# FUNDAMENTALISM AMONG THE WARRIORS



"The heart of the matter, we believe, is that many philosophers and sociologists want 'truth' and 'reality' to be exact. To them 'truth' cannot have an error bar. Reality cannot have any residual uncertainty."

Kenneth G. Wilson and Constance K. Barsky, Beyond Social Construction, 2001

"Lay audiences who are unfamiliar with these fields are susceptible to being swayed by dumbed-down soundbites like 'sex not gender' and 'woman means adult human female'—phrases that sound pithy and compelling precisely because they oversimplify reality."

Julia Serano, What is a Woman, 2023

"Feminist doctrine invents several new categories of thought-crime, the most heinous of which is to question or contest current feminist doctrine [sexual harassment]... It shrewdly guilt-trips those campus liberals who will agree to all sorts of nonsense rather than let themselves be labeled misogynist."

Norman Levitt, Why Professors Believe Weird Things, 1998

hen Trump ran for office in 2016, the fascist mobilization was beyond anything in living memory—including the bad old days of the '80s, when hundreds of neonazis like East Side White Pride openly ruled the streets of cities like Portland, jumping minorities for sport. 185 Not only were many of those same old boneheads, some of whom had served time for murder, back on the streets, but they were joined hand-in-hand by ravenous hordes of conservative know-nothings. At first, a so-called "Fascist-Ancap Alliance" brought Infowars fans and armed militia members to chant "build a wall" on the Portland State University campus at students of color. Then a wider number of "street preachers" and "white identitarians" soon coalesced in streets, chanting promises to murder immigrants and beat non-white infants to death almost every weekend, then jumping in their trucks and driving around looking for victims. By May of 2017, one of their number, Jeremy Christian—who had a couple months earlier punched a bus stop beside my face, attempting to make me flinch—had stabbed three people on our light rail train, killing two, after attacking two muslim girls and screaming about a local antifascist research group.

During this siege of our city, while far-right calls for murder and intense state violence echoed outside his windows, one professor at Portland State, Peter Boghossian, chose to spend his time plotting revenge against some more dire enemies.

Boghossian joined with James Lindsay and Helen Pluckrose to compose twenty vapid articles (on things like rape culture in dog parks and fat bodybuilding) and submitted them to an array of peer-reviewed journals in queer, trans, feminist, fat, sexuality, and race studies. Four out of the twenty were accepted and published.

In the conservative media ecosystem—in between calls for mass deportations and the arrest of all political dissidents—this was trumpeted as proof of the vacuity of "left wing identity politics" or "grievance studies." Very soon their hoaxes were branded "Sokal Squared."

At first glance, the hoaxes could not be more different, and many, including Sokal, noted this.

Sokal's Hoax took aim at metaphysical and scientific antirealism, and was

185 Elinor Langer, A Hundred Little Hitlers: The Death of a Black Man, the Trial of a White Racist, and the Rise of the Neo-Nazi Movement in America (2004).

an essay structured around exposing and critiquing Aronowitz's own writings. The hoaxes of Boghossian, Lindsay, and Pluckrose took aim at... academics writing about the structural oppression of minorities?

Sokal sought to prove that a prominent marxist zine had no ethical compulsion against platforming explicit declarations of a reactionary philosophy. Boghossian, Lindsay, and Pluckrose sought to prove that... you can get a few mildly silly research topics past lazy peer review in some bottom-tier academic journals?

The only way one could possibly equate the two situations is if you believed that Sokal's Hoax had anything to do with peer review or thought postulating the existence of things like white supremacy and cisheteropatriarchy were on par with postulating that the physical universe doesn't exist and our minds make reality.

In short, this new hoax "scandal" had almost nothing in common with the antirealist contentions at the core of the Science Wars. Attempts to label it "Sokal Squared" by conservative media personalities was surely just stolen valor and pandering to chortling troglodytes on Fox News who think "minorities whine too much."

Anyway, why did Meera Nanda sign the Rowling letter?

### THE BIGGER ENEMY

When *Social Text* groused, in the aftermath of Sokal's hoax, that the entirety of left academia was under attack, they weren't *just* trying to bring in allies to cover their asses. Norman Levitt and Paul R. Gross' bestseller *Higher Superstition* may have brought to wider public attention the ongoing wars over realism and antirealism within academia and the radical left, but it *also* explicitly tied conservative critiques of the radical left to critiques of postmodernism. This courting of the far right was a huge part of its breakout success.

While Levit and Gross postured at various points as centrists, liberals, or even leftists, in no remote sense were they anything other than far-right reactionaries. They whined about gender abolitionism and racial justice, while posturing as "neutral" on basic issues of oppression, in ways that prefigured the language of today's demagogues masquerading as "classical liberals": "We refuse on principle to take sides in the dispute over the literary canon, in the fights over affirmative action, in the question of whether it is well to have 'studies' departments for subpopulations with a history of victimhood." 186

"Victimhood." Not oppression, "victimhood." I mean, what can even be said to such reactionary drivel besides *eat a fucking bullet*.

The explosion of popularity that *Higher Superstition* saw is functionally inseparable from the simultaneous explosion of interest in Richard J. Herrnstein and Charles Murray's *The Bell Curve*. Public discourse in mainstream media consistently conjoined the two books, tying those scientists denying race pseudoscience to those postmodernists denying science and physical reality wholesale. But this move wasn't constrained to conservative op-eds. Among the physicists, Alan Cromer, for example, approvingly cited *The Bell Curve* in one of the many resulting books published in the academic half of the Science Wars.<sup>187</sup>

Outright hostility to feminism, multiculturalism, and decolonial struggles was an incessant infection among the critics of antirealism and relativism. In the same article where Fromm demands Aronowitz confront whether his antirealism substantiates that of Christian Science he *also* whines endlessly about feminist cancel culture.<sup>188</sup>

The leftist science warriors had every opportunity to denounce these would-be allies, but many chose silence or enthusiastic complicity. Just as

<sup>186</sup> Norman Levitt and Paul R. Gross, *Higher Superstition: The Academic Left and Its Quarrels with Science* (1994), 9.

<sup>187</sup> Alan Cromer, Connected Knowledge: Science, Philosophy and Education (1997).

<sup>188</sup> Harold Fromm, "My Science Wars." *The Hudson Review* 49, no. 4 (Winter, 1997): 599-609.

the postmodernists choose silence or enthusiastic complicity with the more batshit antirealists in their camp.

There was "a bigger enemy," after all.

By 2005, Sokal's primary collaborator, Jean Bricmont, had come to the conclusion that the struggle against Israel's genocidal apartheid regime and the suppression of Palestinian voices licensed him to collaborate with fascists and conspiracy theorists. So pressing was the greater enemy of Zionism.

Soon he was declaring the genocide in the Balkans to be an invention of NATO propaganda and Milosevic a smaller enemy than the US.

Amidst scoffingly dismissing the support that leftists once lent Pol Pot and Stalin, Bricmont explicitly renounced the Three Way Fight perspective of antifascism, in terms that characterized the thinking of many leftists at the time:

"The neither-nor stance gives the impression that we are somehow situated above it all, outside of time and space, whereas we are living, working, and paying taxes in the aggressor countries or their allies (in contrast, the position 'neither Bush nor Saddam' made sense for Iraqis, since they were subjected to both regimes). An elementary moral reaction would be to oppose the aggressions for which our own governments are responsible, or else to approve them outright, before even discussing the responsibility of others."

Jean Bricmont, Humanitarian Imperialism, 2006

When, in 2009, antifascists exposed Bricmont's praise for the Holocaust denier (and Rwandan genocide denier) Paul-Eric Blanrue, he doubled down, denouncing antifa as well as anti-racism, even getting Chomsky to sign a public letter on behalf of another holocaust denier. Further and further he spiraled, and soon he was praising holocaust deniers more broadly as "atheists of the religion of the holocaust." 189

"For me, the world is split in two: those who defend Chouard [a denier of gas chambers] in the face of the Parisian media inquisition and the others. Everything else takes second place."

Jean Bricmont, Facebook, 2019 190

#### And Sokal?

Sokal, whose face years ago I printed on militant anti-postmodernist stickers and buttons for anarchist bookfairs? Sokal, the leftist radical who taught for Sandinistas and was one of the early prominent academic figures organizing against the apartheid regime of Israel? Sokal, the childhood hero of a kid trapped in a faith healer cult?

