear'" (Freeman 2011). According to Senator Hammond, "The only persons who do not have a revolver and a knife are those who have two revolvers" (quoted in Potter 1976:389). During a debate in 1850, Senator Henry Foote of Mississippi pulled a pistol on Senator Thomas Hart Benton of Missouri (Freeman 2011). In another bitter debate, a New York congressman inadvertently dropped a pistol (it fell out of his pocket), and this almost precipitated a general shootout on the floor of Congress (Potter 1976: 389).

But white homicide rates are down, so politicians no longer do this. So too, whites no longer lynch anyone ever. A century ago, a woman like Casey Anthony would have been lynched by a mob. This trend is intergenerational and linear, leading Ryan Faulk to hypothesize genetic causation. This is likely true, as war-likeness probably correlates with social conservatism.

Army Sees Sharp Decline in White Recruits

Whites are not signing up for the military any more, going with this trend. At the same time, obesity is up[7], and this can be attributed to a dysgenic paternal age effect. If obese people are largely driving the decline of white violence capacity, and obesity is due to dysgenics, then it follows that the decline of white violence capacity is due to dysgenics.



There is a linear trend of US troop deployment falling since the end of WWII[28]. The US has not had a successful war for 20 years, since Iraq. Afghanistan ended in an embarrassing failure with the vril loaded Taliban coming in to remove women's rights after decades of struggle. The US could not even remove its own machinery properly, and now the Taliban uses US Humvees and M4 rifles. Russia will likely win the war in Ukraine; it's unclear if the US will ever win another major conflict. I think the odds are low.

But non-whites still have plenty of vril left. On the US southern border, which can't be secured, are militant drug cartels. Europeans have violent Muslims. It's looking like the West will grow increasingly militarily incompetent as a whole and will suffer Barbarian incursions like the Romans.

Because of this, I don't think Trump will be Red Caesar and I don't find similar ideas elsewhere to be realistic.

5.9 Models of Civil War

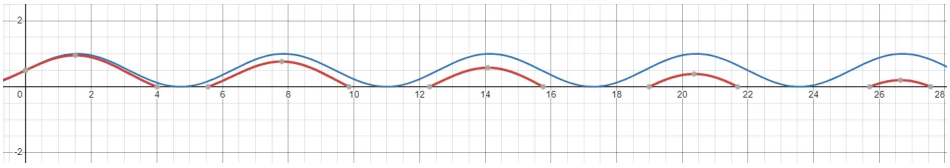
Previously, I verbally described a theory that said that modern countries would not experience a far right autocracy in the near future, because it is unlikely that they would experience a war (at all, much less one that the far right would win), and without a war, autocracies generally do not form.

5.9.1 War likelihood

Now I want to give mathematical form to this reasoning.

$$\mathbb{P}(w) \propto \psi + Vril \tag{5.24}$$

In the article, I hypothesized that the probability of a war in a society is proportional to Peter Turchin's PSI (political stress index)[3] plus the "vril" of a population.



Vril (meme term for the racial capacity for collective action / activity, basically the same as asabiyyah) seems, based on some homicide data I showed, to be declining linearly, consistent with dysgenics. Turchin's PSI cycle, on the other hand, appears to have to do with memetics and/or the economy, as it's linked to short cycles of ideological radicalization and economic booms and busts.

This, then, is like decomposing a phenotype into environment and genes:

$$P_w = E + G \tag{5.25}$$

If we could use GWAS to create an asabiyahh/war capacity gene score, we could correlate it with national war frequency over 100 years or some other time period around the time the gene score was taken.

If environmental features of the cycle never vary, then over a long enough time period, all differences are genetic, while over short time periods, differences may be due to the cycle.

As can be seen in the cycle graph above, eventually civil war just stops happening. This is consistent with the way it is in some countries already; some nations still have multiple civil wars per century, others haven't for a few centuries now.

Britain is one of those nations. It had a civil war every century (or more) and several uprisings from 1100 to 1799[37]. From 1800 onwards, essentially nothing. Britain was notoriously immune to the extremism of the 20th century. Neither communism nor fascism could find any cracks to grow in substantially there. The story is much the same in the US. From 1780 to 1945 rebellion was always a real threat and there was one civil war, on top of a founding revolution[**?**]. Now none of that happens, at all. It just doesn't happen on the same scale. Did books do this? "Culture?" Can you imagine the Wilmington Uprising[39] happening today? I can't. Why? Books? Technology? Neither, how could it be books? How could it be surveillance technology when the events were well known at the time? This leaves genetics.

