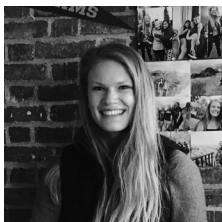


# IDEAL COGNITION

A NARROWLY CONSTRAINED RELATIVE PRAGMATISM



KATE KENNEDY

*Kate Kennedy is a senior biology and philosophy major at Williams College in Williamstown, Massachusetts. She's especially interested in the philosophy of science and philosophy of mind. In a somewhat different vein, she's also studied continental philosophers, as well as critical theorists. In her free time, she runs on the Williams track team and focuses on the 400-meter hurdles. While she grew up in Los Angeles, California, she spent the last couple of her high school years in London, and now eventually plans to move to Boston to work in healthcare consulting.*

**ABSTRACT:** *Both the nature and aim of human cognition are philosophically divisive topics. On one side, there are the evidentialists who believe that the sole purpose of cognition is to seek and find truths. In contrast, pragmatists appeal to cognition solely as a tool, something that helps people achieve their goals. In this paper, I put forward an account of cognition and its aims fundamentally based on a pragmatic viewpoint. Crucially, however, I claim that an evolutionary pragmatic picture of cognition must assert rationality as a core tenant of human thought, mooring a relative pragmatism within a system logic and rationality.*



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## INTRODUCTION

Defining the ideal cognitive system is an epistemically rich project, drawing on significant philosophical questions about the nature of reasons and the aim of cognition. The answers to these questions are both philosophically and practically important, helping people to think about how to best use their minds and powers of rationality. Given this task's importance, it is unsurprising that many philosophers have offered their own interpretations of both the mind's goals along with metrics to evaluate success or failure in attaining those goals. While some have appealed to pragmatic arguments, others have approached the problem from a more straightforward, evidentialist viewpoint, claiming that the best way to judge a cognitive system is through its ability to find and track truths.<sup>1</sup> In order to build my own account of cognition's aim in this paper, I will start by defining and defending pragmatism, in particular evolutionary pragmatism. With this in mind, I will consider a natural consequence of accepting evolutionary pragmatism and epistemic relativism and explain how, even from a relativistic viewpoint, truth-tracking must be acknowledged as an essential attribute of cognition. In the process, my account of cognition's aim will become clear: I will advocate for a constrained form of evolutionary pragmatism that is only partially relativistic because it acknowledges that while cognition can have a multiplicity of goals, reason must be one of those goals. I will end by considering how my account can help us, as people, learn to creatively and positively set our individual and communal cognitive ends.

## PRAGMATISM DEFENDED

Pragmatism stands in stark epistemic contrast to evidentialism. While evidentialists claim that the primary—and in fact, sole—aim of cognition is discovering truth, the pragmatist account does not accord

**1** Stephen P. Stich, *The Fragmentation of Reason: Preface to a Pragmatic Theory of Cognitive Evaluation* (Cambridge, MA: MIT Press, 1990), 129-34; Thomas Nagel, *The Last Word* (New York: Oxford University Press, 1997), 133-35.

**2** Stich, *The Fragmentation of Reason*, 129-34; William G. Lycan, "Epistemic Value," *Synthese* 64, no. 2 (1985): 137-64.

**3** Stich, *The Fragmentation of Reason*, 133-35.

**4** Stich, *The Fragmentation of Reason*, 130-31.

truth any exalted role. The pragmatists can even go as far as to claim that a cognitive system that is not able to fully or accurately track truth functions is just fine, even optimal. Evolutionary pragmatists, such as Stephen Stich and William Lycan, assert that systems of cognition have been primarily shaped by evolutionary processes, meaning that cognitive systems are not fundamentally and solely designed to create beliefs that are true but instead create beliefs that are practically useful.<sup>2</sup> An important consequence of evolutionary pragmatism, which I will consider in more depth later on, is that it necessarily leads to a type of epistemic relativism. This is because evolutionary pragmatists like Stich claim that there are likely many different kinds of equally valid cognitive systems with different aims and practices, so it is impossible to claim that there is only one "right" or optimal system.<sup>3</sup> Before analyzing and defending Stich's epistemic relativism, however, it is important to consider what is appealing about the pragmatic account in the first place.