189 Jean Bricmont Personality Notice, Conspiracy Watch, Last Updated 2021, https://www.conspiracywatch.info/notice/jean-bricmont.
190 ibid.

Alan Sokal took speaking engagement after speaking engagement with the far-right, repeatedly sharing platforms and heaping praise on them. When James Lindsay released a ludicrous and transparently reactionary book titled *Cynical Theories: How Activist Scholarship Made Everything About Race, Gender, and Identity*, Sokal endorsed it, even writing a preface.<sup>191</sup>

Lindsay would quickly move on to spreading fear about "white genocide," <sup>192</sup> describing queer folks as "a hostile enemy," <sup>193</sup> and alleging that shadowy global elites were conspiring to reduce the world population. <sup>194</sup>

But most directly, Sokal has embraced rabid transphobia and gotten deeply into bed with the most noxious fascists. He defends *conversion therapy* for trans kids, <sup>195</sup> citing the discredited pseudoscience of Ray Blanchard, the notorious crusader against survivors of child sexual assault. The field of sexologist conversion therapy studies is notoriously unscientific, going back to literal defenses of "faith healing." <sup>196</sup>

- 191 Alan Sokal, Preface to the French translation of Helen Pluckrose and James Lindsay, *Cynical Theories*, 2021, https://physics.nyu.edu/faculty/sokal/preface\_to\_cynical\_theories\_ENGLISH.pdf.
- 192 James Lindsay (@ConceptualJames), June 10, 2021, https://web.archive.org/web/20210628000113/https://twitter.com/ConceptualJames/status/1402749362220974094.
- 193 James Lindsay (@ConceptualJames), June 17, 2020, Twitter, https://archive.is/8geaj.
- 194 James Lindsay (@ConceptualJames), January 13, 2021, https://web.archive.org/web/20210324145446/https://twitter.com/ConceptualJames/status/1349370680857518082
- 195 Alan Sokal,. Submission to the Government Consultation on "Banning Conversion Therapy," December 5, 2021, https://physics.nyu.edu/faculty/sokal/conversion\_therapy\_submission.pdf.
- 196 David H. Barlow Ph.D., Gene G. Abel M.D. & Edward B. Blanchard, "Gender identity change in a transsexual: An exorcism," *Archives of Sexual Behavior* 6 (1977): 387–395.

#### AN INTERLUDE ON FASCIST CREEP

As we've covered, there was a pile of reactionary shit among the ranks of postmodernists, many of their perspectives or arguments had directly reactionary roots, and much of their legacy was empowering conservative science-deniers and outright fascists. ... So the science warriors had garbage among their ranks too. Everyone's hands are dirty. What do we do with this?

Again, the easy path out—and one that many unfortunately instinctively swerve towards—is to declare all such ties as irrelevant. *Everything can be appropriated by reactionaries, anyone can be corrupted—so examples of such neither matter nor illuminate.* 

This deflection is gravely mistaken because it abandons our obligation to identify *specific* points of commonality, crossover, and ideological weakness. It treats fascism as some inexorable storm that can swallow anything; a brute sociological phenomenon rather than an ideological cluster with content and structure.

Of course, such a dismissive approach is comforting to many and is quite common in academia, where surveilling rank-and-file fascists and the ideological moves that make up their various movements is at best seen as janitorial work for *mere activists* like antifa. At best academics engage with a few select historical fascist *academics*, while treating the arguments or connections of actually influential living fascist thinkers and organizers as almost inherently irrelevant.

But the compromise of "I don't press about your camp's associations if you don't press about my camp's associations" only ends up providing cover for fascists in practice. Similarly, "Why should we focus on a few kooks rather than intellectually stronger or more popular positions?" is democratic-brained naivety regarding the damage that a well-positioned minority can inflict or the corruptive influence it can have.

These dismissals spawn severe ignorance and misunderstandings, often outright endorsing the enemy's perspectives or setting up strawmen (like the "totalitarianism" thesis), and it can lead to practical miscalculations and failed predictions in the struggle to vanquish the fash, to say nothing of embarrassing pratfalls in direct debate or engagement with their ideas.

The fallback in the face of such is to scoff and shrug, who among any of us could possibly predict or engage with this lunacy! A solidarity in mutual ignorance of fascist thought is thus cultivated as a signature of elite belonging. The more that the in-group is—in their ignorance—flabbergasted by fascists, the more being ignorant of and flabbergasted by fascism becomes a virtue, critical to belonging to the in-group.

In reality while fascists come in many stripes, and reaction takes many forms, it does not take *every* possible form. No matter how diverse and seemingly preposterously cobbled together different ideological currents in the fascist movement are, there are commonalities and important underlying structures to examine and understand. So too with reactionaries and conservatives more generally.

Pressing such points is not about invalidating by association—or playing whataboutism—there is little shame in unchosen and happenstance proximity. The real demerits arise from inaction. As modern antifascists painstakingly learned during the '80s when neonazis first surged in subcultural scenes, we have a responsibility not just to draw lines and exclude reactionaries from the various prestiges and legitimizations accorded by association, not just to publicly expose all fascist creep and bust up their organizing, nor just to meet their jackboots in streets with defensive violence, but to studiously take an accounting of how their creep into various circles happens.

Every ideological community has vulnerabilities that can be exploited; how aggressive you are in discovering and applying patches over those vulnerabilities is what counts.

But if irrationalism, parochialism, and relativism are the traditional hall-marks of reaction—not universalism or belief in a single physical reality—what could even be the source of reactionary rot among the realists?

#### YOU DON'T HAVE TO BE A SCIENTIST...

On October 12th, 2020, one Toby Young, the "general secretary" of a UK nonprofit he formed by the name of "The Free Speech Union" sent me a fancy letter implying they would sue a US-based anarchist organization I was a part of for "libel" over a public denunciation we had made of a misogynist and racist shitstain named Toby Fitzsimmons. The aforementioned shitstain had submitted a generic article on anti-capitalism to us earlier that year, only to be exposed by his fellow students at Dunham University, who admirably leaked a pile of screenshots from a misogynistic and racist chat he'd been in and gave us a heads up. Stating our opinion on the matter publicly—I was informed by this "Free Speech Union"—was a "social media pile-on" and thus constituted a "criminal offense."

I laughed and told the censorious little tory pricks to fuck off.

A few years later, Sokal proudly gave a talk before them.

For the most part, this talk was a lazy-retread of his decades-prior fame, recycling the same quotes and the same canned arguments he'd repeated in talks again and again. But Sokal added something new this time:

"Saying that quarks are constructed is wrong but at least it's subtle, saying that sex is socially constructed is—I mean, you know, you don't have to be a scientist to realize that that's wrong."

Alan Sokal, talk before the Free Speech Union, 2024 197

You don't have to be a scientist?

In his Hoax, Sokal groused (in mocking praise) that Aronowitz had written "neither logic nor mathematics escapes the 'contamination' of the social." Meta-commentary on this line continued for years throughout the Science Wars, with exactly how much contamination the central issue. I always read this focus on things like math and physics as a mutual recognition of what had the purest claim to science, the most objective structures of reality. It surely went without question that everything else was strongly contaminated with the social; fields like biology were repeatedly brought up as spaces of fuzzy distinctions and perspectival choices. Objective reality would have to live or die on truly universal structures, as painstakingly uncovered by the most radical sciences, not the half-baked impressions and pragmatic needs closer to everyday life.

Three decades later, before the censorious reactionaries of the "Free Speech Union," this would all be thrown out. "You don't have to be a scientist."

197 "What is Science and Why Does it Matter? With Professor Alan Sokal," talk before the Free Speech Union. March 27, 2024, *The Free Speech Union*, uploaded April, 2024, YouTube, 55:54. https://www.youtube.com/watch?v=UbRrP8UzvSc.

The little tories didn't want to hear Sokal repeat the same canned snark and damning quotes he'd been regurgitating since the '90s; they only knew who he was because they'd heard he'd once owned the libs. So he tailored his talk into a denunciation of transfeminism. He knew what lines would serve as fresh meat to the jackals, and he tossed them out with relish.

"Emmy Noether, one of the greatest mathematicians of the 20<sup>th</sup> century was denied a professorship at Göttingen because why? —Because she had two X chromosomes."