5.9.2 War Outcome

I hypothesize that war leads to autocracies because war allows a minority to become the majority by applying a selection pressure to the fighting population through violence. Now, we want to consider the political outcome of a war.

First, assume

$$\mathbb{P}(s = win) \propto \frac{N_s}{N} \tag{5.26}$$

The simplest model is that the probability of winning goes up with the fraction of fighters in the war your side has.

This model immediately implies that democracies are harder to beat than autocracies, since autocracies are by definition less popular, so unless a cleansing war has just occurred, they have less of the population willing to fight for them. This is something observed in the data on autocracies; most come from other autocracies (55%)[27] Of those that come from "democracies" they are all coups of existing state militaries (the soldiers the masses hired were deviant from the masses for some reason), or they are the Hitler way, which is that a demagogue actually wins office and therefore the state will not oppose his personal fighting force, which he uses to rule autocratically (but popularly).

Now, what will the politics of an autocratic regime tend to be like?

$$\mathbb{P}(win|L) \propto \mathbb{P}(L)\mathbb{E}[fight|L] \tag{5.27}$$

Imagine there is a pool of fighters and the sides are split into camps regarding leftism, L. Fighters join the side most similar to them. In this case, the most normie camp will likely win if fighting doesn't correlate with leftism, since the most fighters will gravitate towards that camp. Autocratic extremism becomes more likely the more the fighters are biased towards one side.

The expectation function can be estimated with the appropriate regression. With the right historical data, the assumption that winning is proportional to numbers could be checked. In theory, if we could get starting numbers of sides and what the percent of the numbers of fighters were of the sides that win, and plot this against the probability of winning, we should see an increasing trend.

5.9.3 Elites and War

What if there is a deviant elite class? An army is elite-mass holistic — elites must command it well, non-elites must compose the front lines. When the elite class holds the same politics as the underclass, the elites will split in proportions which are the same as the underclass. But when the elite is deviant, the side more appealing to elites will win more elites. We can hypothesize that

$$\mathbb{P}(s = win) \propto \frac{F_s}{F} \frac{E_s}{E} \tag{5.28}$$

The probability of winning is proportional to the fraction of the masses times the fraction of elites a side captures. No elites = no win, same with no masses.

Combining this with the previous model, we can specify that the masses don't matter, only the "fighters", which may deviate from the masses politically. In general, wars do not tend to be total, meaning the majority of the adult male population are not fighters historically. For instance, in Afghanistan, the Taliban is composed of just 1% of the population, and fought against a similar fraction willing to serve the American established government. Most people, even adult males, sit on the sidelines. Thus, a government is a paper tiger when it is deviant from the balance of elites and fighters; "vril" may correlate not only with fighting class size, but also with the ability for a fighting class to be deviant, wanting to dominate the masses with proactive violence, as opposed to mass-aligned reactive violence only.

$$\mathbb{P}(s = win) \propto \frac{F_s}{F} \frac{E_s}{E} \tag{5.29}$$

How can this be verified? If we could somehow get a list of civil wars, measure the politics of their fighters and elites, as well as the proportions (this could be done with the gene scoring of dug up remains, perhaps), we could begin to verify this hypothesis. We could also test in current societies, using psychometric methods, whether potential fighters and elites tend to deviate politically.

5.10 Conclusion

It is unlikely that white nations, especially Anglo ones, can have civil war in the near future, due to extremely low vril levels, probably caused by dysgenics. More than that, wars tend to be won by halves, and the median Anglo right-winger is low vril and will not go Pol-Pot on the top 25% of leftists, even upon winning a war. A right-won Anglo civil war would cost far too many based lives, and would result in a prolonged Trump administration and nothing more. After that, leftism would re-emerge, due to no eugenics policies.

Apart from war, it would seem the brainwashing powers and power powers of the elite in the West are severely limited. It is also inconcievable to wash leftists out of the elite without war. For this reason, and the high heritability of leftism, the elite will remain leftist in Anglo nations, as well as the populace, for the time being.

It is unclear if countries with different bio-histories like the Germanic nations have different possibilities. These nations may be higher vril, and there may be more elite deviance due to Anglo meddling. As such, electoral politics and blogging to save the West has more potential in Continental Europe. Vielliecht die Wordcels sollen jetzt Deutsch lernen? Es gibt dann ein groessere Moeglichkeit, dass ihre Blogs werden das Abendland retten.

