The Peer Review
Ten Theses on Science and Radicalism
2025

Issue #2 of The Peer Review zine.

usa.anarchistlibraries.net

Ten Theses on Science and Radicalism

The Peer Review

2025

Letter from the Editor

The anarchist response to the emergence of COVID-19 put divisions in the movement into stark relief. On the one hand, many recognized its severity and the resulting need for quarantine, social distancing, and vaccination. There was a strong moral imperative to protect those who were immunocompromised, elderly, or at heightened risk, even if it meant sacrificing some personal freedoms. On the other hand, many decried the state response to the pandemic as authoritarian, the enforcement of vaccine mandates as dictatorial, and the involvement of big pharmaceutical companies in producing and marketing the vaccine as encouraging the capitalist stranglehold on health. As the writer of *Anathema* put it, "In the name of 'public health' all sorts of security measures are coming together to create an authoritarian wet dream" ("COVID-19: A Fork in the Road," 2020, p. 3).

In many cases these are valid critiques. In the Philippines, for example, soldiers with assault rifles patrolled quarantine checkpoints during the early days of the pandemic (Magsalin,

2020), and the steps the Chinese Communist Party took enforce lockdown orders can only be described as despotic. Despite this, though, the pandemic offered opportunities for anarchists to organize—especially in mutual aid networks, eviction protests, and rent strikes (Firth, 2020).

In the five years since the pandemic began, however, I fear these legitimate criticisms have morphed into a broader distrust of science and medicine in the anarchist space. An anonymous writer to *Montreal Counter-Information* feared that we as a society now demand that "experts tucked away in labs using esoteric methods act as the only voices in the room to generate one-size-fits-all policy declarations for entire nations" (Anonymous, 2021). Another anonymous writer to *i giorni e le notti* (reprinted in English in *The Local Kids*) accused the creators of the COVID-19 vaccine of being "eugenicists ––and sterilizers of poor women" (Anonymous, 2022, section iv). I've met antivax punks at shows, and I've heard rumors that others have encountered the same (three6666, 2023). And this is setting aside the existing critiques of science and technology posed by primitivists. All of this echoes the anti-science and anti-health sentiments that have engulfed the right wing.

Years before the pandemic, William Gillis noted, "It's no secret that a good portion of the left today considers science profoundly uncool" (2015). As our title suggests, The Peer Review runs contrary to that assertion. This issue is devoted to exploring ten theses about science and public health, as seen through a radical anarchist lens.

1. Every Anarchist Should Be a Scientist…

In the article that provides the title for this thesis, Isis Lovecruft (2016) wrote, "We should never allow ourselves to become so rigid as to forget what makes us anarchists in the first place: childlike curiosity, incessant inquiry, and a radical love for taking things to their roots to further our understanding. We seek to dismantle the world around us, knowing that it does not

function as well as it could. We want to understand ourselves, our environment, and each other. We want the blueprints for the social machine, so we can sledgehammer the fuck out of it, and build it back up from scratch" (p. 5). And, as she points out, that sounds quite a bit like science.

In describing science, A.R. Prasanna reminds us that it "is not just a collection and collation of known facts," but "a philosophy derived out of experience, innovation, and verification or validation" (2022, p. 6). It is not simply sterile empiricism or institutional authority, but rather a restless pursuit of understanding. In this light, the anarchist drive to dismantle the social machine and rebuild it "from scratch" echoes the foundations of science—it's not a dogma to follow blindly, but a process grounded in experience, exploration, and discovery. In that sense, it's not that every anarchist *should* be a scientist—it's that every anarchist *is* a scientist.

2. …and Every Scientist Should Be an Anarchist

As William Gillis (2016) wrote in the article that—similar to Lovecruft—gave this thesis its name, "Control can only be achieved through disengagement and rigidity. And so any successful power structure must involve mechanisms to punish and suppress habits of inquiry" (p. 1). It is no secret that science, both as an area of study and a community, has its problems. Overreliance on funding either from private industry or from the government places restrictions—both overt and subtle—on what can and can't be studied. It is exorbitantly expensive to publish in some of the most prestigious journals, with *Nature* charging authors as much as €9,500 ($10,800 in April 2025) for review and publication (Brainard, 2020). Women, persons with disabilities, and ethnic and racial minorities are disproportionately underrepresented in STEM careers (National Center for Science and Engineering Statistics, 2021).