Alan Sokal, talk before the Free Speech Union, 2024<sup>198</sup>

Let's pause.

It is *transparently false* that Noether was denied professorship in 1915 because of her chromosomes. Theophilus Painter wouldn't discover the X/Y heteromorphic chromosomal pair in humans until 1924; whatever Noether's chromosomes were, the philosophical faculty at Göttingen simply could not and did not discriminate against her because of them. They discriminated against her because she was a woman.

How, you might ask, did they determine this?

Well they no doubt assessed her physical characteristics as broadly aligning with a distribution of characteristics they associated with women, her build, her size, her fat distribution, her voice, the texture of her skin, and her lack of facial hair. They assessed how she dressed, how she carried herself, how she talked, and how she behaved. Most of all, they assessed how other people assessed her and how she assessed herself.

When Noether was later *expelled* from Göttingen by Hitler's ban on Jews, did the Third Reich assess her ethnicity by means of a DNA test and some arbitrary cluster grouping analysis of genes?

No, of course not. She was assessed as a "Jew" much as she was assessed as a "woman." In the rather loose associative terms of a concept constructed by humans through millennia of arbitrary social division, oppression, identity-formation, and malleable perpetuation.

Of course, it is broadly likely that Noether had two X chromosomes, just as it is broadly likely that she would have genetic markers common among Jews. But we do not *know* that, and certainly neither did anyone at Göttingen.

What *would* have been known to them was the existence of trans people. Karl M. Baer had undergone gender reassignment surgery in 1906 and gained *full legal recognition* in Germany with a new birth certificate as a man (a legal status that would have applied at Göttingen). In 1907, upon the death of prominent Brazilian socialite Dina Alma de Paradeda in Breslau, her geni-

tals were publicly revealed and a biography published. From these cases and others, German media had widely covered the existence of trans folks, and a surprising amount of the coverage was sympathetic. In academic spheres, Magnus Hirschfeld, whose prominent Institute for Sexual Science in Berlin would later be targeted and destroyed by the Nazis, championed the notion of *sexual intermediacy*. This notion, that sex was a multidimensional spectrum, followed in the footsteps of many scientists, like Charles Darwin, who had assumed the same.

And what we know *now* is that there are many people who develop the physical features we associate with women *without* two X chromosomes. Some have a Y chromosome but with genetic coding such that testes and testosterone never occur and they are born with the phenotypic traits we associate with women, like a uterus, fallopian tubes, cervix, and vagina. This often happens via a variation within a gene (called "SRY") on the Y chromosome *or* via a gene (called "SOX9") on a completely different chromosome, not traditionally considered a sex chromosome. Other folks with Y chromosomes have genetic coding on their X chromosomes such that their androgen receptors studiously ignore that hormone, causing them to develop the phenotypic traits we associate with women. Other genetic variations that lead to a female phenotype include having a single X chromosome, having a small piece of the Y chromosome in an X chromosome, or having both XY and XX cells from the merging of twins in utero.

Most women—with or without these traits—do not know anything about their genetic code. And certainly no one alive in 1915 knew these details.

Sokal dismissed out of hand such facts about the microphysics of "sex," in terms that are *astonishing*:

"The sexual divide is an exceedingly clear binary. As binary as any distinction you can find in biology... a subject that's been more or less accurately understood by humans albeit without all the scientific details ever since the beginning of our species."

Alan Sokal, speech before the Free Speech Union, 2024  $^{\scriptscriptstyle 199}$ 

## **RADICAL ACCOUNTS OF "SEX"**

"If the ordinary things of the world are compounds then it is natural that they should share nothing in common except resemblances... Scientifically significant generality does not lie on the face of the world, but in the hidden essences of things... it is clear that 'table' and 'red' are not real universals; and 'gene' and 'molecule' are."

Roy Bhaskar, A Realist Theory of Science, 2008

Some will say that the efforts of people like Sokal to redefine our everyday lay concept of "women" in terms of chromosomes is "reductionism." Perhaps in one sense of the term. It certainly strips away a vast amount of dynamics and declares them either derivative of a single underlying fact or irrelevant. But *lossy* reductions, ones that deliberately ignore further underlying dynamics and paper over the resulting exceptions, are myriad and infinite. They are not in line with the "reductionism" seen as a virtue and pursued by physicists.

Why would we ever expect the crude conceptual structures and terminology of early humans (assuming they even used a sex binary) to be preserved in a more radical and universal account of reality? And why would a physicist treat concepts at the highly coarse-grained level of chromosomes as *more real*, and somehow *less abstract* or *less prone to artifacts of social construction* than at the level of genes or, in his shocking example, quarks?

After three decades as a prominent champion of realism, it turns out Sokal is not fighting for the radically realist perspective justified by theoretical physics but rather an fundamentalist "realism" closer to something like a phenomenological or "common sense" perspective, where whatever *seems* to be the case *must be*.

For comparison, let's return to Maxwell's electromagnetism and Weinberg's electroweak theory. Physicists rightfully boast that the theory of electrodynamics has been proven precise to 10 in a billion. It matches all the data we have to the maximum precision we can test. Still, it is probably the case that this present theory is a rough or incomplete abstraction over a deeper reality and a more universal theory. We do not yet know this more radical account, and there's a tiny chance that it might not involve objects/relationships like "the electron field" as we know it. If so, we will be forced to do one of three things, depending on what the deeper theory looks like:

1. We could dissolve the concept of "the electron field" and never again use it for anything serious or even in any context. As folks did with "phlogiston."

- 2. We could continue to use "the electron field" as a shorthand, but recognize that it is useful only in some context or bounded domain, and tied to the pragmatic interests, perspectives, and applications of humans. It might retain some faint realist echo, as representing some degree of fixedness or factual structure, but it would not be *universally* valid.
- 3. We could try to redefine "the electron field," mapping it onto our new conceptual structures, *choosing* some specific mapping so that the term retained its universality.

Once upon a time we had a rough concept of "sex," one that emerged from pragmatic concerns with the technology of reproduction. It was a rough and crude bundle of associations, shaped in a feedback loop with social and cultural dynamics and pressures, but it seemed to point to some deep underlying reality. Something fixed in the world, a universality discernable from any perspective or vantagepoint. A single bit that God flips when creating a soul. As it turns out, this is absolutely and thoroughly not the case.

One can sympathize with the binary hypothesis. For a moment it seemed like a subset of the things we had historically clustered under the concept of "sex" were the result of a single chromosomal bit, XX or XY, and it is reasonable that some folks felt an urge to redefine "sex" to mean exclusively those things, potentially splitting off everything else once associated as mere cultural constructions of "gender." This gender stuff could then be messy and arbitrary, while sex is left clean and binary.

But as time went on the picture became complicated, biologists trying to preserve the binary hypothesis were forced to split their concept of "sex" into layers: *fetal chromosomal sex, fetal gonadal sex, fetal hormonal sex, internal reproductive sex*, and *genital sex* roughly corresponding to an idealized temporal sequence of development. A given individual could then be classified as male in one layer and female in another.

For any *scientific* concept of "sex" it's natural to want the broadest possible compression, a concept that could be generic across species. It would be weird to limit sex to "humans"—an already notoriously arbitrary category—much less assign particular genes like SRY and SOX9 a universal role.

But chromosomes and reproduction don't work the same way across nature. Birds encode sexual expression via a vastly different chromosomal mechanism from humans, requiring *double* Z chromosomes to encode the development of what we then call male features, and there are plenty of species that don't have a *chromosomal* sex binary at all. There are lizards and insects that don't use males at all and insects with three sexes. There are 7 taxonomic families and 27 orders of fish species that change sex, with female fish transforming into

fully reproductive male roles. The causality of this process goes from social cues to the brain to the hypothalamus and pituitary gland which then cause the gonads to change. These fish and many other species reproduce through causal mechanisms that oblige blurring or rearranging the layers of analysis we might want to break them into for epistemic ease. Social and environmental context is often influential, as are an organisms' cognitive response, after all evolution will select for genes that respond to relevant external conditions and this involves being able to change their expression.

Every scientist can recognize that such *ad hoc* distinctions are the sign of a degenerating research program, a radical account that once seemed within grasp, slipping away. Most scientists would give up on preserving the more abstract term of "sex," either retiring it to casual shorthand and different definitions in different contexts, as biologists have, or dissolving use of it entirely.

