The Anarchist Library Anti-Copyright



# The Anarchist's Guide to Critical Thinking

The Peer Review

The Peer Review The Anarchist's Guide to Critical Thinking 2025

Issue #1 of The Peer Review zine.

theanarchistlibrary.org

2025

# Contents

First things first	5
What is critical thinking	5
and why should you give a fuck?	5
Here's the plan	6
Part I	6
<b>Evidence</b>	6
Heuristics, Biases, and Fallacies	8
Part II	11
Applications	11
<b>Content</b>	13
Sequence	14
Revisit	15
Sources	16

- Sunstein, C. (2005). Moral heuristics. Behavioral and Brain Sciences, 28(4), 531–542. https://doi.org/10.2139/ ssrn.387941
- Tversky, A. & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157), 1124–1131. https://doi.org/10.21236/ad0767426
- Willingham, D. T. (2019). How to teach critical thinking. NSW Department of Education. https://education.nsw.gov.au/ content/dam/main-education/teaching-and-learning/ education-for-a-changing-world/media/documents/ How-to-teach-critical-thinking-Willingham.pdf

## Sources

Bailin, S., Case, R., Coombs, J. R., & Daniels, L. B. (1999). Conceptualizing critical thinking. *Journal of Curriculum Studies*, 31(3), 285–302. https://doi.org/10.1080/002202799183133

Battersby, M. (2016). Is that a fact? (2<sup>nd</sup> ed.). Broadview Press.

- Chomsky, N. & Herman, E. S. (2002). *Manufacturing consent: The political economy of the mass media* (2<sup>nd</sup> ed.). Random House, Inc.
- Crowder, G. (2005). Anarchism. In E. Craig (ed.), *The shorter Routledge encyclopedia of philosophy* (pp. 14–15). Routledge. https://doi.org/10.4324/9780415249126-s003-1
- Ennis, R. (1991). Critical thinking: A streamlined conception. *Teaching Philosophy*, 14(1), 5–24. https://doi.org/10.1057/ 9781137378057\_2
- Gelderloos, P. (2004, October). The patriarchal science of corporate media. The Anarchist Library. https://theanarchistlibrary.org/library/peter-gelderloos-thepatriarchal-science-of-the-corporate-media
- Hasher, L., Goldstein, D., & Toppino, T. (1977). Frequency and the conference of referential validity. *Journal of Verbal Learning and Verbal Behavior*, *16*(1), 107–112. https:// doi.org/10.1016/s0022-5371(77)80012-1
- Kamm, F. M. (2007). Intricate ethics: Rights, responsibilities, and permissible harm. Oxford University Press. https://doi.org/ 10.1093/acprof:oso/9780195189698.001.0001
- Oswald, M. E. & Grosjean, S. (2004). Confirmation bias. In R. F. Pohl (ed.), *Cognitive illusions: A handbook on fallacies and biases in thinking, judgement and memory* (pp. 79–96). Psychology Press.
- Sagan, C. (1979). Broca's brain: Reflections on the romance of science. Ballantine Books.

# First things first

### What is critical thinking...

Some writers and philosophers have approach defining it broad strokes: Robert Ennis, who spent six decades writing about the topic, claimed that critical thinking is simply "reasonable reflective thinking that is focused on deciding what to believe or do." (1991, p. 8). Similarly, Sharon Bailin and her colleagues identified only three characteristics that make thinking critical: (1) it is done to determine what to believe about something; (2) the thinker is trying to meet some standards of adequacy in their thinking; and (3) the thinker does meet those standards to an appropriate degree (1999).

Others have focused more specifically on critical thinking as applied to argumentation. Mark Battersby, for example, defines it as "the ability and inclination to assess claims and arguments" (2016, p. 7), and stresses the importance of evaluating evidence to expose false claims. Regardless of whether the definition is generic or specific, though, most writers agree that critical thinking is a habit that requires practice to master.

## ... and why should you give a fuck?

Far from a bourgeois ideology, critical thinking is a necessary tool for anarchists. Anarchism demands that individuals be able to think accurately and effectively. From being able to spot exploitative power structures to understanding the minutiae of alternative economic theories, anarchism is far more than just tossing pipe bombs at cop cars. Even the most aware anarchist is in danger of falling for misinformation, conspiracy theories, and cults of personality—and before you think you're immune, remember that you have identical brain structures to the people who fall for it all the time. To avoid those traps, anarchists need to be able to think for themselves. When done right, critical thinking is a necessary step in the path to liberated, individual thinking.