On the topic of the continent, Carl Schmitt said that power was about making small exceptions to the general. The general is the biological trend towards leftist. Power can make no change to the general, only biology can do that. Power is small and can carve out someone a little estate away from the hordes for a small time, but will never challenge the hordes.

We have provided empirical and mathematical-logical evidence for Schmitt's view here.

Chapter 6

Why Breeding More is the Most Sure-fire Way of Defeating the Left

The effectiveness of selection pressure caused by breeding more than leftists depends only upon the narrow sense heritability of leftism. Numerous twin studies have shown that this is quite high.

In the end, I give mutational load about a 90% chance of being the ultimate cause of leftism. This is lower odds than the chart from the end of the mutational load chapter suggests because the data could also be confounded by birth order or some other uncontrolled, unforeseen variable.

However, I am 99% sure that leftism comes from a mutation-esque X factor. If it is not mutational load, it is something like mutational load – subtle, counter-intuitive, and mostly unseen. The next two candidates are the Flynn Effect (which is powerful enough to have covered up IQ dysgenics and mutation) and environmental toxins. People are yet unsure what caused the Flynn effect, meaning folk intuition does not explain the great rise in IQ scores in the last 100 years (evidence is appearing, however, that it may ultimately be nutrition causing greater brain growth, similar to the effect on height). So too are toxins unseen yet potentiall consequential.

In other words, I am 99% sure, given the contents of this book, that "cultural" explanations for the rise of leftism are false, and something belonging more in a biology book than a humanities "analysis" text is the ultimate culprit behind the rise of leftism. The best candidate is currently mutational load, as it most parsimoniously explains all the data herein.

Because of this, "cultural" approaches will not work. Your blog won't save the west, or at least the Anglosphere. You must breed. Because of the breeder's equation (see selection pressure in this work) and the heritability of leftism (very well replicated in twin study literature), the effect of increasing the correlation between conservatism and fertility is guarenteed to be efficient. *Importantly, it doesn't matter what the X factor actually is.* There is highly heritable resistance to it, whether it be mutational load or something else. Better breeding, aka eugenics, will solve the problem!

Your blog won't, and other solutions are too costly and less effective, like war, which the last chapter casts firm doubt on. Ironically, the heritability of fertility in humans is only about 0.28, much less than the heritability of leftism [53]. This makes sense; economics can have great impact on fertility, but usually not on beliefs about homosexuality, sexual promiscuity, feminism, or racism. So, if you blog at all, you will probably have more effect convincing genetically right wing people to have an extra baby than you will convincing geneticall left wing people to be substantiall right wing. Have an extra baby, right winger, is a discrete goal and a simple message, and people are much more influenced by non-genetic factors like memes on that topic, while "hey leftist, completely change all your views on society and morality" is much more informatically complicated and less likely to work even if leftists read all your posts.

Having an extra baby is also likely the biggest thing a rightist can personally do to have an effect. If politics is mostly democratic, which it seems to be, and views are mostly genetic, you can basically take people away from the other side by body destruction or add people to your side by body creation. One is easier, cheaper, less dangerous, and more moral than the other. You will never destroy or convert even a single leftist in your life, not ever, but it is likely you will get married and have at least 1 baby. Once you're married with one baby it's pretty easy to have another. So, create an extra rightist.

The policy view matters less, because you will never change policy. If you have extra kids and one day they outnumber leftists, maybe they will. Alternatively, maybe we will find some place away from leftists to be. But you can enshrine the view that conservatives should breed much more than leftists into policy as well. Once rightists have hegemony from breeding more, this can be sealed forever by making leftist breeding very difficult.

So, have an extra baby.

6.0.1 Towards a Science of Society

Additionally, even if all the empirical content and hypotheses of this book are wrong, it will still stand as an example of quantitative sociobiology, the first example of this to my knowledge. There has been no other attempt to approach human society like physics, and as such even intelligent social researchers still take "cultural" explanations of human social change and behavior for granted, for no good reason. These explanations are very much the phlogiston of social science – there is no good evidence for them and a little bit of mathematical logic brings the order needed to see through them and past them.

It is likely error lies in this book somewhere, but the future fully formed science of society will look much more like this book than any verbal alternative that currently exists; this is what happened in the natural sciences, and human behavior is only nature.

Finally, there is a great deal of study ideas and parameters to estimate in this book. This book could be seen as the foundation for a future research program as much as it is an original work of science. Many of the ideas here are possible, but are best done with a team and sufficient funding – they are too much for one man to do through online platforms.