To defend his account, Stich starts by rejecting a competing method for how to define the ideal cognitive system: one that evaluates cognition based on its ability to produce true belief. Ultimately, he claims that this position is incoherent. This is because, according to him, there is no reason to value a "true" belief over a "TRUE" belief, or a "TRUE\*" belief over that. Essentially, Stich is just using this nomenclature to make the point that in searching for truth, it is easy to get caught up in an infinite—and by Stich's account, pointless—regress by inquiring how someone *really* knows a fact, and how they *really* know that they really know, and so on.<sup>4</sup>

At this point, the evidentialist runs into trouble, although the pragmatist is untouched by the problem of this regress. If there is no logical way to reach a foundational truth—one that is unquestionably not just true, but TRUE, TRUE\*, and so on—the evidentialists' aim becomes not only practically, but also theoretically, impossible. This undermines any type of robust empiricism founded on rationality, as there would be no way to empirically confirm or deny the ultimate truth of a proposition. In other words, someone could always ask the question, "Well how do you *know* that you *know* that?" In fact, deciding that something is acceptably true

at any point in the regress is necessarily arbitrary and, as a result, indicates that truth as the sole aim of cognition is an empty goal.

The pragmatic view, on the other hand, claims that there is no *a priori* metaphysical or empirical justification for truth as the aim of reasoning. This is an attractive point of view because the very idea of an *a priori* truth that does not fall into epistemic regress is chimerical. By accepting a pragmatist point of view, the bar is set lower; cognition and reasoning do not need to reveal absolute truths but are instead just tools that can be evaluated on their ability to accomplish certain goals. For a pragmatist, the notion of pure truth is irrelevant. Instead, if truth mattered to a pragmatist at all, it would be because of its potential practical value.<sup>5</sup> In short, because truth only matters to the extent that it serves as a practical tool to help people get around, the problem of a “truth” regress is peripheral.

Another compelling reason to treat the cognitive system practically as a tool crafted for human needs rather than as some infallible truth-seeking machine is evolutionary theory. In his book *The Nature of Rationality*, Robert Nozick explains cognition through an evolutionary lens.<sup>6</sup> While Stich’s argument about the distinction between true beliefs and TRUE beliefs seeks to reveal the relative unimportance of absolute truth, Nozick’s appeal to evolution offers an explanation of why this might be the case. He suggests that human cognition was not ever actually made in order to find truth and therefore, given its construction, may not even be capable of discovering truth in the first place. Further, even if cognition could uncover truths about a mind-independent world, we as humans would have no way of knowing this fact.<sup>7</sup>

To explain this claim, Nozick argues that evolution may have somehow shaped the human brain so that certain contingent factual connections appear self-evident—as in, appear to have an inherent structural relationship—when they in truth are neither self-evident nor structurally related. Nozick offers the example of Euclidean geometry, which is, he explains, not technically a true representation of physical space. Yet, at first glance, its tenants seem undeniable. Perhaps, he suggests, this is because it was somehow selectively advantageous for cognition to recognize certain patterns as self-evident.

5 Stich, *The Fragmentation of Reason*, 130-31.

6 Robert Nozick, *The Nature of Rationality* (Princeton, NJ: Princeton University Press, 1993).

7 Nozick, *Nature of Rationality*, 107-32.

8 Nozick, *Nature of Rationality*, 109-10.

9 Nagel, *The Last Word*, 14-15.

Therefore, seemingly inborn and undeniable “facts” only appear that way to us in a mind-dependent, evolutionarily shaped paradigm.<sup>8</sup> In some ways, this is similar to a modern-day Cartesian evil demon; evolution has shaped our minds to see the world in certain ways, crafting patterns (like Euclidian geometry) that seem self-supporting but are, in fact, distinctly human constructs.

