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STICH'S PRAGMATISM: A PRACTICAL APPROACH WITH PRACTICAL VALUE

INTRODUCTION

Stephen Stich's book, *The Fragmentation of Reason: Preface to a Pragmatic Theory of Cognitive Evaluation*, challenges the conceptual boundaries set by traditional epistemology with regard to human cognition in order to open the door for the author's pragmatic and pluralistic views. This paper focuses both on Stich's journey to his pragmatic viewpoint and its practical implications.

Of the three traditional epistemological projects, Stich says he chose the evaluation of strategies of reasoning and inquiry because it has "real, practical implications both for the conduct of science and for the governing of one's cognitive affairs in everyday life."¹ He ends the book on the optimistic note that "A pragmatic epistemology encourages the hope that human cognitive systems may improve without limit..."²

I am much in sympathy with what I understand to be Stich's attraction to pragmatism. While much of what I've studied in epistemology has been intellectually stimulating (beginning with Descartes' "cogito" analysis), it has been rare to find issues that appear to have an impact on daily life. The exceptions have been Stich's pragmatism and feminist epistemology. In this paper I will attempt to explicate Stich's argument for a pragmatic theory of cognitive evaluation, turning a critical eye on his claim that his system points the way toward helping people improve the effectiveness of their thought processes.

Space considerations, as always, have influenced the choice to devote less space to some of Stich's more interesting individual arguments, such as against analytic epistemology and the

value of true beliefs (which probably are worthy of individual papers), in favor of areas more necessary to understanding his conclusions and his defense of his conclusions.

I will begin where he did with the intriguing question: do many people really reason badly? Then I will move into an explanation of his view of normative cognitive pluralism, which he says puts him into the minority of philosophers. From there I'll summarize his views on evolution, the analytic approach and true beliefs. Then I will go into detail about his pragmatic approach and his defense against charges of relativism and circularity. Finally, I will conclude with an evaluation of how well he responds to the initial question about people reasoning badly and whether his approach truly does open the door to benefits for people living in the real world. My general response is that he does succeed.

DO MANY PEOPLE REALLY REASON BADLY?

Stich says the process that led him toward a pragmatic approach to evaluating cognition began with a problem posed by his friend and colleague, Richard Nisbett. A social psychologist, Nisbett was conducting experiments which seemed to indicate that the subjects, despite being fairly bright, seemed to reason very badly. Stich describes four different experiments designed to show how people reason: the selection task, the conjunction fallacy, pseudodiagnosticity and belief perseverance. Nisbett and apparently other researchers found this a bit unsettling. So did I when I struggled with the very first one described by Stich. That was the selection task, which challenges one to pick which hidden parts of the four cards one needs to uncover in order to correctly answer the question. It was a little bit easier for me to see the correct answer for the conjunction fallacy which involves probability theory. In that one the subject gets a background description of an individual followed by eight statements about what has become of the individual. One must rank the statements by their probability. The third experiment, called

pseudodiagnosticity, asks the subjects to draw a conclusion about the effectiveness of a new drug for treating a certain disease. The correct answer is that absent any information about recovery rates among those who did not take the new drug, there is not enough information to draw a correct conclusion. The final experiment involves belief perseverance. In this one, people are presented with the task of distinguishing between authentic and inauthentic suicide notes. As they worked through the task they were given false feedback about their performance—above average, average and below average. They were then debriefed and told that the feedback was false. The startling finding was that, even after debriefing, the subjects of the experiment rated themselves pretty much consistently in accord with the original false feedback!

What led Stich further down the path toward his pragmatic position was the problem his friend Nisbett encountered with other professionals. Sometimes the latter challenged his claim that the subjects were in fact reasoning badly. Why, they asked, did Nisbett get to say which inferences are good and which are not. So Nisbett asked Stich how it could be shown that the subjects were reasoning badly. As Stich examined the experimental data on human inference collected by psychologists he became aware that the conclusions they wanted to draw ran smack up against the theories of two philosophers, Donald Davidson and Daniel Dennett.