In contrast to electrons, "sex" has always been a descriptor of the loosest common associations smeared out over the most absurdly differentiated set of examples; an obviously pragmatic and perspectivally-oriented conceptual tool. It would be preposterous and *alarming* to any realist worth their salt if such a human-scale concept actually did cut reality at the joints because such would suggest that the structures of reality had been somehow tailored to our perspective.

If physicists had found a deeper zoo of particles beneath electrons (the chromosomes to sex), and then a zoo of particles beneath those (the genes beneath the chromosomes), we might've tried to hang onto "electrons" and speak of something like different isotopes of electrons dependent upon different underlying configurations.

But the problem is far more intractable in the case of "sex." The number of genes is *many orders of magnitude* larger than particles in the standard model or atoms in the periodic table of elements. And they're not universally fixed; the set of genes to be considered varies across individual "organisms," and even within them (imagine electrons needing to be defined differently on different planets). Moreover the arrangement of these genes matters, and the fuzzy notion we're trying to isolate, "sex," is a *process* involving massive interactions, with relevant causal chains often seemingly skipping up levels of abstraction in terms of reach (imagine electrons responding to the fact that it's Tuesday or that the cute lab tech frowned at you this morning). In short, "sex" is *nothing like* the universal perfect consistency of the electron field, where every single electron is indistinguishable from every other electron, modulo external arrangements like position and spin entanglement.

If physicists discovered that what we had been describing with "electrons" were somehow the product of such a batshit Rube Goldberg contraption and

so massively and arbitrarily variable we would instantly give up on the concept of electrons. We wouldn't even throw them in the phlogiston bin, we'd drive them to the city dump under the cover of the night and bury them in hopes no one would ever find our shame.

And on our way back we'd probably have a psychotic break, because the sheer extent of the consistency and interlocking confirmation of everything to do with electrons *up until that point* would oblige us to believe in something like a Deceiver of vastly superior resources and/or the pointless irrelevance of all thought.

Biologists themselves recognize that "chromosomal sex" is an aggregate abstraction over far more complex genetic dynamics, and many now follow this to the inevitable conclusion: that the notion of "sex" motivating this whole affair, *cannot be reductively mapped*, as it is a human-scale abstraction created for pragmatic reasons and thus inextricably entwined with culture.

"Plentiful data and analyses support the assertions that sex is very complex in humans and that binary and simplistic explanations for human sex biology are either wholly incorrect or substantially incomplete. For humans, sex is dynamic, biological, cultural and enmeshed in feedback cycles with our environments, ecologies and multiple physiological and social processes."

Agustín Fuentes, *Here's Why Human Sex is not Binary*, 2023

Pretty much no trans or intersexed person on the planet<sup>200</sup> is denying that what we call *Homo sapiens* has so far had a roughly bimodal distribution of sexual characteristics largely causally carried by XX and XY chromosomes and associated hormonal regimes, that reproduction has operated through differentiated gametes with sperm cells fertilizing ovum. Let me say that again, the actual physical *reality* is simply not being contested by transfeminists in these discourses.

Just as recategorizing Pluto as a "planetoid" rather than a "planet" (and then back again) wasn't an attack on reality and didn't undermine anyone's knowledge of the distribution of matter in the solar system, this is a changing of *labels* on our map of the structures of reality, not a denial of them. What's being fought over is the use of a *word*. And only antirealists in the vein of the wackiest postmodernists and new agers think that words constitute reality.

The most obvious and natural reductionist approach is to throw out the term "sex" for anything firmly universal, while retaining variations on it in specific perspectival and pragmatic contexts, continually emphasizing the

200 The only possible exception I know of is some fringe speculative writing by Lu Ciccia, in *Contra el sexo como categoría biológica*, which saw harsh criticism and pushback from Mexican trans folks. I have not yet acquired a copy.

contingency of these uses. In general the reductionist, or radical, prefers to speak in terms of more fine-graining realities like "people with uteruses," "people who primarily run estrogen," and even "people with double X chromosomes." In medical studies such finer conceptual categorization allows for more explicit clarity around potential causal dynamics and entailments.

Of course this change of language changes our attention, it emphasizes the objective lack of solidity of "sex," how the aggregates we're vaguely gesturing at are bimodal not binary, contextual not universal. But these are also not up for debate scientifically; they are objective realities.

Insofar as there could be any rancorous disagreement, it has to be over the virtue of reductionism, that is to say radicalism itself.

#### FUNDAMENTALISM: REALISM DEVOID OF RADICALISM

Immediately after Sokal's hoax, Barbara Epstein appropriated the public attention and umbrage to declare that Judith Butler's *Gender Trouble* was a noteworthy example of postmodernist *antirealism*.

"Butler argues that the conventional view of sex as consisting of two given, biologically determined categories, male and female, is ideological, and defines radical politics as consisting of parodic performances that might undermine what she calls 'naturalized categories of identity.' Her assertion that sexual difference is socially constructed strains belief. It is true that there are some people whose biological sex is ambiguous, but this is not the case for the vast majority of people."

Barbara Epstein, Postmodernism and the Left, 1997

Epstein did this right after complaining that postmodernism threatened to undermine marxist class analysis. Now, she was certainly right to denounce the tendency among postmodernists to evacuate class from their social theorizing on the grounds that "all interpretations or constructions of class interest are equally possible and equally valid." I've repeatedly emphasized that postmodernism's pluralism is a classed phenomenon, as is its allergy to the existence of simple facts or truths that might oblige action rather than unending open interpretation.

But I think the conjunction of the complaint about undermining class with the complaint about undermining sex is revealing.

It is trivially the case that any taxonomy of class will be arbitrary and lossy. If we let them, leftists will spend centuries furiously and fruitlessly debating the boundaries between "aristocracy," "bourgeoisie," "proletariat," and "lumpen." Are homeless queer teens shoplifting, scamming, selling drugs, and trading sex "proles" or "lumpen"? Are cops "workers," albeit "traitors," or are they in some entirely different category? I don't fucking care. Why would different splittings of such crude taxonomic terms matter to a crew of said homeless teens on their way to burn down a precinct? Our evaluation of the underlying power dynamics would be the same.

How we cut up such aggregate abstractions only matter if you're assigning them an ontological *primacy*.

When Epstein scoffed that the "vast majority" of people are not intersexed, the anarchist and the physicist are left completely perplexed. The anarchist feels no allegiance to majoritarian democracy; we would give our lives to defend a minority of one. And the physicist knows that even a single exception destroys a universal. Radicals simply cannot parse "vast majority" as an

argument with any compulsion.

But for the *fundamentalist* this is powerful rhetoric.

The right-wing libertarian Michael Huemer is a prominent proponent of "phenomenal conservatism"—the claim that we are epistemically justified in believing whatever *seems* to us to be the case, in the absence of evidence against it. While Huemer recognizes the occasional need to inquire and reason to strange conclusions, he champions a foundationalism to justification that inevitably bleeds into a lack of drive to hunt for deeper realities under appearances. Huemer has a tendency to embarrass himself by believing whatever incorrect and vapid accounts of antifa or "woke social justice warriors" pervade his right-wing social circles and media diet, feeling no compulsion to do a deep dive looking into what we actually argue and do. He's the sort to write, "According to most progressives, the main source of racism is Republicans and white people, not Democrats or black people," <sup>202</sup> as a supposed gotcha where many Democrats and black "leaders" supporting drug prohibition somehow disproves its racism (when in fact everyone on about the racism of the drug war constantly screams about them).

If, on first glance, something feels wrong or stupid, he regularly decides it probably is and delves no deeper.

In this, the star philosopher of phenomenal conservatism faithfully represents legions of 13-year-old white boys captured by reactionary influencers since Gamergate by pandering to their assumptions and instincts.

If it *feels* racist that antiracists treat white nationalism as distinct from black community organizing or personal biases, then it is racist. Why should you feel an obligation to spend years reading up on the history and continued influence of white supremacy? Why should you recognize the value of a definition of "racism" not as just personal bias, but in terms of broad and often diffuse power asymmetries, incentives, and alliances? And if you're Huemer, why shouldn't you cite that an entire 14% of US respondents (one in seven!) still openly oppose interracial marriage as somehow proof that racism is basically dead?

