Epistemology and the Psychology of Human Judgment
by Michael A. Bishop and J.D. Trout

Chapter 5 & 6  Strategic Reliabilism
The Costs and Benefits of Excellent Judgment & Epistemic Significance
In this chapter B&T note that standard SAE does not concern itself with pragmatic aspects of belief. In this tradition, the fundamental question is whether a particular belief is to count as knowledge, not whether the knowledge is itself worth having.

Naturalism, however, tends to regard pragmatic questions as central to epistemology. For them, the central question is whether one ought to employ one reasoning strategy over another, and this question really is not fully answered in terms of epistemic justification or, as we saw in Chapter 4, even of reliability. Ultimately we need to know how much the knowledge is worth.

Cost benefit analyses are problematic, however. In economics, value is measured quite precisely in terms of money. But it’s not at all clear that financial units are appropriate for measuring the value of all things. In fact, most people would stipulate that it is not.
The value of flawed cost-benefit analyses.

- B&T point out that cost-benefit analyses in terms of money have value absent any claim that money is the measure of all things.
- Specifically, they note that financial calculations on the value of a human life were originally effective at getting political leaders to do what they would not do on the basis of ethical considerations alone.
- In other words, if we think of a person simply as a functioning piece of machinery, then we can make the case that it is a real loss when society invests money in creating such a machine, and then loses it through some chain of events that could have been prevented at a lower cost than that of replacing the human itself.
- They also note that even imprecise cost-benefit analysis are useful in getting people to grasp the complexity of the problems they are dealing with. B&T cite the example of passionate pleas for increased safety regulations following airplane accidents. These typically do not take into account the full range of relevant phenomena.
  - For example, we know that increased airline safety regulations can raise the number of automobile fatalities.
  - We know that additional automobile safety features do not decrease the number of automobile fatalities.
Cost-benefit epistemology

- With the caveat that they are imperfect measures, B&T adopt the view that
  - the epistemic costs of a reasoning strategy S can be roughly measured by the amount of time it takes to employ S, and
  - the epistemic benefits of S can be roughly measured by the reliability of S.
The cost-benefit imperative.

- B&T insist that the importance of doing cost-benefit analysis can’t really be exaggerated. They make this point in relation to a cost-benefit analysis of selective defection from the Goldberg rule. (p.90 fig. 5.2). The point here is that applying the rule and then defecting from its results based on intuitive judgment is both the most tempting and the worst possible strategy.
B&T claim that excellence in reasoning consists in reasoning well to significant truths. This is pretty obviously a can of worms, so it’s worth recalling why they go down this road.

Remember that B&T claim that people who reason well are people who allocate their reasoning resources well. For example, a person with a multi-dimensional problem who spends all his time getting one small aspect of it exactly right - the Perfectionist - is not as good a reasoner as someone who apportions her time and comes up with a workable, though less than perfect solution – the Pragmatist.

So the idea here is just that reasoning is a practical activity that real people do in real time for the purpose of improving their current epistemic situation to some extent.
A skeptical interlude…

- This all sounds very sensible, but we should pause a moment before swallowing it whole.
- Suppose Perfectionist, while being poor at resource allocation, is actually really good and comes up with much more accurate and precise answers than Pragmatist to the parts of the multidimensional task he does complete. In other words, if time and cognitive resources were not an issue, we would definitely prefer Perfectionist’s answers.
- Wouldn’t we want to say that the reason for our preference in such a case is that Perfectionist is a better reasoner than Pragmatist?
- (You can connect this kind of question to a view you may have of some of your professors. If they are lucky, people who do research are given a lot of time and resources so they can focus an unusual amount of intellectual energy on their work. Some of these people are brilliant at what they do, and yet they seem to be rather poor at managing other mundane aspects of their lives (hygiene, basic courtesy and manners, keeping office hours, etc.)
Rationality vs. Intelligence?

- Maybe one way to deal with this problem is to distinguish between being excellent in reasoning and being intelligent. Or, put differently, perhaps excellence in reasoning is a particular form of intelligence that manifests itself in the ability to solve problems across different domains.

- So the model might be something like this: Living well depends partly on the ability to apply our reasoning ability to many different areas. A truly excellent reasoner is someone who can reason well in these different areas, but also reason well about how much reasoning it is worth doing in these different areas given the problems that require solving.

- Some people have the ability to reason well in a particular domain, but as they lack the ability to reason well in other domains or to apportion their reasoning resources well, they can not be said to be excellent reasoners.
B&T on significance

- B&T claim that “excellent reasoners reason well to significant truths, not just any old truths.” The problem is to figure out what we mean by “significant”.
- The problem, of course, is that what’s significant for you isn’t necessarily significant for me, and all that crap.
- B&T propose the following (p.95) partial explication of significance:
  - “The significance of a problem for S is a function of the weight of the objective reasons S has for devoting resources to solving that problem.”
- This involves two pretty strong commitments:
  - Reasons are objective. This means for B&T that they exist whether a particular reasoner knows about them or not.
  - Reasons can be weighed. This means that their significance is susceptible to measure.
  - (You will note that they waffle in the book between talking about measuring the “strength” of the reasons and the “weight” of the reasons.
- B&T identify three different kinds of objective reasons susceptible to measurement:
  - Moral
  - Prudential
  - Epistemic
Troubleshooting

- B&T consider a few problems with this basic approach.
- 1. Insignificant problems.
  - Question: How do we characterize someone who has a very strong desire to engage himself in a very trivial problem.
  - Answer: B&T allows that having a desire to do x is an objective reason for doing x, but not a strong reason for doing x. (Note especially that the strength of the desire does not track the strength of the reason.)
- 2. Lost causes.
  - Question: Intuitively it seems that there are very big problems that individuals can do very little about. This would suggest that there are strong and objective problems that excellent reasoners would avoid.
  - B&T's reply to this is pretty vague, but it seems to be that truly lost causes (say, reviving the dead) but that many causes (say, reforming the health care system) are not actually lost, but just very difficult, and they are solved by many people making small contributions.
- 3. Negatively significant problems
  - It seems like there are some problems that a good reasoner should avoid, not because they are insignificant, but because, while they are significant, focusing on them and even solving them may actually contribute negatively to our well-being.
  - I'm actually not sure why they characterize this as a problem for their view. It seems clear that in this case one has strong objective reasons for not devoting resources to such problems.
Epistemic Inaccessibility

- It seems reasonable to say that a person can have a reason she doesn’t know about. For example, if you are about to be run over by a bus, you have a good reason to get out of the way, you just don’t know about it.
- But the normative value of a reason does seem to depend on its epistemic accessibility. In other words, it doesn’t make much sense to say that you ought to have gotten out of the way given that you didn’t know the bus was coming.
- B&T do not think this is a particular problem for their view, as they do not require the concept of significance to result in normative recommendations for particular individuals. It is odd, but not incoherent, to say that “a person has strong objective reasons for devoting resources to a problem” that he doesn’t know exists.
- While we can not infer from this that she ought to devote resources to this problem, we can infer that she would be better off if she we were able to deal with it, and this can result in a recommendation for people who are in a position to make this possible.
Significance Research

- B&T conclude this chapter by observing that people are not particularly good at judging the significance of problems.
- We tend to think that some problems are very big when they are really very small, and vice versa.
- In other words, our inability to judge the significance of problems is itself a significant problem. So they advocate a lot more research into discovering what these problems are, the basis of our inability to make these judgments, and educational efforts to correct it.
- Well, who could argue with that?