Davidson and Dennett said it is conceptually impossible that people reason in ways that depart seriously and systematically from what is rational or normatively appropriate. As I understand it, they say that people's beliefs are mostly true and they draw the correct inferences, or else it will be impossible to interpret their verbal output and mental states. Verbal output that can't be interpreted is not language at all, and mental states without content can not be beliefs or thoughts. Therefore, to conclude that there is extensive irrationality in human inference is conceptually incoherent.

But the Davidson/Dennett position, pitting concept against empirical finding, is too much for Stich, who says he has never had much sympathy for philosophers who attempt to tell scientists the way things should be. Furthermore, his own work seemed to point him toward the conclusion that the Davidson/Dennett problem simply wasn't significant psychologically. Specifically, what Stich finds to be not significant are the distinctions between "real" inferences and "inference-like" mental processes, and "real" beliefs and "belief-like" mental states.³

Cognitive Pluralism

It was while working out a response to the Davidson/Dennett argument for the impossibility of systematic irrationality that Stich first became interested in cognitive pluralism. Stich describes the pragmatic version of cognitive evaluation he ultimately settled upon as both radical and a minority view among philosophers. His view is normatively pluralistic and relativistic. The majority view favors normative monism. These terms come from two claims about cognitive pluralism. The first is called descriptive cognitive pluralism; the other is normative cognitive pluralism.

Descriptive cognitive pluralism is the claim that different people go about cognition—forming and revising beliefs and other cognitive states—in significantly different ways. These are empirical claims based upon observations, experimentation and historical research. The opposite is descriptive monism, the view that most people employ much the same cognitive processes.

Normative cognitive pluralism is a claim not about what cognitive processes people do use; rather it is a claim about the processes people *should* use. It says that "there is no unique system of cognitive processes that people should use, because various systems of cognitive

processes that are very different from each other may all be equally good.” (p. 13) The opposite is normative monism, the claim that these systems are only minor variations of one another.

The reason most philosophers favor normative monism is their belief that good reasoning is rational reasoning. They say that it is not the case that there are alternative systems of reasoning that differ from one another in important ways. Stich assumed the same, he says, until his work took him in a pluralistic and relativistic direction. He claims that different systems of reasoning may be normatively appropriate for different people. Next I will present brief summaries of Stich’s arguments challenging the validity of evolutionary accounts, analytic epistemology and true beliefs.

EVOLUTION, ANALYTIC EPISTEMOLOGY & TRUE BELIEFS

In a previous section we covered Stich’s response to the Davidson/Dennett argument for the impossibility of irrationality. He also dismisses a similar evolutionary argument that bad reasoning is impossible with examples to show that evolution has not and possibly can not always produce the most desired results for human cognition. What bothered Stich was that these arguments conflicted with the findings of psychologists who were doing research into human cognition and finding that people do reason badly. “The point is not, of course, that irrationality is a good thing or that bad reasoning is to be encouraged. But if bad cognitive processing were either conceptually or biologically impossible, it would make nonsense of the empirical exploration of reasoning and its foibles.”⁴ Stich is worried about the practical importance of this argument.

As Stich’s thinking evolved he began to see it as a threat to the entire analytic epistemology tradition. The argument goes like this. If descriptive cognitive pluralism is true, i.e. different people reason in significantly different ways, then much of the divergence is due to

cultural differences. The analytic epistemologist attempts to evaluate these differences in light of our intuitive notions of cognitive evaluation. The problem is that these intuitive notions are themselves the products of culture with as much variation as the cognitive processes that they evaluate. So why would anybody care whether their reasoning process falls within the boundaries of the intuitive notion of rationality?