If it *feels* like a surrender of epistemic diligence when feminists use the shorthand "believe survivors" as a slogan then it must be. Why should you

201 By contrast to such, the position that *there is no foundation*, rather we are all thrown into the mix and eventually forced towards universal epistemic attractors can be seen as a kind of infinitism, but it really is a position that our starting priors or starting notion of epistemic virtues *do not ultimately matter*. It's an image where we're thrown out to sea at various locations and *have* to swim aggressively to eventually find purchase towards the infinite horizon. Huemer quite evidently feels no such frantic desperation, and this enables him to treat exploration as a more of a token virtue, to be dabbled with as one feels.

202 Michael Huemer, Progressive Myths (2024)., 94

think more richly around how to correct subtly inoculated incorrect priors, consider which personal heuristics can correct currently broken tendencies in mainstream social epistemology, or take personal responsibility for judgement and action beyond the crude measures of a courtroom? Why should you investigate rape and sexual assault statistics broadly when you can note a single math mistake in a single paper and then try to slice away the rest of its numbers by simply scoffing at modern definitions of rape and sexual assault?<sup>203</sup>

If it *feels* like the police state is broadly just on matters of race, then it must be. And if you make a long chain of inferences around evidence in cases of murder that take for granted at various points assumptions like liberal fantasies about how the police operate and that no one with conceptual schemas, thought processes, or allegiances influenced by a broadly white supremacist society *could have voted for Obama...* well the end result sure feels like confirmation.

Both Huemer and Epstein are content with their surface impressions of the world in the absence of overwhelming and immediately available evidence to the contrary. This is what Epstein meant when she brought up the *non sequitur* that intersexed folks are a *minority* of the population.

Trans and intersex activists regularly bring up that almost all atoms in the universe are either hydrogen or helium, with *everything else* making up only the tiniest sliver by comparison. *Atoms are binary*, they laugh, *any exceptions can surely be ignored or discarded*. But this mockery stems from an instinctively physicist way of viewing the world. Only radicals feel the nagging urge to dig into the exceptions, to push beyond some effective domain of "good enough" to find deeper root dynamics.

In the face of the existence of a mere minority, Epstein felt no such compulsion. The fundamentalist mind feels the reverse: any existing models must be *defended*. This inevitably extends to violence.

There's a quote of Sokal's from right after the Hoax that has always eaten at me.

"There is no fundamental 'metaphysical' difference between the epistemology of science and the epistemology of everyday life. Historians, detectives and plumbers—indeed, all human beings—use the same basic methods of induction, deduction, and assessment of evidence as do physicists or biochemists."

Sokal, What the Social Text Affair

Does and Does Not Prove, 1997

203 No joke, Huemer expresses annoyance that things like "repeatedly pestering someone for sexual favor" can create sexual assault, and dismisses accounts technically describing rape but not using the term on the grounds that "the simplest explanation would seem to be that respondents said they were not raped because they were not raped, in the ordinary English sense." In one sense, I agree wholeheartedly. I think it's obvious that no line can be drawn between the induction used in formal modern institutional science and the induction used by infants and everyday folks. This is why I argue that skeptical attacks on "science" can't help but extend to object permanence; there is simply no sustainable distinction between scientific antirealism and metaphysical antirealism.

But we apply these tools in different contexts, on different subject matters. Reductionism works wonders in physics, yet flounders in less radical fields studying messy aggregate systems where our concepts don't cut at objective joints but rather *contextually useful* distinctions. Sokal's quote in 1997 ignores this, which has long troubled me. By his talk in 2023 he has *reversed* things. Biology becomes *more obviously real* than physics, "sex" more real than quarks, because it is closer to the common sense of 13-year-old white boys.

If an account of the world makes a broad compression, who cares if it's a lossy one?

When I say that everyone engages in scientific thinking, I mean to emphasize the ever-present potential for radicalism. "You too can plumb deeper! Many terrifying structures larger than us have no independent power or autonomous existence! They are ultimately illusions that can be shattered! We only have to press beyond their effective domain!"

But it turns out what Sokal was trying to do was borrow the prestige of science for everyday beliefs. It wouldn't be the first time a socialist dabbled with reactionary populism, telling their caricature of an Average Joe that he already knows enough and "to hell with anyone trying to fuck with that."

Reactionaries always believe that some comforting simplicity must be defended from any remainder it leaves out.

Sometimes this comes guised as an epistemic conviction, like in Scott Adam's conspiratorial assertion that, "Complexity is always a cover for fraud. In every domain." <sup>204</sup> But simplicity-for-simplicity's sake is the goal. Not finding strange new lossless compressions of reality, but violently avoiding the demands of thought. While a scientist happily admits when something in our daily lives is actually irreducibly complex, the genesis of reactionary thought is the refusal to tolerate such. As a neoreactionary once memorably put this overall philosophy in a discussion on how to more fully oppress women: "An exception must die so that a rule may live." <sup>205</sup>

<sup>204</sup> Scott Adams, Twitter, February 7, 2025, https://archive.is/ivPoh.

<sup>205</sup> Pseudo-chrysostom, comment on "The Disastrous Effects Of Females In Power," *Jim's Blog*, June 5, 2018, https://blog.reaction.la/economics/the-disastrous-effects-of-females-in-power/#comment-1782721.

"The denial of complexity is the essence of tyranny."

Giorgio Parisi, Nobel Lecture: Multiple equilibria, 2023

In his attempt to defend the crude middle school account of sex against a more radical or reductionist account, Sokal is quickly obliged to abandon any universal definition, speaking instead of "humans" and mammals. One could imagine him defending this on the grounds that "*Homo sapiens*" are of greater import, he's just trying to give an objective account of something in *human nature*. Ignore all the ideological alarm bells going off and don't listen to any of those dirty punk transhumanists emphasizing that the open mutability of "humans" to processes of thought and culture has long defined us better than any arbitrary set of genes.

Sokal clearly wants to make chromosomes the defining core of human "sex." So he throws genes like SRY and SOX9 under the bus of his account of the True Human, to say nothing of androgen insensitivity, etc. He repeatedly emphasizes that intersex deviations are "syndromes." By this means one can dismiss the existence of intersexed folks as examples of the chromosomal sex mechanism breaking.

The fact that a starkly feminine model and jazz singer like Eden Atwood could grow up virtually indistinguishable from other women and treated by patriarchy in exactly the same way before randomly learning she had a Y chromosome, is irrelevant; Sokal must force her into his category of male, just *injured*, *disordered*.

"An infertile individual with a Y chromosome is still male, just as a one-legged person remains a full member of our bipedal species."

Alan Sokal, speech before the Free Speech Union, 2024

But notice what Sokal is forced to accept. The very absurd *teleology* that Aronowitz ranted about in his wingnuttery is baked into any framework that speaks of "broken" or "failing to work." To think in such terms is to take an anti-reductionist top-down approach, whereby some outline at the macroscale that we have imagined for subjective cognitive convenience becomes instead an *objectively intended* outcome, and a given fact at the micro is disrupting the plan, a gear in a machine that is failing to do its job in service of "the organism" or even "the species." Broadly speaking, this sort of top-down thinking is precisely what Aronowitz wanted to resuscitate. His crusade against the reductionism of physics was all about rehabilitating the top-down and "holistic" conceptual approaches he thought were essential to marxism and critical theory.

To make the assumption that some united organism—like the working class—*exists* as an ontological primitive rather than a subjective epistemic shorthand papering over the finer-grained account, is to engage in anti-reductionist claptrap on par with Dupré or the vitalists. The same sort of thinking, writ large, would lead one to think that *nations* exist beyond and above individuals, such that an individual who works against "the will of the nation" or "betrays" it, should be labeled "*dysfunctional*."

Why should we consider a gene that doesn't set off a causal chain to build a specific set of gametes or whatever as "failing" or being "broken" because there's some larger aggregate system—or account of such that we've invented—we might grant moral authority to?

Many genes in our bodies never trigger or are suppressed, indeed this is often vital to what we subjectively consider our flourishing. We like some genetic dynamics and dislike others, but for deeply perspectival reasons that would not necessarily apply from the point of view of an organ, cancer cluster, alien mind, or even just another human with a different goal.

Genes are closer to a vast ecological system than a sequence of discrete commands from God detailing some teleological blueprint, some divine and objectively written collective *purpose* of all our cells and atoms.