If you are very wealthy and would like to make a grant to a newly formed Sociobiology Foundation, please contact me at josephbronski7@protonmail.com or X.com @BronskiJoseph. Thanks for reading!

[1]See Age of Discord.

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Chapter 7

Appendix 1

7.0.1 The Homosexual and Female Verbal Tilt

Male homosexuals have a verbal tilt. One of the first studies to show this was published in 1984.

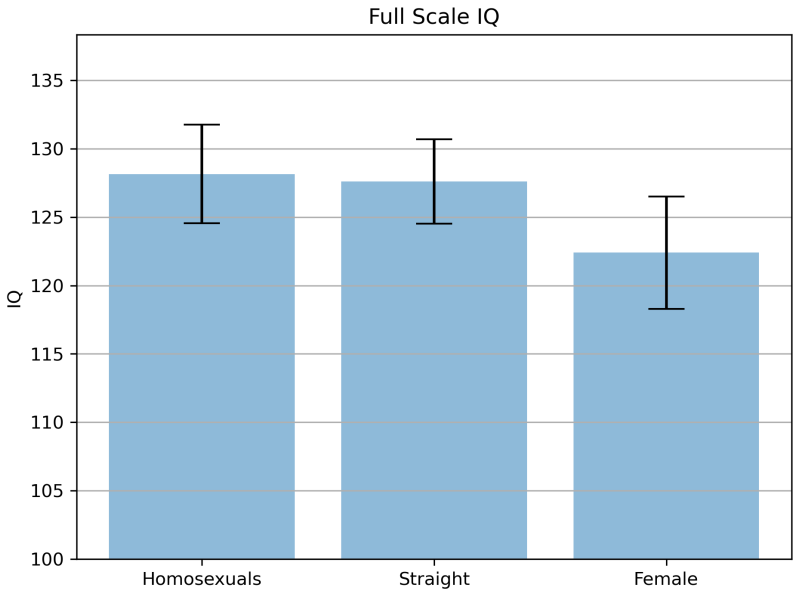

Figure 7.1: Homosexual FSIQ. Bars are 95% CI. [1]

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 7.1 shows, there was no full scale intelligence gap between the groups.

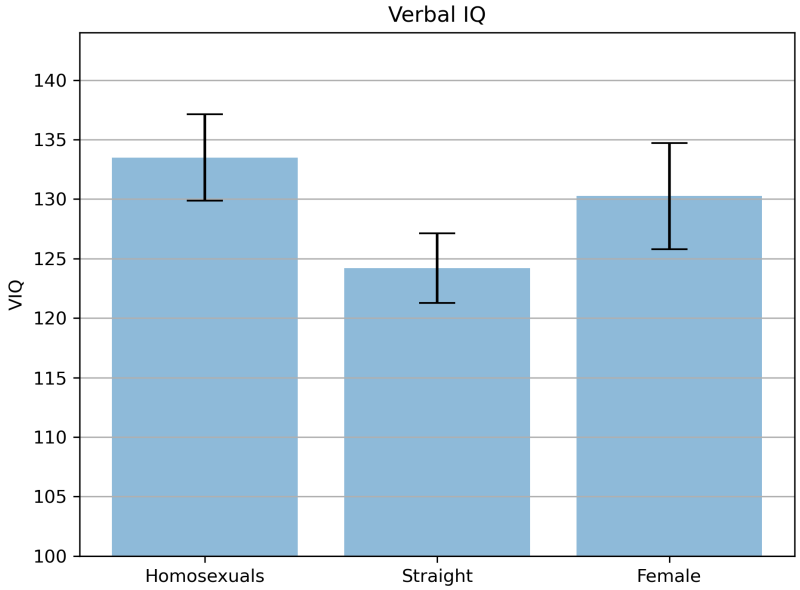

Figure 7.2: Homosexual VIQ. Bars are 95% CI. [1]

However, women and homosexuals had higher verbal IQs than the straight men.