Far from stifling scientific innovation, an anarchist society could work to resolve many of these issues. Bureaucratic ineffi-

ciencies will be reduced by dismantling and collectivizing large research organizations. The abolition of social and material hierarchies will provide underrepresented individuals greater opportunity to study science. The embrace of a community model (see thesis #4) will prevent the accumulation of capital by the benefactors of scientific research and instead focus on what benefits specific communities the most. In short, anarchism has a plethora of solutions to offer any scientist interested in improving the existing system.

3. Science is Methodical, Not Political

Unlike what tech billionaires will have you believe, technocracy is not the logical or inevitable result of embracing science. In the worst-case scenario, "Those of higher knowledge, status, or authority—experts—take it upon themselves, justified by their epistemic monopoly, to both define and solve the problem for nonexperts" (Byland & Packard, as cited in Caplan, 2023, p. S107). Nonexperts, in this situation, are expected to simply accept what the experts decide. In response, Arthur Caplan points out that "correcting that problem hardly means rejecting the input of scientific experts…Science tells us what can be done; the political task is to decide what ought be done within the constraints and boundaries that science provides" (2023, p. S107). Technocracy is a failure of democracy—not of science—and good scientists can inform the public on important issues without claiming political authority over those topics.

In fact, scientists oftentimes rebel against contemporaneous political power. The Roman Inquisition burned Giordano Bruno at the stake in 1600 for arguing that the universe contained other stars and planets. Apotex, a multinational pharmaceutical company, publicly attacked Nancy Olivieri in the 1990s after her research found that one The Roman Inquisition burned Giordano Bruno at the stake in 1600 for arguing that the universe contained other stars and planets. Apotex, a multinational pharmaceutical company, publicly

Magsalin, S. (2020, April 2). Against a quarantine with martial law characteristics. *Bandilang Itim.* **https://bandilangitim.xyz/library/simoun-magsalin-against-a-quarantine-with-martial-law-characteristics-en**

National Center for Science and Engineering Statistics. (2021). *Women, minorities, and persons with disabilities in science and engineering.* **https://ncses.nsf.gov/pubs/nsf21321/report/**

Podur, J. (2014). Science and Liberation. *Anarcho-transhuman, 2*, 19-27. **https://anarchotranshumanzine.wordpress.com/wp-content/uploads/2015/04/h2.pdf**

Prasanna, A. R. (2022). *How to learn and practice science.* Springer Nature Switzerland. **https://doi.org/10.1007/978-3-031-14514-8**

Schneider, M. J. (2022). *Introduction to public health* (6th ed.). Jones & Bartlett Learning.

Sever. (2017, Summer). Against self-sufficiency: The gift. *Black Seed, 5*, 32. **https://archive.org/details/black_seed_5/**

Spade, D. (2020). *Mutual aid: Building solidarity during this crisis (and the next).* Verso.

three6666. (2023, July 9). *What's the deal w anti-vax punks?* [Online forum post]. Reddit. **https://web.archive.org/web/20241216142958/https://www.reddit.com/r/punk/comments/14v3gq8/whats_the_deal_w_antivax_punks/**

[Hastings Center special report, 53(5)] (pp. S105-S109). Hastings Center. **https://doi.org/10.1002/hast.1531**

COVID-19: A fork in the road. (2020, March/April). *Anathema, 7*(3), 1, 3. **https://anathema.noblogs.org/files/2020/04/mar-apr_2020.pdf**

Doerksen, E, Gunay, A. E., Neufeld, S. D., & Friesen, P. (2024). Community-led approaches to research governance: A scoping review of strategies. *Research Ethics*, 1-27. **https://doi.org/10.1177/17470161241269154**

