

Pragmatic Encroachment and Belief-Desire Psychology

Jonathan Jenkins Ichikawa
University of British Columbia

Benjamin Jarvis
Queen's University Belfast

Katherine Rubin
Brown University

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Abstract. We develop a novel challenge to pragmatic encroachment. The significance of belief-desire psychology requires treating questions about what to believe as importantly prior to questions about what to do; pragmatic encroachment undermines that priority, and therefore undermines the significance of belief-desire psychology. This, we argue, is a higher cost than has often been recognized by epistemologists who embrace pragmatic encroachment.

No one will be much surprised by the suggestion that often, what we should do depends in part on what we should believe. The princess must decide whether to kiss the frog; ought she to do it? This depends in part on her evidential situation: what reason has she to think that the frog will, if kissed, become a wonderful prince? Has she reason to think it might become an evil sorcerer? Is there reason to think it might be poisonous? If she ought to believe that the frog would, if kissed, turn into a handsome prince, then, given the ordinary background assumptions about her desires, etc., she ought to kiss the frog. In general, what we should do depends in crucial part on what we should believe. Such is common sense and philosophical orthodoxy, and common sense and philosophical orthodoxy here are right.

By contrast, it is contrary to common sense and to philosophical orthodoxy alike that what we ought to *believe* will generally depend, in the relevant way, on what we ought to *do*. Of course there are special cases where this is so—when, for instance, we're considering beliefs about what we ought to do. But, according to a traditional picture, whether the princess ought to believe the frog is a cursed prince does not depend at all upon whether she ought to kiss it; according to this tradition, the dependence only runs in the other direction. It cannot be, according to common sense and philosophical orthodoxy, that she ought not believe *because* she ought not kiss.

We think that common sense and philosophical orthodoxy are right about this. But this feature of orthodoxy has recently been contested; contemporary epistemologists are now taking seriously the idea that what one ought to believe depends on what one ought to do. In what follows, we develop a challenge for this revolutionary idea.

§1. An Introduction to Pragmatic Encroachment

Consider knowledge. According to a traditional picture, whether a belief constitutes knowledge depends only on how well it manifests its truth-directedness. It depends, for instance, on such features as whether it succeeds in achieving the truth, whether it exhibits a

reliable or competent tendency in its agent, whether it achieves truth *because* of such competence, etc. On this traditional picture, such ‘purely intellectual’ factors are the only ones relevant to whether a belief constitutes knowledge. In particular, knowledge does *not* depend on what courses of behavior are appropriate to a given agent.

A number of epistemologists have recently rejected this traditional picture, endorsing *pragmatic encroachment about knowledge*—the view that knowledge is determined not merely by these traditional factors, but also by practical considerations concerning how the believer ought to act.¹ In particular, these pragmatic encroachment theorists argue that as the stakes for a given subject go up—as it becomes more important to the subject that he or she avoid error—it becomes more and more difficult to know, because subjects face increasingly onerous requirements in order to act. This may be motivated by particular intuitions about cases,² or derived from general principles linking knowledge and action.³ The underlying idea behind all of these views is that differences in what sorts of behaviors would strategically serve practical interests can *ipso facto* make for differences in knowledge. Consequently, knowledge doesn’t relate only to the truth-directedness of beliefs; pragmatic factors about what subjects ought to do matter as well. As Stanley puts it, “what makes true belief into knowledge is not entirely an epistemic matter.” (2005, p. 2)

Although most of the literature on pragmatic encroachment to date has focused on knowledge, there could be pragmatic encroachment on other states, too. One could endorse *pragmatic encroachment about justification*, arguing that whether a belief is justified depends not merely on ‘purely intellectual’ factors, but on practical ones as well. For any epistemic normative status a belief might have—*e.g.* being justified or being knowledge—let us say that it is *pragmatically encroached upon* if having or failing to have that status depends on pragmatic factors such as whether certain behaviors are rational.