## Here's the plan

There's a longstanding debate about whether critical thinking skills are generalizable (in that there is a single skillset that applies to all areas of inquiry) or if it's domain-specific (in that each discipline-math, science, history, philosophy, etc.-has its own set of critical thinking skills). I'm choosing to split the difference. In Part One, we'll address two generalizable skills: first, we'll discuss evidence gathering and assessment, and second, we'll talk about heuristics, biases, and fallacies. In Part Two, I'll present a guide to critical thinking specifically designed for anarchists, based on Daniel Willingham's 2019 paper "How to Teach Critical Thinking." Willingham outlines four steps that should be taken when teaching critical thinking about any topic: first, identify what "critical thinking" means in that domain; second, identify the knowledge that is necessary for each understanding of critical thinking; third, create a sequence in which that knowledge should be learned; and fourth, revisit and relearn. With that, let's get started.

# Part I

#### Evidence

When assessing any proposition, argument, or problem, a good thing to ask is: **how good is the evidence**? Every argument requires evidence: if someone were to claim that leprechauns are real, we shouldn't take their claims at face value. Rather, we should ask for the proof. After that, we should assess if the evidence they provide is adequate.

In his book *Is That a Fact?* Mark Battersby divides the assessment process into two steps. First, ask if the evidence sup-

#### Revisit

Critical thinking is not something that one learns once and can simply use forever. Rather, it takes continual practice to cultivate. Willingham stresses that the fourth step is to **revisit each critical thinking skill** over time in order to master it. Oftentimes the application of these skills will change, as new questions and problems arise in which they are put into use. It helps, however, to be deliberate about putting these skills into practice.

Engaging with fellow anarchists and others can help to keep critical thinking sharp. Start a reading group to discuss anarchist literature or regularly get together with nonanarchists to debate the merits of decentralized systems. Join a mutual aid organization in order to help others or plan a protest with other activists. The opportunities to interact with others are endless.

Critical thinking skills can be honed individually as well. Regularly challenge your own assumptions and thought processes when considering important questions or problems. Consider alternate scenarios to every solution you find and actively test your ideas in the real world. Resist accepting easy answers, and work to apply anarchist frameworks to daily life (like using **prefigurative politics** to imagine the world as it could be).

Anarchists often rally around the slogan "No gods, no masters." While a great phrase, it shouldn't mean "no thought" as well. In fact, **anarchism demands more thinking in order to work.** Willingham may show how critical thinking can be taught, but anarchists must take those skills to go forth and build a world without domination. In order for this guide to be useful, it should be used—so please, go forward and practice these skills (for all of our sakes).

### Sequence

Willingham's third step is to **identify the order in which skills should be learned**. In most subjects, complex knowledge is built on a foundation of more basic information: musicians learn scales before they learn to improvise, artists learn to draw basic shapes before they draw hands, and math students learn algebra before they learn calculus. While this sequence can be flexible (as it should be—everyone learns information differently and at different rates), here is the sketch of a plan.

#### **Phase I: Foundations**

This includes learning about the core concepts of anarchism, such as anti-authoritarianism, liberty, solidarity, and direct action. One should practice spotting power structures in daily life, such as police presences and workplace managerial hierarchies. This stage should also include practice identifying common statist and capitalist arguments.

#### Phase II: Critique

This phase begins applying anarchist ideas from Phase I to real-life situations. It includes critiquing capitalism, the state, and the media, analyzing the successes and failures of historical examples of anarchism, and getting involved in collectives, unions, and other groups in the anarchist milieu.

#### Phase III: Praxis

This phase is advanced practice. It includes tackling complex debates within anarchism (such as violence vs. pacifism and individualism vs. collectivism), critically assessing both anarchist and non-anarchist movements, evaluating (and originating) tactics for organizing, and creating alternative and anarchist media such as zines, papers, and teach-ins. ports the determination. He uses the example of a letter to the editor published in *Time*, in which the author claims that her "85-year-old mother power-walks two miles each day, drives her car (safely), climbs stairs, does crosswords, reads the daily paper and could probably beat [your columnist] at almost any-thing." Thus, so the writer believes, people in this era must be "living to a healthy and ripe old age" (2016, p. 14). As Battersby points out, however, just because the writer's grandmother does these things does not mean that all elderly people can do these things—the premise does nothing to support the conclusion. Whether or not the evidence is true, you should be skeptical of an argument if the evidence doesn't provide any basis for the conclusion.