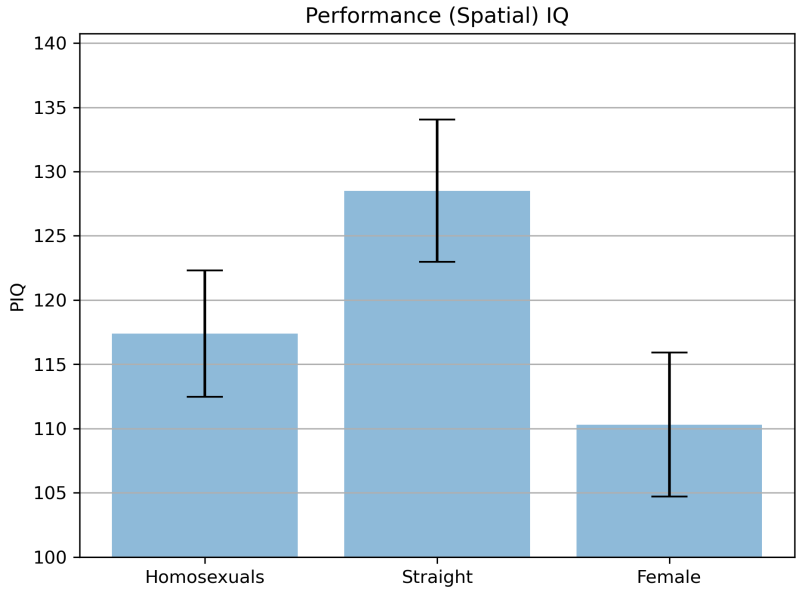

Figure 7.3: Homosexual PIQ. Bars are 95% CI. [1]

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.

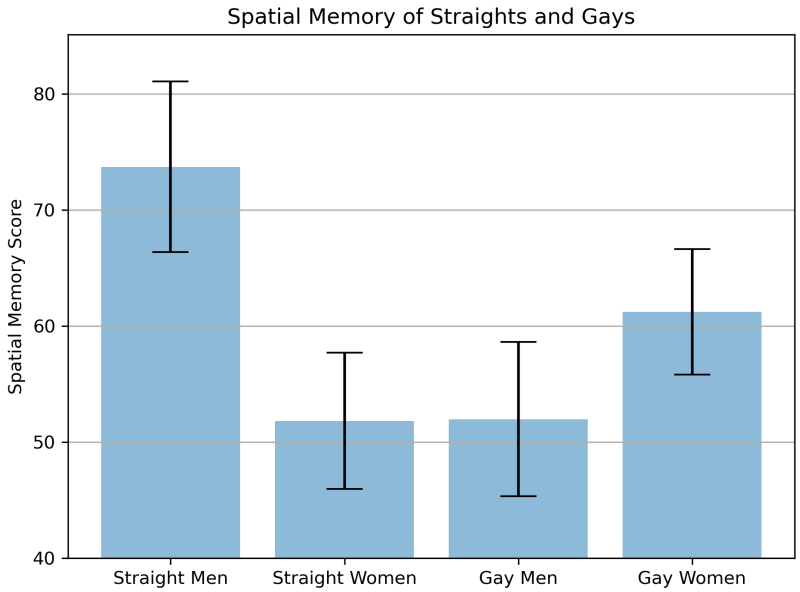

Figure 7.4: Error bars are 95% CI. [2]

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.

7.0.2 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.

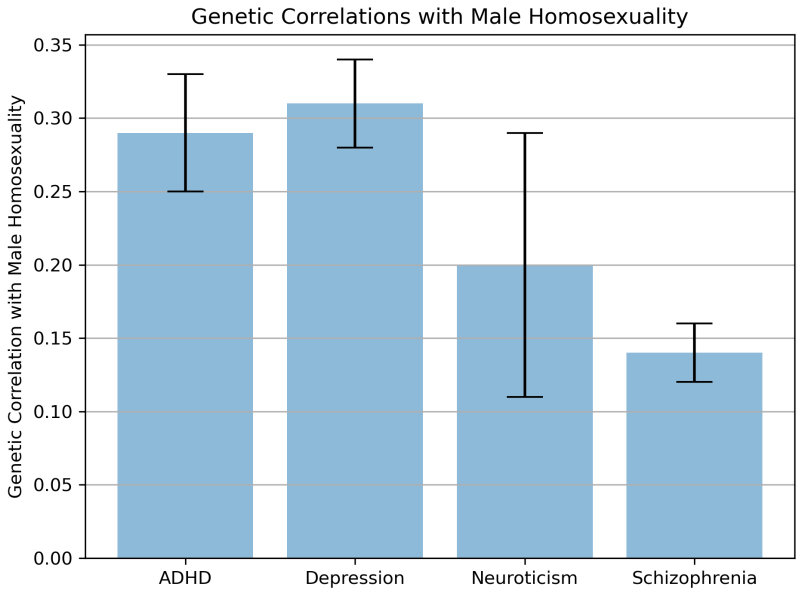

Figure 7.5: Error bars are 95% CI. [4]

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

7.0.3 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.