To write off the "exception" of intersexed folk, Sokal is forced into leveraging the same sort of irreduction, where it's not that "sex" is a crude "seeming" that is ultimately shredded by the knives of reductionism, but rather that "sex" represents an ontological force outside and beyond the actual biological facts, providing an *intended ordering* of the world.

The political valences of this fixation on preserving order and common sense against the "chaos" opened up by radicalism are obvious.

"The rigid authoritarianism of conservatives does not simply enshrine certain social norms, but always seeks to naturalize them, to uphold them as truths that are beyond the reach of society's capricious influences. There is no better mechanism by which one can validate traditional norms than by holding them to be unimpeachable, natural in some divine, ontological way that precedes politics, that precedes society. Gender can be made-up bunk now, since all the half-crazed transsexuals go around claiming it is—but sex, don't you dare deny the reality of sex! ... The core of conservative existential terror is the idea that social norms, even deeply-held, highly-embedded ones, could be questioned, altered, transformed—transcended. Even if they are someone whom the rules don't currently benefit, what if the changed rules benefit them even less? A cruel, tyrannical god may harm you, abuse you, but at least if you understand his rules, you can play them, you can attempt to curry favor. What could be more frightening than a world with no gods and no masters?"

Talia Bhatt, "Sex is Real": The Core of Gender-Conservative Anxiety, 2024

In the video of his talk, Sokal stands before his audience of reactionary dorks and titters about feeling more welcome with them than among the Left.

Sokal is not alone. As the influence of anarchism has risen in the Left, aggressively changing norms and social expectations, a number of old school socialists have defected to the far-right, along with a number of postmodernists. But both are dramatically eclipsed in numbers by a set of former feminists, who abandoned pretty much every value they might've once held in favor of ravenous hatred of trans people. Collaboration with christians busy outlawing abortion? Easy. Paying neonazis for security at their rallies? A win-win.

Unlike Sokal, many of these reactionaries realized very early on that the root facts of biology were not on their side. To preserve "chromosomal sex" as a universal reality they would have to appeal to some ordering magick above and beyond science.

Guess what former arch-antirealist Sonia Johnson is now a realist about?

"Males, therefore, constitutionally unable to meet the two-X-physical / spiritual-chromosome requirement, are forever prevented from being female."

Sonia Johnson, *The SisterWitch Conspiracy*, 2010

### **ORDERING THE ARMY**

Everyone knows that focusing on chromosomes is beside the point. That's not what is at stake in these questions of realism, radical or reactionary.

In Sokal's account he only became invested in arguing about sex and gender after talking with some older women of his generation who thought their political gains were being eroded by the "gender ideology" of the Kids These Days. The individual he cites most approvingly on these supposed political stakes is Kathleen Stock, a middling academic who had focused on subjects like aesthetics, film, and music before finding a more prominent career as a reactionary crybully and crusader against free speech. <sup>206</sup>

Stock's trade is now to assure those who do not get basic philosophical arguments around sex and gender, that she—a philosopher, by some technicality—likewise does not get them.<sup>207</sup> Infamously, she accused Judith Butler of necessarily having to reject the existence of things like "*molecules, atoms or quarks*" as an extension of their critique of "sex." <sup>208</sup>

In Stock's account of the epistemic virtues of science there are some notable skews: A good theory should be "simple" and "explain" the evidence, but only "well." She throws out anything like a virtue of lossless compression for instead the reactionary affinity for *lossy* compressions—simplicity at the cost of ignoring exceptions. As a result, her account is one stripped of any drive for deep roots. And you will not be surprised that she incessantly uses the word "radical" as a contemptuous slur.

"Does a given theory explain the evidence well? Are there rival theories that might explain the evidence better? Does the theory help us explain and predict what people care about? Does it have other explanatory virtues such as simplicity, and is it a good fit with other existing productive theories?"

Kathleen Stock, Material Girls, 2021

Of additional note is the frank subjectivism she places front and center: "What people care about." Despite her pretenses of reductionism or materialism and frequent declarations that she's defending "basic facts," Stock is flagrantly perspectival and pragmatist about how she thinks all our concepts should be

- 206 Stock infamously rage-quit her job over getting criticized for her lazy transphobic blather, and then got the British state to fine her former university over half a million pounds for having permitted students to protest her. The free speech of her critics was Orwellianly framed as somehow violating free speech by "bullying." She should be bullied forever.
- 207 Christa Peterson, "Kathleen Stock, OBE" *praile*, January 21, 2021, https://www.praile.com/post/kathleen-stock-obe
- 208 Kathleen Stock, Material Girls: Why Reality Matters for Feminism (2021), 63.

defined. She even approvingly cites the supreme anti-reductionist John Dupré on how labeling choices in biology reflect present human interests. Which, fair enough! Stock's core issue is that she believes these "interests" are being eroded by the alternative conceptual carvings of sex and gender long promoted by anarchists and feminists.

I strongly agree that the rough patterns we choose to pick out in aggregate macroscopic systems are unavoidably going to be shaped by our interests. We look at lumps of matter and identify "tables" and "table saws" not because those clusterings and distinctions are objective, but because carving up the underlying atoms that way is useful to us. Of course this doesn't mean that "tables" and "table saws" are scientific concepts or that such really exist! Like many physicists, I happily admit that the dynamics gestured at by the relativist sociologists apply to massively aggregate "objects" like societies and organisms; my argument for realism is that such get winnowed away once you get down to the universalities described by physics.

But Sokal wants to have it both ways. He wants to say his enemies have given up on objective reality, only to then embrace Stock's argument that our models *shouldn't* strive for objective reality but rather pragmatic and subjective utility. He wants to lean on the epistemic authority of physics, but then throw out its radical approaches to prop up crude approximations and teleology in biology. He wants to present science as a neutral arbiter of fact and those he disagrees with as *ideologues*, but then at the end of the day his argument is that we *must* hold onto a rickety concept of "sex" for political reasons.

It's impossible to divorce Sokal's reactionary privileging of "sex" over exceptions (and even quarks!) from his ideological commitment to a very specific analysis of patriarchy and supposed stakes to how we define "sex." This is how he can accept the adulation of a mob of misogynist tories and still imagine himself a feminist hero, a Hilbert standing for Noether against the patriarchy.

"Hilbert fought strenuous battles with the university authorities to allow a woman to become a member of the faculty. A majority of faculty members argued against this: 'How can it be allowed that a woman should become a professor? ... What will our soldiers think when they return to the university and find that they are required to learn at the feet of a woman?"

Leon Lederman and Christopher T. Hill, Symmetry and the Beautiful Universe, 2004

But a radical realist would emphasize that the *exact* pathways of causation matter. The humanities professors—primarily philologists and historians—who blocked Noether's appointment instantly decided that the spouseless and childless prodigy with strong facial features was a woman because people *said* 

she was a woman, because in a thousand ways she affirmed rather than disputed this, and because she kinda looked like "women" were supposed to look.

Emmy Noether is an old hero of mine and it's *torturous* to have to break down the most simple facts of the oppression she faced in such basic terms. It's beyond enraging that Sokal would grab someone so dear to physicists and so casually strip out the *actual mechanisms* of her oppression. Noether's chromosomes—whatever they were—didn't create patriarchy. And patriarchy does not operate on karyotype tests.

Of course, reactionaries like Stock disagree.

In Stock's account, patriarchy is a product of biological sex: Noether's own chromosomes didn't create the social dynamics that oppressed her, but human sex chromosomes *in general* did.

"Did a random group of people start oppressing random others? Or was it rather that there was one group better able, on average, to dominate the second group, due to genetics and associated tendencies to relatively superior physical strength? And if that, then how could the oppression or dominance itself have 'created' such characteristics?"

Kathleen Stock, Material Girls, 2021

I want to be clear, I think pretty much everyone agrees it's probable that physical differences in bimodal sex expression—primarily issues of physical strength and pregnancy—helped break social symmetry. We see patriarchal societies over the vast majority of the planet, and it would be weird for this commonality to be the product of a single ideological *coin toss* over 60 thousand years ago, and an unbroken chain of ideological reproduction since. Whatever stochastic variation human societies have gone through, there is at least some statistical skew towards a preferred orientation of power across the bimodal sex expression.