Second, you should ask if the evidence is credible. If the abovementioned writer had cited a study instead of using her own grandmother as an example, you should ask if the sample size was adequate and if the study was funded by organizations that may have an interest in promoting its conclusion. Or if she had cited a poll conducted among senior citizens, you should pay attention to **question bias** (when the phrasing of the poll questions influences the responses) and **context bias** (when the context of the poll, such as a preliminary introduction by the researchers or the environment of the responder, influences the responses) (Battersby, 2016, pp. 29 & 52). Above all, you should seek to verify that the information being given to you is correct—if the premise is false it could point to an invalid or unfounded conclusion.

Philosophical razors are rules of thumb that can be used to metaphorically "shave off" unlikely premises and conclusions. The principle of **parsimony**, for example, holds that explanations should be as simple as possible. The most famous formulation of it, **Occam's Razor**, states that we should only accept the more complicated theory if the simpler one cannot explain the event (Battersby 2016, p. 23). If you hear a crash, walk upstairs, and see a baseball, broken glass, and a group of kids with

bats and mitts running away, the most likely explanation is that they were playing baseball and hit a ball through your window. The theory that aliens broke your window and planted the baseball there to frame the innocent kids should likely be rejected unless the first explanation doesn't account for some aspect of the situation.

Similarly, the **Sagan Standard**, attributed to Carl Sagan in his book *Broca's Brain*, holds that extraordinary claims require extraordinary evidence (1979, p. 73). The claim that a new treatment will cure any type of cancer in less than twenty minutes requires much more proof than the claim that diet and exercise help you lose weight. There are many other philosophical razors in existence, but a word of caution: while razors provide good bases for ruling out bad arguments, they are not foolproof. Though it is overwhelmingly unlikely, perhaps aliens did plant that baseball, and that new treatment does cure cancer. So, while they may provide a quick-and-easy method of detecting bullshit, they are not infallible.

### Heuristics, Biases, and Fallacies

#### Heuristics

Human beings (yourself included) are prone to biases, fallacies, and unclear thinking. The work of Amos Tversky and Daniel Kahneman (1974) showed that we tend to rely on quick rules of thumb, called **heuristics**, when making probability judgments. While useful when making quick decisions, heuristics are prone to error, as when one estimates the probability of a heart attack occurring among a certain age group based on how many people they know have had heart attacks. Who you know that has had a heart attack has no bearing on the actual percentage of people that do, similar to how Battersby's writer assumed that all elderly people are fit and healthy because her grandmother is.

#### Content

Now that the goals of anarchist thinking have been identified, the second step in the process is to **gather the knowledge necessary to reach those goals**. Every problem requires the requisite background information in order to solve it. The example Willingham uses is a historical letter: to analyze a letter written by a sergeant before a battle, one needs to know the context in which the letter was written, the role of sergeants in the military, and knowledge of the war in general (2019).

There is quite a bit of knowledge that is necessary for anarchists to think critically. Existing anarchist theory provides a solid foundation: a working knowledge of Bakunin, Kropotkin, Goldman, Zerzan, Marx, and others is indispensable. With this theory in hand, anarchists can learn to identify exploitation, material and social inequalities, and the class-based structures inherent to capitalism. An understanding of the ideological details of fascism and other ideologies opposed to anarchism can help with spotting propaganda as well, especially if that propaganda is particularly subtle (it doesn't have to be the Two Minutes Hate to be propaganda).

Familiarity with politics, news, and world events is also essential. The world has seen a resurgence of right-wing populism recently that is threatening to undermine our collective rights. Any good anti-fascist should be able to discuss why it has arisen and how to address it. Knowledge about the struggles of our trans, gay, disabled, BIPOC, and marginalized brethren is likewise necessary to dismantle the barriers preventing us from full equality.

This list is not complete and is only meant to point critical thinkers in the right direction. Remember, knowledge is power, and power begins with knowledge.

Bonus points for assessing the role of police, politicians, and judges in perpetuating injustice.

#### **Economics**

Economic theory is one of the cornerstones of anarchist thought. It is not only important to learn and understand anarchist models (anarcho-syndicalism, anarcho-communism, etc.) but also to study the capitalist model that anarchism is working to overthrow. Skills in this area include the ability to discover and analyze labor exploitation and the basic knowledge required to understand the foundations of neoliberalism, communism, and socialism.

#### Media

Media can be both a tool of the state and a source of the truth. On the one hand is the corporate media that, as Peter Gelderloos has pointed out, exists only to "fatten the wallets of their executives and share-holders" and maintain social control (2004). On the other is, well, this zine! Skills in this area include identifying propaganda, discovering the sources behind specific information and narratives, and uncovering media bias in all of its forms (cf. Chomsky & Herman, 2002).