This example helps the pragmatist because it offers a response to the evidentialist claim that the aim of cognition is self-evidently to find truth. Evidentialists have intuition and common sense on their side: it seems clear that human cognition and rationality is constantly searching for, and indeed discovering, logical truths. By appealing to evolution, Nozick could simply respond that the aim of cognition seems to be reason because evolution makes it appear that way to humans. As such, Nozick is able to both offer a mechanism through which cognition has been created and offer a story for why evidentialism is an enticing, although ultimately misguided, position.

Some philosophers, such as Thomas Nagel, have objected to this evolutionary pragmatic view on the grounds that it is logically incoherent. Nagel objects to Nozick’s evil demon-like conception of self-evident rationality shaped by evolution because he claims that the very argument undermines itself and, in this, is self-defeating. This is because Nagel believes the structure of Nozick’s argument is flawed. Nagel explains that, in order to craft his theory of evolution, Nozick must rely on the very basic tenants of self-evident reason that he is trying to undermine. Essentially, to make any argument, a person must use basic principles of inference, such as logic and reason, which are the very principles that the evolutionary pragmatist seeks to undermine.<sup>9</sup> In this way, Nagel attempts to discredit the evolutionary pragmatist position—among other subjectivist viewpoints—by claiming that certain truths that are necessarily mind-independent. As such, any purportedly failed argument for evolutionary pragmatism merely stands as a testament to the inescapable reality of mind-independent truth.

However, Nagel is unable to deliver a fatal blow to the pragmatists. This is because evolutionary pragmatists could simply claim that the ability to discover basic truths about the world was, in fact, evolutionarily pragmatic. As a result, the cognitive system developed the ability to track

mind-independent truths, at least in some forms. The very success of humanity and its ability to reason in the first place strongly suggests that our reasoning procedures are pretty successful. As such, the evolutionary pragmatist merely needs to claim that truth is not the *sole* aim of cognition. Instead, cognition was built as a biologically contingent system through the process of evolution. Evolutionary pragmatists do not need to make the stronger, subjectivist claim that mind-independent truths are fundamentally inaccessible. Instead, they can claim that, within an evolutionary scope, human cognition was somehow able to attain its complex, multifaceted, and very likely truth-tracking form that it takes today. Admittedly, the evolutionary pragmatist account should tout a healthy fallibilism about many beliefs that Nagel would take objection to, yet, in claiming that evolutionary processes yielded a truth-tracking system that can access mind-independent reality in some logical spheres, evolutionary pragmatist accounts can evade the formal accusation of logical incoherence.

It is important to stress that by the evolutionary pragmatic account, truth-tracking cognitive powers can be conceived as epiphenomena of evolutionary processes. Evolutionary pragmatism does not have to be some type of Panglossian story about how evolution created the perfect cognitive system for discovering real, objective truths. This theory is anachronistic at best, reflecting an outmoded idea of evolution's mechanisms. It is now clear that evolution does not simply operate using selective forces; it fundamentally works via random mutations and genetic drift, where random mutations happen to reach fixation due to non-selective forces like having a high frequency in a small population. In this way, it is naïve to imagine that evolution could have, on its own, created the "ideal" mechanism sculpted by Darwinian selection. To posit truth-tracking as the primary aim of cognition and, as such, the main cognitive attribute that has been selected for is to over reach. Far more likely, humans' complex cognitive system evolved in response to an increased cognitive load in many areas, yielding reasoning and truth-tracking as important parts and epiphenomena of cognitive growth more generally.<sup>10</sup>

However, once humans developed reasoning ability either selectively or incidentally, its power to shape the

**10** Robert Boyd, Peter J. Richerson, and Joseph Henrich, "The Cultural Niche: Why Social Learning Is Essential for Human Adaptation," *Proceedings of the National Academy of Sciences* 108, Supplement no. 2 (June 28, 2011): 10918–25.