7.0.4 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].

7.0.5 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].

7.0.6 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].

7.0.7 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].

7.0.8 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].

7.0.9 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].

7.0.10 The Verbal Tilt and Leftism

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

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Chapter 8

Memetics Appendix

8.1 Some Words on Memetics

In this appendix, I will summarize and cover some interesting verbal expositions on memetics that were impactful on my thinking.

8.1.1 Mosca

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.

8.2 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:

$$C = E[P] = E[G] + E[Env] \tag{8.1}$$

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.

8.3 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.

8.4 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.

8.5 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.

8.6 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.

8.6.1 Pareto

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.

8.7 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.

8.7.1 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		
$3\alpha, 4\alpha$	The objective end would be accepted by the subject if he knew it.	
$3\beta, 4\beta$	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?

8.7.2 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.

CLASS I

INSTINCT FOR COMBINATIONS (§§ 889-990)

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)

CLASS II

GROUP-PERSISTENCES (PERSISTENCE OF AGGREGATES) (§§ 991-1088)

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)

CLASS III

NEED OF EXPRESSING SENTIMENTS BY EXTERNAL ACTS (ACTIVITY, SELF-EXPRESSION) (§§ 1089-1112)

III-α. Need of "doing something" expressing itself in combinations (§§ 1092-93)
III-β. Religious ecstasies (§§ 1094-1112)

CLASS IV

RESIDUES CONNECTED WITH SOCIALITY (§§ 1113-1206)

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)

CLASS V

INTEGRITY OF THE INDIVIDUAL AND HIS APPURTENANCES (§§ 1207-1323)

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.

8.7.3 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)

$$\frac{dClass1}{dt} = f(\frac{dWealth}{dt}) \tag{8.2}$$

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).

8.8 Other Summaries

8.8.1 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.

8.8.2 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.

8.9 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.

8.10 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.

8.11 Mercier

There is extensive work by Hugo Mercier documenting the same finding with cognitive science literature [6] [7]. I will summarize his arguments here.

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.

8.11.1 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 [7].

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.

8.11.2 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.

8.12 p_s Statistics

How guillible are people? We suspect people favor fitness increasing memes due to evolution. p_s statistics offer some modest support of this idea.

Here is what p_s statistics are. 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:

$$p_s = \frac{p_2 - p_1}{1 - p_1} \tag{8.3}$$

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.

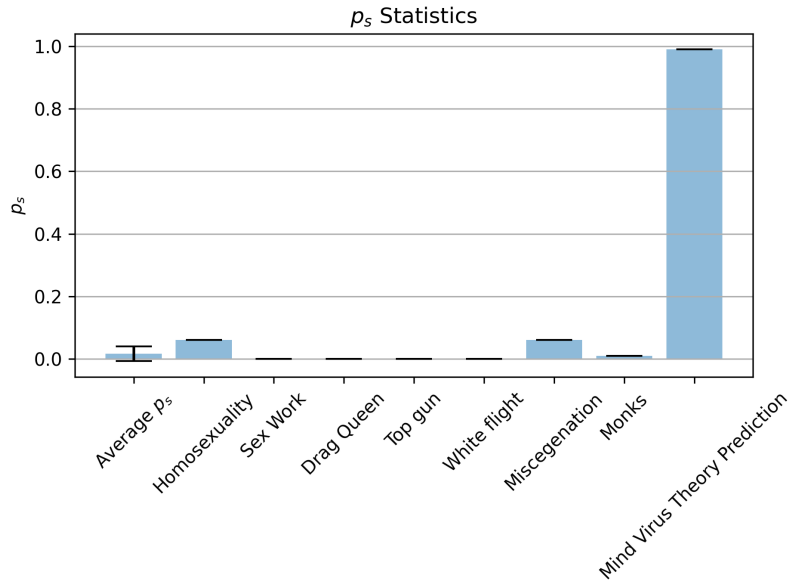

Figure 8.1: General Guillibility is indistinguishable from 0

8.12.1 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.

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

8.12.2 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.

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

8.12.3 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.

$p_1 = 0.03$

$p_2 = 0.02$
$p_s = -0.01$

8.12.4 Top Gun

Source: [2]

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.

$p_1 = 0.005$
$p_2 = 0.0056$
$p_s = 0.0006$

8.12.5 White Flight

Source: [3]

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 ...

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

8.12.6 Miscegenation

Source: [4]

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.

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

8.12.7 Monk Life

Source: [5]

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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