#### Organization

What's the point of being an anarchist if you aren't willing to act? Critical thinking skills in this area include identifying methods to engage with activists in other spheres, organizing protests, and advocating for alternative systems. Also included in this area are skills related to the history and praxis of anarchism, especially learning from past and present successes and failures. Cass Sunstein (2005) extended Tversky and Kahneman's work to include moral judgments, identifying a list of heuristics that tend to guide us when making ethical decisions. He includes, for example, the **Betrayal Heuristic** (in which an offense that includes a betrayal of trust is often judged as more immoral than one that does not include treachery, such as a close friend stabbing someone in the back rather than a known rival) and the **Outrage Heuristic** (in which most people's judgment of how harsh a punishment should be is related to how outraged they are by the offense). Like Tversky and Kahneman, he argues that these rules of thumb are prone to giving inconsistent or incorrect guidance. One thing to watch out for when assessing claims (especially your own claims!) is the underlying heuristics that the claimant is using.

#### Biases

A number of other cognitive biases exist, too. **Confirma-tion bias** is the tendency for individuals to unconsciously reject information that doesn't align with their existing beliefs. As Margit Oswald and Stefan Grosjean put it, confirmation bias means that "information is searched for, interpreted, and remembered in such a way that it systematically impedes the possibility that the hypothesis can be rejected" (2004, p. 79).

**Framing effects** occur when individuals draw different conclusions from the same information depending on how that information is presented. People are more likely to buy yogurt that is advertised as "92% fat free" than they are yogurt that is advertised as "8% full fat" even though they are the same product. This is because the advertiser is "framing" the first with positive language and the second with negative. Problematically, this means that "people will choose inconsistently in the sense of making different and opposed choices in decision problems that are essentially identical" (Kamm, 2007, p. 424)—in other words, how a problem is framed will affect what peo-

ple decide to do about it, even though the framing doesn't actually have anything to do with the problem.

Finally, the **illusory truth effect** occurs when continued repetition of a claim causes it to seem truer than alternatives, even if it is false. First identified in a 1977 paper by Lynn Hasher, David Goldstein, and Thomas Toppino, they found that their test subjects rated a statement as more likely to be true if it was repeated to them rather than if they read it once. Importantly, this is a prominent reason why propaganda techniques such as the **Big Lie** (like Trump's claim that he won the 2020 election) and the **firehose of falsehood** (like Trump's constant and endless lying) work.

### Fallacies

Unlike heuristics and biases, which affect how people process claims, fallacies are mistakes made in the reasoning behind claims. There are hundreds, but below are some of the more common ones:

- Sweeping generalization The arguer expands a specific case into a general principle that does not always apply. For example, claiming "People from that city are always rude" takes what may be true of some residents (rudeness) and generalizes it to all residents.
- **Begging the question** The arguer leaves out an important premise to their argument, usually because they assume that it is settled and does not need to be addressed. The claim "Killing an innocent person is murder. Murder should be illegal. Therefore, abortion should be illegal" leaves out the controversial premise "abortion is murder."
- *Ad hominem* The arguer attacks the character of their opponent rather than discussing the issue at hand.

For example, claiming, "You don't know anything about climate change, you're too young and inexperienced" avoids engaging with the hypothetical young person's argument by dismissing it based on their youth.

• Straw man – The arguer takes another's argument, extends it to an extreme, and then easily dismisses it. This makes it seem as if the arguer succeeded in defeating the original argument, but they have only torn down the extended version of it. For example, the claim "My opponent wants to reduce carbon emissions. Clearly, what he really wants is to ban all cars and shut down factories" takes a reasonable argument (reduce carbon emissions) and blows it up into an extreme not found in the original argument (banning all cars and shutting down factories).

# Part II

# Applications

Now that we've covered some general critical thinking skills, let us turn to Willingham's plan to teach domain-specific skills. The first step is to identify **what critical thinking means for anarchists**. So, what should anarchists be able to do with their thinking? While this list is by no means exhaustive, below are some ideas.

## Power & Hierarchy

Key to an anarchist evaluation of the existing social norms is the identification of existing hierarchies. After all, one of the core axioms of anarchism is that people have no obligation to follow those in power (Crowder, 2005). This set of skills may include spotting classism/racism/sexism/ableism, identifying structural violence, and recognizing cults of personality.