**11** Nozick, *Nature of Rationality*, 114.

**12** Stich, *The Fragmentation of Reason*, 158.

**13** Stich, *The Fragmentation of Reason*, 141–42.

**14** Stich, *The Fragmentation of Reason*, 140–49.

future of humanity and cognition became very real and, in some ways, divorced from the evolutionary paradigm from which it arose. Nozick claims: "A concern for reasons, present because of its past correlation with an [evolutionarily developed] reliable route to truth, now floats free."<sup>11</sup> Humans can reason on their own terms—acknowledging their cognitive system's potential inefficiencies and fallibility—and seek to define their own cognitive ends. This is where Stich's relativism comes into play.

## EPISTEMIC RELATIVISM APPLIED TO COGNITION: DEFENDED AND CONSTRAINED

Stich argues that pragmatic cognitive evaluation necessarily leads to relativism. This is because people have different pragmatic ends. These pragmatic ends could be set within many contexts—cultural, historical, ideological, religious, or even individual—although Stich seems to be particularly interested in a culturally-based pragmatic cognitive relativism and plurality.<sup>12</sup> Within this paradigm, each group needs to know what the ends of their cognitive system are before any evaluations can be leveled. Therefore, while different cognitive systems can in fact be compared and contrasted, each system must be critiqued based on its ability to fulfill its own ends. Barring the potential complication of comparatively evaluating the ends themselves, Stich claims that cognitive systems can be contrasted based on how effectively they succeed in their own projects.<sup>13</sup> While Stich fully embraces the relativist implications of his pragmatism, he admits that many people find them troubling. In response, he offers some counterarguments leveled against relativism and dismisses them all in turn.<sup>14</sup>

The most compelling of the counterarguments is that Stich's epistemic relativism is plagued by a kind of circular reasoning. To explain this criticism, consider a case study. Suppose that two different cognitive systems are being evaluated and that each system is evaluated by its own separate criteria. As a result, the members of the two systems each independently conclude that they have the superior system. This illustrates that, within the relativist

canon, there would be no way to directly compare two groups if the very modes of cognition are different in each. It would be impossible to gain an objective view from the outside of both, leaving any chance of comparative evaluation in an irreconcilable impasse.<sup>15</sup>

In response to levels of logical incoherence, Stich defends pragmatism by claiming that it is not a formal example of circularity. He explains that this is because formal circularity only applies when an argument's premise is taken as one of the conclusions. In this case, however, using a specific cognitive system to evaluate cognition does not take the results of that evaluation as its premise; rather, it just determines the process of analysis.<sup>16</sup> Nonetheless, even if the accuser admits that this scenario is not an example of straightforward circularity, the strength of the criticism remains. If the standards of evaluation are defined by and embedded within the thing that is being evaluated, there is a sense in which the whole process is rigged. Put differently, if the parameters of the cognitive system are malleable, then the outcome—in this case, the evaluation—should be as well.

Stich could try to weaken this problem by claiming that the standards of a cognitive system are not formed in order to somehow yield a falsely positive cognitive evaluation. Rather, the cognitive system is constructed in order to fulfill its own ends, and this fulfillment can be analyzed from the outside in an evaluative way. Nonetheless, the problem of constructing this external evaluation remains. In response, Stich simply concedes that this trouble, while real, is not unique to cognitive relativism; it besets any explanation of ideal cognition. Therefore, while the problem of viewing the mind “from the outside” may be irresolvable, it presents no unique problem for pragmatic relativism.<sup>17</sup>

However, Stich's answer is unsatisfying because he fails to consider that there is a position that can evade this problem: an account, like Nagel puts forward, of cognition that claims that the mind has access to mind-independent truths.<sup>18</sup> In this case, there is still no way of escaping reason or getting outside of the mind, but once certain forms of reason have been posited to exist independently of the human mind, there is an objective metric to measure cognitive standards by. An account along these lines could go something like this. Cognitive systems should