Firth, R. (2021). Mutual aid, anarchist preparedness and COVID-19. In J. Preston & R. Firth (Eds.), *Coronavirus, class and mutual aid in the United Kingdom* (pp. 57-111). Palgrave Macmillan. **https://doi.org/10.1007/978-3-030-57714-8_4**

Gillis, W. (2016). Every scientist should be an anarchist. *Anarcho-transhuman, 2*, 1-4. **https://anarchotranshumanzine.wordpress.com/wp-content/uploads/2015/04/h2.pdf**

Gillis, W. (2018, August 18). Science as radicalism. *Human Iterations.* **https://humaniterations.net/2015/08/18/science-as-radicalism/**

Hill, M. A. (2009, July 8). *Fragments of an anarchist public health.* ZNetwork. Retrieved April 22, 2025 from **https://znetwork.org/znetarticle/fragments-of-an-anarchist-public-health-developing-visions-of-a-healthy-society-by-marcus-hill/**

Jones, J. (2008). The Tuskegee syphilis experiment. In E. J. Emanuel, C. C. Grady, R. A. Crouch, R. K. Lie, F. G. Miller, & D. D. Wendler (Eds.), *The Oxford textbook of clinical research ethics* (pp. 86-96). Oxford University Press. **https://doi.org/10.1093/oso/9780195168655.003.0009**

Lovecruft, I. (2016). Every anarchist should be a scientist. *Anarcho-transhuman, 2*, 5-6. **https://anarchotranshumanzine.wordpress.com/wp-content/uploads/2015/04/h2.pdf**

attacked Nancy Olivieri in the 1990s after her research found that one of their drugs, deferiprone, caused liver dysfunction. The German right wing was enraged by Albert Einstein's work on relativity (as well as his pacifism), which led to Nazi officials stripping him of his academic positions and publicly burning his books. While scientists can sometimes assume positions of authority, science itself is only a method of uncovering empirical facts about the world. And sometimes those facts run contrary to existing power structures.

4. Science Should Be Done with Communities, Not to Communities

Science is most effective when it is the product of collaboration, especially with research subjects. Historically, scientists and researchers have often treated the communities they are working with purely as sources of data, ignoring the impact their research has on the rights and well-being of the participants. The Tuskegee syphilis experiment is one of the most notorious examples: the U.S. Public Health Service spent forty years studying the progression of syphilis in a group of impoverished black men, giving them sugar pills as "treatment" and, for some participants, failing to inform them that they had the disease at all (Jones, 2008). Luckily, we are beginning to see signs of change. There has been a concerted push in recent decades to see communities as partners in research rather than a means to an end.

Citing a long history of exploitation in research, especially among indigenous peoples, Emily Doerksen et al. noted in their 2024 paper "Community-led approaches to research governance" that the communities that are commonly studied have been increasingly "voicing their demands for authority in the governance of research involving them" (p. 2). They identify three strategies that have been employed:

1. The development of research guidelines by community representatives,

2. Community review boards to assess the ethics of proposed research initiatives in their jurisdictions

3. Community advisory boards that work in tandem with researchers to ensure that their cultural norms are being respected

Such governance helps to move science in a more participatory direction that ultimately has the potential to benefit both researchers and research subjects.

There is certainly still much to be done, and a number of scientists doggedly refuse to abide by these practices. However, Doerksen et al.'s work, as well as the work of other clinical ethicists, shows that there are possibilities to move beyond the quasi-colonial approaches of yesteryear.