What is not clear is how big of an impact this influence is. It may be very small or weak, merely capable of facilitating an initial symmetry breaking in certain egalitarian societies, before much stronger dynamics of technology, culture, ideology, identity, and institutions take over. Even the smallest perturbation can serve to catalyze the growth of massive crystals, yet not be particularly important to an account of said crystals. A small amount of dust may *set off* crystallization in a solution, but isn't that relevant in describing the actual chemicals catalyzing, the structures they form, or the forces at play between them.

Further, as anarchist historians repeatedly emphasize, we do not know how egalitarian societies (or matriarchal ones) survived and flourished in the holes in our records and between patriarchal empires. We know that many did, but

there are systematic biases around what evidence would be left in the archeological record. How many other, stranger, systems came into being around something like sex/gender, whether oppressive or liberatory? How much did different expressions of technology, culture, ideology, etc intensify or oppose the influence of the bimodal trait distribution that Stock sees as central?

Note everything we have to gloss over in coarse-grained talk: The actual particular interactions of particular humans for millions of years. And in particular, the vast tangle of important mechanics in play today.

Radical feminists have long since settled on an account where patriarchy is primarily *upheld* by dynamics of ideology, culture, and institutions, even if biological differences in the bimodal sex distribution continue to play a part. Stock's argument for biological primacy is ostensibly reductionist, but it doesn't go through. She has to ignore the ongoing actual causal network and merely point to a roughly plausible temporal "first cause."

Stock wants a *simple* account of patriarchy, just as she repeatedly demands a *simple* account of gender or sex. But what we should care about in its dynamics cannot be mapped down to some objective reality of physics and remain simple. Feminists have long known that what we call "patriarchy" is closer to an *ecosystem*, a vast churning network of causal dynamics and congealing regularities. How could you define an entire *jungle* succinctly while providing a good map of it for our interests? Any parsimonious definition will bring some things into focus and occlude other things.

And just like the processes and layers of abstraction we might want do not cleanly separate with biological sex, gender does not cleanly separate from sex. It's all a mess. Gender is conditioned, inflicted, performed, experienced, habituated, incentivized, emulated, interpolated, invented, stumbled into, but so is sex, and the two are intermeshed. Patriarchy takes some *inspiration* and *influence* from the bimodal sex distribution, but is not reducible to it. It is not causally separate from dynamics of genes and hormones, but rather intersects with them in countless ways, a flowchart that cannot be summarized in any book.

This irreducibility reflects the fact that "patriarchy" is not a firm part of the ontology of the universe on par with electrons and quarks—it's perspectival *shorthand*, quite pragmatically useful in the subset of possible perspectives and situations in which we presently live. "Patriarchy" is in some sense real, but only like how "sex" is. Recognizing that is important because it also means that it is a concept that can fray and dissolve. Patriarchy is neither magically more than its components nor autonomous. It is not "natural" or an eternal fact; it has an *effective domain*. We can fucking kill it. We can make the world such that it fails to refer.

A huge part of this involves sabotaging its perpetuation of the sex/gender hierarchy.

"Just as the end goal of socialist revolution was not only the elimination of the economic class privilege but of the economic class distinction itself, so the end goal of feminist revolution must be, unlike that of the first feminist movement, not just the elimination of male privilege but of the sex distinction itself."

Shulamith Firestone, The Dialectic of Sex, 1970

"Our ways of living and expressing ourselves break such fundamental rules that systems crash at our feet, close their doors to us, and attempt to wipe us out. And yet we exist, continuing to build and sustain new ways of looking at gender, bodies, family, desire, resistance, and happiness that nourish us and challenge expectations."

Morgan Bassichis, Alexander Lee, Dean Spade, Building An Abolitionist Trans and Queer Movement with Everything We've Got, 2011

This isn't a blanket commitment to making ourselves "illegible" as a goal in itself, nor does it even remotely mean abandoning material struggles around from biology like abortion to matters of economics like unpaid housework. It doesn't mean *ignoring* distributions of matter in reality or taking choices of self-constitution or association away from anyone. It means actively looking for choices and moves that wouldn't appear in the conceptual frames native to patriarchy, but that are possible nonetheless. It means being insurgents or hackers, always on the lookout for vulnerabilities and opportunities, even when those are highly particularized. It means nurturing meshed prefigurative subcultures that do not wait for the slower "masses."

But to the reactionary mind, all this complexity is horrifying, unthinkable, intolerable. This isn't a campaign platform. This won't fit on a bumper sticker.

At one point Stock demands a *simple* definition of "man" or "woman" on the grounds that the simpler the definition the easier to translate between languages and cultures. But how would you even begin to describe what a "goth" or a "punk" is to someone outside your discursive community and frame of reference? How would you describe "race"—given that it doesn't fucking exist in any deep scientific or ontological sense—but also has immense practical existence as a feedbacking social reality. You would have to trail on for a long while, trying to account for every association, their weightings and contingencies.

What stands out dramatically in both Sokal and Stock—even though Stock references a number of actual feminists to mock them—is how they feel no urge to either investigate or think through the complexities of a different

worldview. They expect everything handed to them in the lowest common denominator of public discourse. Stock's book is a veritable parade of hilariously surface-level readings and misinterpretations, even describing non-binary identities in terms of androgyny. It's a lot like reading Jordan Peterson or James Lindsay; there's a persistent reactionary entitlement to only the most immediate and simple explanations, protecting them from any worldview that would require too many points of change.

"This approach finds its high point—or low point, depending on how you look at it—in academic Chloë Taylor's argument—in a feminist journal—that rape-crisis centres for women serve only to 'reinscribe gendered constructions of male sexuality as dangerous and of women's bodies as sexually vulnerable', and are 'the cause of rape', perpetuating the problem they seek to avoid. Frankly, this is mad."

Kathleen Stock, Material Girls, 2021

When I was seven, my mother made a sharp choice in physical reality and abruptly packed her car, taking me and drove my sister to a domestic violence shelter. Upon arriving, she discovered they had a rule against housing boys aged eight or older; in a relatively short time I would be classified as an inherent sexual threat and my mother would be forced to choose to live on the streets with her children or to abandon me.

Such rules have long since been abandoned almost everywhere, with modern domestic violence workers speaking about this shameful past with horror. It's easy to understand why. If you force mothers to make a choice between sacrificing their children and sacrificing themselves, a great many will choose to suffer their abuser rather than give up their child to something worse. Often this means the continued abuse of mother *and* child. Over decades of such policies across the US, it's probable that hundreds of thousands of mothers were pressured into staying with their abusers. Many no doubt were murdered as a consequence.

Similarly, in the example of rape-crisis centers for women that Stock scoffs at, it should be *obvious* how such gender exclusion can increase rape, as cis women are not the only victims of rape, and denying support for cis men, trans men, trans women, non-binary folks, etc. increases the precarity and vulnerability of certain targets of rapists. A long time ago, when a male friend of mine was raped by an ostensibly feminist woman, she *bragged* about it in front of our mutual friends the next day, because she knew at the time there was no support apparatus, either social scripts or resources, he could turn to. Excluding a population from support eventually sends clear signals to predators. Every cop knows they can rape homeless trans kids without consequence.

My partner worked for years at a crisis center, answering harrowing calls and holding the hands of battered survivors in emergency rooms while the pigs glared at them. Decades prior, *in the bad old days*, that same crisis center had appointed as their director a woman who had horrifically abused her husband, and—after he finally escaped her—stalked his new partner, assaulted her, and then shot him in the genitals on the porch of his new house. At the time this was not considered abuse or disqualification from running a crisis center. Because she was a woman. In her new role she was—surprise—abusive to her staff, degrading the effectiveness of the entire crisis center, until she was finally forced out.

These are some of the most plain, object-level entailments of reinforcing gendered narratives where men are innately sexually dangerous and women are innately vulnerable, but there are less tangible if still substantive consequences. Hearing, as a small child, that I was innately dangerous, ontologically an abuser-in-waiting by virtue of my genetics, made the extreme abuse my mother continually inflicted on me and my sister hard to conceptualize and seemed to guarantee that no one would listen or recognize it. On other individuals such biological essentialism might gestate into fatalistic self-perception and self-narrative.