Stich also was bothered by the Wittgensteinian idea that epistemic assessments must come to an end with the criteria in our ordinary concepts of cognitive evaluation. Stich responds that both our notions of epistemic evaluation and our cognitive processes can be evaluated instrumentally as well as conceptually. They can be evaluated by how well they bring about states of affairs that people value, such as being able to predict or control nature, or how much they contribute to an interesting and fulfilling life. He says we can view cognitive processes as mental tools, to be evaluated as other sorts of tools. This has its roots in the pragmatist tradition.

In rejecting appeals to ordinary notions of epistemic evaluation, Stich says that he was, in effect, denying that rationality and justification have any intrinsic or ultimate value. In looking at what else might be a candidate for having intrinsic value to our cognitive lives, he also challenges the idea that truth has intrinsic value. He admits that for most people having true beliefs is intrinsically valuable. But he questions whether people would still feel that way if they understood what having a true belief means. Beliefs are brain states. What he calls an interpretation function maps belief-brain-states to entities like propositions, truth conditions, situations or states of affairs. The belief is true if and only if the proposition to which it is mapped is true. Stich challenges this method using the same argument as he did to challenge analytic epistemology and its reliance on our intuitions about cognitive evaluation. He can do this because the proponents of this sort of theory say that the mapping must capture our intuitive

judgments about the content or truth conditions of the mental states. But what is so special about these intuitions, he asks. They are a socially acquired set of judgments that may well vary from one individual culture to another. If there is nothing special about the intuitive mapping function, it being just one among many, then it follows that there is nothing special about having true beliefs either. He also challenges the notion that true beliefs and the cognitive systems that tend to produce them are instrumentally valuable because they foster our pursuit of other goals.

EPISTEMIC PRAGMATISM

So if the epistemic pragmatist does not value true beliefs, then what does she value?

Stich takes his first pass at an answer at the outset of his concluding chapter.

“In evaluating systems of cognitive processes, the system to be preferred is the one that would be most likely to achieve those things that are intrinsically valued by the person whose interests are relevant to the purposes of the evaluation.”⁵

What Stich seems to be telling us is that he wants to develop a pragmatic evaluation system that treats cognition as an instrument with practical consequences for the relevant persons. But he warns at the outset of Chapter 6, the concluding one, the best he can do at this time is a preliminary sketch. That’s why, he says, he partially titled the book *Preface to a Pragmatic Theory of Cognitive Evaluation*.

He also reminds us that pluralism plays a big role throughout his thesis. In contrast to monists, who say people intrinsically value one major thing (happiness, pleasure, etc.), Stich claims people really value a great diversity of things. This value-pluralism, as he calls it, places him in the position of having to defend his theory against the serious philosophical charge of relativism.

But before he does that he deals with what he considers to be a more serious problem if value-pluralism turns out to be true. How do we evaluate the relative worth of various cognitive systems in helping people achieve what they intrinsically value? Stich says this is more difficult than, for example, trying to evaluate the outcomes of technological systems. It would involve finding a method to weigh a person's intrinsic values against one another. No easy task, says Stich; it will involve much future work into the nature of human value systems for epistemic pragmatists in collaboration with psychologists, anthropologists, economists and others. This integration of empirical and normative research is a hallmark of the pragmatic tradition, according to Stich.

DEFENSES AGAINST RELATIVISM AND CIRCULARITY

Having exposed us to the challenge posed by value-pluralism, the author now goes onto to dispense with the charges of relativism, and circularity as well. Although Stich ultimately dismisses the charges of relativism and circularity as not worth worrying about, he spends a good chunk of his final chapter (14 pages) explaining why. Due to space considerations once again, I have attempted to sketch these out as briefly as possible while maintaining accuracy.

He concedes that his brand of pragmatism is relativistic, but this is not a bad thing. That pragmatism does lead to relativism stems from the thesis of normative cognitive pluralism, the basic epistemic view on which Stich hangs his hat. That view says that there may be various systems of cognitive processes that are significantly different from each other, but equally good.