5. Bring Down the Lab Elite, Not the Lab

Justin Podur (2014) distinguishes between three aspects of being a scientist: Science A, Science, B, and Science C. Science A (for Authority) is the authoritative stance that scientists can take when discussing matters of public interest. Science B (for Business) is the pragmatic, day-to-day routine of being a scientist: applying for grants, trying to publish in elite journals, etc. Science C (for Curiosity) is what science is supposed to be—it is the fundamental curiosity that drives scientists to try to understand the world. In his view, too much emphasis on Science B has turned science into an elitist, profit-driven enterprise that has moved scientists further from Science A and Science C. He writes, "Most of what scientists do is try to raise funds, generate publications in prestigious journals, find students to work on their projects, and keep up with other scientists according to these metrics. Science B operates like other sectors of capital-

workplaces both equitable and effective. Though public health has had its failures (sometimes spectacular ones) and has been host to broad abuses of power, it is nonetheless necessary to maintain our collective well-being. The key is to promote non-capitalist and non-centralized forms of public health that can work within an anarchist system.

10. Understanding Comes from Participation

Science is often associated with detached geniuses, corporate research, and ivory towers. There are as many different approaches to science as there are scientists, however: there are curious physicists, auto-didactic engineers, radical biologists, and indigenous ecologists. It can be practiced in basements and squats just as well as it is practiced in laboratories and clinics. Rather than treating it as the enemy, I encourage anarchists to see the radical potential of science and become scientists themselves.

Sources

Anonymous. (2021, February). On the anarchist response to the global pandemic. *Montreal Counter-Information.* **https://mtlcounterinfo.org/on-the-anarchist-response-to-the-global-pandemic/**

Anonymous. (2022, Summer). Theses on COVID-1984. *The Local Kids, 8*, 8-23. **https://thelocalkids.noblogs.org/files/2022/06/tlk08.pdf**

Brainard, J. (2020, November 24). *For €9500, Nature journals will now make your paper free to read.* Science. **https://www.science.org/content/article/9500-nature-journals-will-now-make-your-paper-free-read**

Caplan, A. L. (2023). Regaining trust in public health and biomedical science following covid: The role of scientists. In L. A. Taylor, G. E. Kaebnick, & M. Z. Solomon (Eds.), *Time to rebuild: Essays on trust in health care and science*

paid sick leave, and got vaccinated. No single person had the power to stop its spread, and this highlighted the need for population-wide interventions.

9. **Care Without Coercion is Possible**

Marcus Hill (2009) connects public health with radical values in his pamphlet *Fragments of an Anarchist Public Health*. In his view, health politics should ultimately be driven by consensus, not structured around an authoritarian approach. Instead, a major aim of public health should be to "encourage individuals to become involved in collective efforts to improve the structural determinants of their health" (2009, p. 3). For Hill, a healthy society does depend on health services. However, equity and participation—values that have been emphasized in anarchist thought for almost two centuries—can and should be incorporated into a more inclusive public health approach.

Hill points to several concrete examples of decentralized public health in action. The Zapatistas organized community-level health services among the indigenous peoples of Chiapas after the Mexican government failed to provide support, eventually founding a hospital in 1991 that runs independently of the state. The Ithaca Health Alliance in Ithaca, NY provides interest-free loans for individuals to repay medical debt. The Gesundheit! Institute, founded by Patch Adams, seeks to entirely redesign the health system in the United States by opposing market-based models of healthcare delivery. These projects have sought to make systemic changes by reshaping institutions "along the lines of participatory social values" (Hill, 2009, p. 5). Along those lines, Hill advocates for the creation of a healthcare system built around anarcho-syndicalist concepts, in which federations of local health groups collaborate to address broad issues in health.

This is only one possible path to a public health that is anti-authoritarian. Ultimately, health is a commons—it is defined by whether our neighbors have care, whether our

ist society" (2014). Science must be liberated from the "dictates of profit" in order to return it to its intended purpose.

William Gillis (2015) sees the same elitism at work. He distinguishes the scientific method from "Science!" (with a capital S and an exclamation point), or the view that the world can be systematized, ordered, and ultimately dominated. The latter functions as a surrogate for corporate domination: "Science! is how our paymasters excuse the damage our widget causes in military or economic application" (2015). He, however, sees science (with a lowercase s) as fundamentally radical—rather than merely an empirical pursuit, it is a search for the "deepest roots" of the physical universe. Scientists must remember to keep "digging for the roots" in order to maintain the spirit of scientific inquiry.