**15** Stich, *The Fragmentation of Reason*, 145-46.

**16** Stich, *The Fragmentation of Reason*, 147.

**17** Stich, *The Fragmentation of Reason*, 148-49.

**18** Nagel, *The Fragmentation of Reason*, 134-35.

be evaluated using our principles of reason—logical, mathematic, and even scientific—to interrogate whether or not cognition can track truth: its ultimate goal. This system of evaluation is far from circular because it operates using reason, a capacity that is exercised by the mind but is not dependent on the mind. Therefore, the very principle of evaluation, reason, is presupposed but not pre-set or pre-designed by the object of evaluation: the mind. In response to this objection, Stich could simply concede that while a mind-independent view of reason is better able to eschew charges of circularity, it is nonetheless inferior because it has other, more significant associated problems.

However, I think that he has a better move to make in response. By claiming that through evolutionary causes human cognitive systems have been able to attain powers of reason that can detect true facts about the mind-independent, external world, Stich can assert that cognitive evaluation is not subject to circularity. There are some important differences between this platform and the Nagel-like account just detailed. First, in this case, reason as a human capacity developed as an epiphenomenon resulting from evolutionary causes. Second, reason must be used as a defining metric to compare two cognitive systems, although this does not mean that the systems are being compared on their ability to track truths or employ reason. In this way, the standard of evaluation is the same but the targets of evaluation could be different. Just as reason can be used to interrogate ethical and aesthetic realms, reason can also be used to evaluate systems of cognition that are not solely aimed at actualizing optimal rationality. Third, in this system, rationality, albeit a useful tool, is one of potentially many tools of cognitive evaluation, because it allows for standardizations of evaluative terms. Ultimately, by asserting reason as an essential unifying feature of cognition, the pragmatist can impose at least enough uniformity to successfully evade charges of circularity.

Admittedly, according reason a central place within the epistemic relativist canon necessarily constrains the purported “relativism.” While Stich might likely object to this from at least an empirical and naturalistic standpoint, it seems inevitable that the reach of relativism should be limited. It is important to not overstate just how “relative” these cognitive systems can be, since it seems implausibly

far-fetched to contend that there could be human forms of cognition that do not rely on reason, at least given our phylogenetic history.

Overall, it is counterproductive for an evolutionary pragmatist to divorce their canon from the real world too much. After all, relying on evolution to substantiate philosophical claims infuses a significant amount of naturalism into the evolutionary pragmatist's paradigm. Further, advocating for a relativist position also implies a certain level of empiricism. As such, the pragmatic relativist can explain cognition most successfully through their account when they deal with a type of human cognition that is tied to the way that the brain operates in the world as it is, contending with reason as a central factor. Prescriptions into the future of cognition and reasoning are allowed but should be realistic and, in this realism, relatively limited.

## LOOKING FORWARD: SETTING OUR COGNITIVE ENDS

Analyzing cognition through the epistemic relativist account and subsuming rationality into a broader picture is the most promising way to go about evaluating cognition. This is because epistemic relativism is able to convincingly explain how cognition has evolved via an evolutionary lens. Further, pragmatic and epistemic relativist accounts can assert that the aim of cognition is not a foregone conclusion. Rather, it is something that must be shaped and decided. In this way, the pragmatic platform is fundamentally hopeful and creative. In many ways, it can be viewed as a charge for cultures and peoples to think critically about the kind of ways that they want to use their systems of cognition. At the same time, it also preaches a healthy doctrine of tolerance in its claim that there is more than one right way to do something.

Ultimately, I am endorsing an evolutionary pragmatic and epistemically relativistic approach to evaluating cognition. At the same time, however, my account seeks to take what is convincing about a position that values cognition based on truth and subsume it into the broader relative pragmatist program. Specifically, the evolutionary pragmatists must emphasize reasoning and rationality

as fundamental constituent parts and goals of human cognition. Not only will this allow the relativists to robustly defend themselves against charges of circularity, logically buttressing their account, but it will also help to make their account more realistic to the world as it is, and hopefully can be, as cognitive ends are collectively and purposefully set.