Looking into the matter further, it would be relevant to ask whether one system is better than another for a given person or group. It may turn out that one system is better for one person or group, while another system works best for others. Stich takes this possibility to be the

“hallmark of relativism in the assessment of cognitive processes.”⁶ An account is relativistic if it is sensitive to facts about the people using the cognitive system. Hence a pragmatic account of cognitive evaluation will be relativistic because it is sensitive to what its users value, i.e. a plurality of values.

A second source of relativism is the consequentialist nature of a pragmatic evaluation. Consequentialism refers to the fact that the likelihood of a system leading to certain consequences will depend on the environment, the circumstances of the person using the system. Stich cites several examples, including children growing up with differing world views at different times in history and scientists who differ in their receptivity toward new discoveries. It is this kind of diversity, in which there may be no best system of cognition, that Stich finds liberating, but which bothers other philosophers.

He denies, as some charge, that relativism plays into the hands of epistemic nihilists who abandon any attempt to distinguish good cognitive strategies from the bad. On the contrary, epistemic pragmatism is demanding and designed to produce assessments that people will care about. For a given cognitive agent in a given historical setting, a pragmatic evaluation will rank one cognitive system higher than another. It is not the case that anything goes. Much like the pragmatic assessment of alternative technologies, the evaluations will depend on the goals of the users and their situations.

He also defends against the charge that relativism leads to skepticism by driving a wedge between good reasoning and truth. He refers back to his argument in Chapter 5 that in the enormous space of head-world relationships, the one relationship picked out by the socially transmitted, intuitively sanctioned notion of truth has no unique advantages. If we do not have a reason to value having true beliefs, then we are not worried about whether our cognitive systems

can produce true beliefs. We should prefer pragmatically sanctioned cognitive processes that have obvious connections to what a person desires and values.

Turning to the charge of circularity, Stich says that it mainly rests on the fact that in evaluating a cognitive system a person must use their own cognition. But this would apply to the assessment of any cognitive system, not just a pragmatic one. No sensible person, therefore, should worry about the criticism that one can not apply a pragmatic account of cognition without thinking!

STICH'S CONCLUSIONS

Having traced Stich's journey to his somewhat unique point of view, we shall return to the original question—are people reasoning badly—and how pragmatism applies. His conclusion is that it is an open question; it is premature to conclude that the subjects of the psychological experiments mentioned earlier are doing a bad job of reasoning. And further, he is open to the possibility that human cognitive systems can improve.

Let's reserve just one more moment to see what final steps Stich takes before reaching his conclusions. In evaluating cognitive processes, the questions should be pragmatic. In most cases, the pragmatist wants to know how well the cognitive systems do at achieving what the people using them value. Up to this point he's been talking about comparing different systems, but now he wants to address questions about whether one given system is a good one, or whether the people using it are reasoning well.

One question would be whether a cognitive system is at least as good as any *logically* possible alternative system. He considers three examples. One involves assessing various classes of algorithms; the second, eliminating belief perseverance; and the third, memory compartmentalization. Without recounting the details, suffice it to say that Stich shows in each

case the human brain simply is not big enough to handle the work that would have to be done by the best logically possible cognitive system. So this is the wrong question.

Rather, Stich says we should ask if there is a *feasible* alternative. The question as to whether people are reasoning well boils down to whether their cognitive system is at least as good as any feasible alternative under some appropriate set of constraints. To that he adds we must consider our purpose in asking the question. He borrows from William James the expression “cash value”. The purpose or cash value goes back to traditional epistemological concerns: not simply to evaluate reasoning, but to improve it.

If we are going to claim that the subjects of an experiment are reasoning badly, we must show that there is some alternative to the cognitive system they are using that is both pragmatically superior and feasible. (The implication here is that if there is no such alternative, then one could conclude that there is no such thing as bad or irrational reasoning, which Stich doesn't want to do as it would seem to go against his pluralistic grain.) He says that the only alternatives we need to consider seriously are educational strategies. Up to the date of publication of this book, however, the results of studies had been tentative and controversial, he says.