What both writers mean, I believe, is that we can reject the parts of scientific culture that are laser-focused on attaining grant awards, abusing grad students, and kowtowing to the desires of big business. What will remain is the core characteristics of the scientific method: curiosity, hypothesis, and discovery. In short, there's no reason to throw the baby out with the bathwater—we can focus on moving science away from its dependence on corporate interests and back to its original spirit.

6. Nobody Knows Everything…

The belief that individuals can be wholly self-sufficient is a myth. In reality, each of us has only a scattering of the skills we need to thrive in the modern age (and the pre-modern age too, for that matter). We need to rely on others to help us with the remainder. Human beings are social animals—we have been grouping together for hundreds of thousands of years in order to survive, and that impulse will not be disappearing anytime soon. In fact, the drive to be entirely self-sufficient echoes a profoundly capitalist mindset. In "Against Self-Sufficiency," Sever writes, "We never bear our own weight, and to speak truthfully, we never feed ourselves" (2017, p. 32). They argue that

self-sufficiency—defined here as a complete lack of dependence on others—is in fact an illusion that arose from capitalism, colonialism, and bourgeois individualism. The desire to rely only on oneself for survival obscures an important truth: community is absolutely essential. (Yes, it's ironic that I'm quoting an Anti-Civ publication in a zine about science. But while I disagree with much of primitivism, Sever still makes some good points).

Mutual aid frameworks begin with this understanding. Dean Spade defines mutual aid as "collective coordination to meet each other's needs, usually from an awareness that the systems we have in place are not going to meet them" (2020, p. 11). Whether in the form of soup kitchens, legal assistance, or housing support, mutual aid is built on cooperation and interpersonal solidarity. No single person is a doctor, a mechanic, an elementary school teacher, and a librarian, but every community needs someone with each of these skills in order to run smoothly.

7. …but Everybody Knows Something

Science, when done correctly, can fit well into the concept of mutual aid. Scientists have developed a specific skillset and corpus of knowledge over lifetimes of study, and these particular competencies are useful not only in laboratories but in daily life. Prasanna, for example, writes that the scientific thought process begins with ordinary curiosity: "It is something we all see and experience in day-to-day routines if only we stop and question after the action as to why did I do it?" (2022, p. viii). Science—good science, at least—doesn't require researchers to shut themselves in universities away from the world. Rather, science actually opens pathways to participate in community building.

Modern capitalist societies tend to emphasize the partitioning of both individuals and knowledge into tiny, self-sealing pieces. Mutual aid models, by contrast, are built

on interdependence—epistemic as well as material. We should be thinking together, not simply living together. Contrary to assumptions connecting science and technocracy, scientists should not act as infallible authorities in a society, but as contributors—trusted, yes, but also embedded in a much larger network of thinking individuals. As Prasanna further notes, science is a "continuous process with a firm beginning but never-ending" (2022, p. x). The more voices that are added to the process, the better.

Thus, scientific expertise can a boon to anarchist societies rather than a detriment. Instead of seeing science as a monolithic authority, esoteric and isolated, we can see it as an essential piece for the survival of a mutually dependent community.

8. No One Is Healthy by Themselves

Health isn't fully determined by behavior, genetic makeup, or random chance: it is profoundly shaped through our environments. The social determinants of health are well-established—working conditions, housing, social inclusion, access to medical services, and other situational factors all have a lasting effect on one's health. Similarly, infectious disease control, air and water quality, and crisis management all require community-based solutions. Thus, health is not just a biomedical issue. It is a collective condition that requires collective approaches to address.

Public health, at its root, is about populations, not individuals. This community-centered orientation distinguishes it from clinical medicine, which is largely individualistic, and situates one's health within the larger social fabric. As Mary-Jane Schneider (2020) puts it, "Whereas medicine is concerned with individual patients, public health regards the community as its patient" (p. 86). The COVID-19 pandemic brought this distinction to the forefront of the public's consciousness—a person's risk of becoming ill with the virus didn't depend only on their choices, but on whether others wore masks, had