One can argue about the degree to which such dynamics play out, and I certainly disagree with much of Chloë Taylor's *broader* Foucauldian analysis, particularly around the way her account coddles rapists as "lacking community" and writes off vigilante action against them.<sup>209</sup> But, reactionary that she is, Stock never once thinks to trace any causality by which gender exclusions around support for survivors could hurt survivors. Simpler to declare Taylor "mad" and misrepresent her actual words:

"In approving of rape crisis centers and ride services because 'they are run exclusively by women,' Woodhull reinscribes the construction of an adversarial and biologically grounded male/female dichotomy rather than challenging it. It is these constructions, I suggest, that are the cause of rape, and tactics such as Woodhull's may only perpetuate the problem they seek to solve."

Chloë Taylor, Foucault, Feminism, and Sex Crimes, 2009

Stock ignores Taylor's more objectionable arguments to instead zero in on this because such constructions are *natural*, *obvious*, *common sense* to her.

When I once happened to relay the anecdote of my seven-year-old experience in our first shelter and its exclusion rule on Twitter—careful to note

<sup>209</sup> William Gillis, "What's In A Slogan? 'Kill Your Local Rapist' and Militant Anarcha-feminism" *Human Iterations* (2024), https://humaniterations.net/2024/06/25/kylr/.

I'm really glad the shelter existed at all—hundreds of reactionary supposed "feminists" arrived out of the blue to deliver threats, demands that I kill myself, and general seething hate. It was only natural, obvious, common sense to them that eight-year-old boys were ontologically evil, disgusting, a waste of flesh, "just as dangerous as grown men." Most were outraged to learn that domestic violence shelters have long since renounced such policies. Others were outraged to learn "male" children of any age were ever allowed into such shelters. They thought it only natural that inclusion of a single small child would innately mean the exclusion of "dozens of battered, bloodied and traumatized women and girls."

When Stock positions genetics in such a core causal role to patriarchy, she is not merely talking about slight advantages in physical resources available to different sides of a bimodal distribution should things go sour. She is talking about a continuously propelling mechanism of such centrality and strength as to define the whole thing. A causation actively sustaining and reinscribing patriarchy at the level of values and motivations. One that would apply to a tiny child, raised entirely in a far-left feminist bubble, playing *Uno* on a shelter floor and drinking juice out of a plastic dinosaur cup.

The position of the self-described "feminists" screaming that such kids should be preemptively killed—that any woman would naturally and correctly see them as a threat—is that "males" rape and dominate because of their *genetics*.

This is a model of patriarchy not as an ecosystem to be disrupted and reconfigured, but as two warring armies.

One in which men and women are discrete classes, ontologically given facts of biology. And patriarchy is not something abstract and multifaceted in culture, ideology, and relationships as feminists try to encapsulate with "the rule of the father" or "the sex/gender hierarchy," but dirt simple: the supremacy of "biological men" over "biological women." There is no "third sex" built into patriarchy's function, where exceptions to the sex system are created and thrust beneath both men and women, to serve as whipping girl sacrifices to give men absolute free reign over and use as examples to keep women in line, to give them a stake in maintaining the system. No, no, no, there are just two armies.

For gender reactionaries sometimes too charitably called "TERFs,"  $^{210}$  it's all utterly simple: one army is winning. For the other army to win it must

210 It is unfortunate that "Trans Exclusive Radical Feminist" caught on as a liberal nicety, because it grants that these reactionary shitstains are feminists, much less radicals. Certainly the feminist movement has historically included some noxious currents including transphobes, but at a certain point "feminist" simply ceases to apply in any reasonable sense and quite obviously their thinking has nothing to do with "radicalism."

have *discipline*. Traitors (trans men) must be suppressed. Infiltrators (trans women) must be expelled. Party clarity and cohesion must be obtained. Power captured and leveraged.

"Anti-trans feminists seek to still the category of women, lock it down, erect the gates, and patrol the borders."

Judith Butler, Who's Afraid of Gender, 2024

"We'll send Party militants to seize the key supply routes into patriarchy, then surround and storm the buildings that patriarchy is using as headquarters. After securing the surrender of the main body of patriarchy's army, we'll move out into the countryside to put down any provincial patriarchist counterrevolution. Is that the plan?"

Ran, Facebook comment during the SF anarchist bookfair war, 2013

I want to be clear that I would never deny that there are enemies. Patriarchy is not a faceless external thing that just happens and we're all equal victims of. There are individuals deeply invested in it who have to be fought, resisted, and killed. And there are broad commonalities in society; the ecosystem of patriarchy constructs "men" to identify with it and provides benefits to them. Nor would I ever argue that there is no utility to collaborations and discussions closed to those of a similar experience.

But just as patriarchy is not centralized or monolithic, neither are effective resistance movements. We build a better world through distributed fluid insurgencies, where radicals don't wait for orders from above, but autonomously map the complex causal dynamics they are immersed in and leverage often quite particularized exploits. By understanding that our more universal enemy is the root dynamic of power, anarchists are always ready to recognize mutations or shifts in its operation, without having to tack on epicycles.

Authoritarians, whether leninists or liberals, miss this because of their ideological commitment to statist thinking.

I emphasize this political perspective because Stock's obvious reactionary commitments pervade every argument she makes. Her entire notion of resistance to patriarchy is in terms of "women's rights"—defined in terms of state legislation around exclusion and welfare. She violently simplifies arguments for trans people into discrete and completely separable planes of identity, social roles, and biology and (when all of them are obviously simultaneously at play and interwoven) and then judges her strawmen on their fringe exploitability as a *legal* framework. She rants about the watered-down over-simplified statements of academics and liberal NGOs, while studiously ignoring the moldy zines of radicals where all serious discourse and theory happens.

While there have always been some reactionary currents within feminist ranks, it's honestly hard to find anything recognizable as feminism in Stock's ideology; her worldview is so systematically statist and conservative. She whines that feminists are too pro-abortion and don't consider the wishes of the pregnant person's extended family.<sup>211</sup> She whines that a show shouldn't have been canceled because Greg Wallace is a sex pest and racist. Certainly she has nothing in common with the radicals that planted bombs in banks, burned down the houses of politicians, and nearly killed the king of Britain.

Leaders of the gender reactionary movement like Posie Parker (Kellie-Jay Nyishie Keen-Minshull) have already *explicitly* rejected identifying with "feminism" on the grounds that they think patriarchy is more or less exclusively a biological inequality rather than a self-replicating social and ideological system. Their prescription is social democracy: the existence of biological differences legitimizes the centralized violence of the liberal state to intervene in society to "protect women" as a disadvantaged group, restoring the balance. And as biology means that these interventions must continue forever, so too must the state.

Just as liberals consistently end up siding with fascists to crush anarchists and preserve the state, the gender reactionaries consistently side with the foulest of misogynists and fascists to preserve the patriarchal ontology of sex. *Both* have a vested interest in beating the belief into everyone that patriarchy is natural, so foundational is that premise to both of their projects.

From this perspective anything that might actually attack or undermine the state/patriarchy is a ghastly threat. It's akin to rejecting the toppling of the racist police state because without the police state how would we have affirmative action?

At one point in *Material Girls*,<sup>212</sup> Stock breathlessly compiles five headlines she's dug up since 2016 from far-right British tabloids involving lady criminals who are also trans. In her mind, a law against plastering headlines with someone's trans status is brainwashing society into misattributing male violence to women. Three of her examples are of child predators (apparently besmirching cis women in a way that hundreds of cis women child predators over that period didn't). But you'll never believe the other two examples she mixes in as comparably outrageous:

<sup>211</sup> Kathleen Stock, "The perils of reproductive extremism," *UnHerd*, June 23, 2023, https://unherd.com/2023/06/the-perils-of-reproductive-extremism/.

<sup>212</sup> For a sampling of other theorists tearing apart Stock's philosophical ignorance and sheer incompetence, see "While Tables Burn: On the (Non) Existence of Trans People and the Failure of Philosophy" by Talia Mae Bettcher and "The Matter Of 'Material Girls': Conspiracy Theory In Anti-Trans Philosophy" by Kim Hipwell.

"Gang of women repeatedly stamp on man's head in 2am brawl at Leicester Square underground station' (Daily Mirror website, 26 June 2018)... 'Woman who once shoved policeman onto Tube tracks jailed for spitting at officer' (Daily Mirror website, 17 February 2020)"

You read that correctly. Girl gangs fighting back aren't feminist. Spitting on or attempting to kill cops isn't feminist. Real women would never do such things.

This is not revolutionary feminism, this is just straight up reactionary authoritarianism. A craven worship of the state. In other words, liberalism.