He mentions research on teaching strategies of reasoning that suggests that even after taking a course in logic, people generally are very bad at using purely formal or syntactic principles of inference. On the other hand, it is much easier to get people to use various strategies of statistical reasoning. With a modest amount of instruction people can grasp that, in populations that are heterogeneous, predictions based on small samples are likely to be much less reliable than predictions based on larger samples. But Stich concedes that this one case is far

from what is needed to demonstrate systematically that an alternative cognitive system is pragmatically superior and, therefore, these people are reasoning badly.

Yet Stich is not ready to give up (at least as of that writing). He is not ready to endorse commonsense reasoning or say that we are doing the best we can. The situation could change dramatically as we learn more about what makes cognitive systems useful and develop more powerful technologies for modifying our natural systems. For the pragmatist, he says, cognition plays a central role in pursuit of a variety of ends. Viewed in that way, it is as unlikely that there is a best way of doing cognition as there is a best means of transportation or communication.

“A pragmatic epistemology encourages the hope that the human cognitive systems may improve without limit...Just as there are many good ways to prepare food, or raise children, or organize as society, so too there may be good ways to go about the business of cognition.”⁷

COMMENTS

I would like to offer several of my own observations and reflections on Stich's thesis. The first is that I think I tended to be a cognitive monist with regard to reasoning. And, I have to admit, there is still a lurking suspicion that maybe there is only one kind of good reasoning, and that's rational reasoning. But Stich has opened my mind up to the possibility that there may be a plurality of cognitive systems. He effectively highlights the importance of the research showing that intelligent people do poorly on reasoning tests and challenges the “open and shut” mentality that it is impossible to reason badly.

If he's correct, then there might be ways to improve the different cognitive processes for different people under varied circumstances. For example, I may never come to love logic courses, but I would be open to new teaching techniques that could help me to better

comprehend the subject. Although far from conclusive, the study he cited about helping people to exploit the “law of large numbers” in statistical reasoning seems to hold some hope.

I have been a monist in another way: in determining what people hold to be valuable. It is an ultimate kind of happiness or enlightenment. But within that general happiness umbrella, there are any number of sub-values—family, friends, helping people, challenging oneself, etc.—that seem to correspond to Stich’s theory that there is variety, or a plurality of values as he puts it.

These next two thoughts are speculative at best. I think Stich’s move toward cognitive pluralism may have served to open the door somewhat to the explorations of feminist epistemology. His thesis may also help toward further exploration in the epistemology of religion. It would seem both feminist and religious epistemologies involve challenging traditional notions of truth and rationality. I’m incapable of saying much more about these topics, but both possibly might be appropriate subjects for further research papers.

Stich also makes a good case for why people need not worry about having beliefs that are true, at least not in the epistemological sense. While it sounds counter-intuitive, he’s really not challenging the value that people in the everyday world place on true beliefs. He’s challenging the traditional notion in epistemology of what counts as true, justified beliefs.

On the negative side of an evaluation of Stich’s book, one could feel that he wants to lead us to something special, only to leave us with questions. In his defense, he does refer us back to the title indicating that this is only a preface to a pragmatic account of cognitive evaluation. He opens with a question about bad reasoning, and leaves us with an approach. He’s trying to point us in a direction, and I think it has pragmatic value.

In conclusion, I think he has made an effective case for the notion that a pragmatic evaluation of cognitive systems can have an impact on everyday life. Only time and further research will tell us how much.

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NOTES

1. Stephen P. Stich, *The Fragmentation of Reason: Preface to a Pragmatic Theory of Cognitive Evaluation* (Cambridge, MA: A Bradford Book, The MIT Press, 1990) p. 4.
2. Ibid p. 158.
3. Ibid p. 12.
4. Ibid p. 18.
5. Ibid p. 131.
6. Ibid p. 136.
7. Ibid p. 158.