At the extreme, one might think that *all* interesting epistemic normative statuses a belief might have are pragmatically encroached upon. Call this extreme view *total pragmatic encroachment*.⁴

¹ The first sentence of the preface of Stanley (2005) is: “The thesis of this book is that what makes someone’s true belief a case of knowledge is partly determined by facts from the domain of practical rationality.” (v)

² Stanley (2005), Pinillos (forthcoming).

³ Fantl and McGrath (2009), Stanley and Hawthorne (2008).

⁴ Stanley (2005, p. 124) describes his own view as total pragmatic encroachment, although the arguments in his book are intended only to establish encroachment upon knowledge. One might suggest that this view is straightforwardly untenable, as there appears to be, by anyone’s lights, a stakes-independent notion of *the range of potential rational credences across possible situations that vary only with respect to their practical features*. While we are not altogether unsympathetic to this line of thought, we offer two rejoinders on behalf of total pragmatic encroachment. First, the notion in question presupposes a sharp distinction between practical and nonpractical features of the case, which we suspect someone of Stanley’s persuasion would reject. The suggestion would have us consider a range of possibilities holding fixed some core of ‘intellectualist’ epistemic features. Since it is precisely Stanley’s view that there is no such core, this attempt to construct one may beg the central question. Second, even if there is a stakes-invariant notion like the one here described, it is not clear that it is ‘interesting’ in the sense of our gloss on total pragmatic encroachment. On this approach, credences play the most significant theoretical role, and they are encroached upon; that one can gerrymander a stakes-insensitive property out of these pragmatic ones needn’t necessarily be of much concern to the total pragmatic encroachment theorist. For these reasons, we prefer to develop a different objection to total pragmatic encroachment.

The most widely-discussed argument to date against pragmatic encroachment is that it is counterintuitive; it's suggested that there is a strong pre-theoretic motivation against pragmatic factors constitutively influencing facts about, *e.g.*, knowledge.⁵ We are not much impressed or concerned by this objection—it seems to us that pragmatic encroachment is a highly theoretical thesis that is not easily or naturally subjected to the tests of pre-theoretic intuition. This theoretical principle should be evaluated in theoretical terms. Such is the project of this paper. We do think that encroachment about any given epistemic normative status does carry a theoretical cost with respect to that status; this cost has, we think, not been appreciated in the extant literature.

We make two related claims. First, total pragmatic encroachment carries an extreme cost: the impossibility of an independently fruitful belief-desire psychology. We very much doubt that total encroachment carries sufficient benefits to warrant such a cost, so total pragmatic encroachment should be rejected. Second, pragmatic encroachment about any given epistemic status—pragmatic encroachment about knowledge, for instance—also carries a serious cost: no state that is encroached upon can be, in an important sense to be defined, a governing norm for belief. For instance, if knowledge is encroached upon, then knowledge cannot play this important role. This too is a theoretical cost; encroachment on knowledge diminishes the interest and importance of knowledge; so, *mutatis mutandis*, for other epistemic distinctions.

§2. An Introduction to Belief-Desire Psychology

Some creatures—humans, for example—have a stake in how the world ends up. Because it matters to these creatures how the world turns out to be, and since in many cases, their behavior will influence the state of the world, there are, from any such creature's point of view, better and worse ways for it to behave. Some courses of behavior are likely to facilitate the world turning out in a way that serves the creature's interests; other courses of behavior are likely to impede the world from turning out in that way. Obviously, it would be better for the creature to adhere to a course of behavior that achieves the former rather than succumbs to the latter. Such creatures, therefore, will repeatedly face an important choice: how to behave?

We may, for present purposes, remain neutral on many of the interesting questions about what constitutes success for a given individual. One simple view would identify success with persistence and survival. Alternatively, one might take success for organisms to consist in biological reproduction. More sophisticated (and value-laden) conceptions are also available: it may be that what it is for a creature to succeed is to fulfill its Aristotelian *telos*, or it may depend on its own passions or any other (possibly pre-conceptual or non-representational) motivations for its success conditions. All of these approaches are consistent with our framework; any creature that faces choices that will influence its success (in whatever sense) faces the problem of how to behave.

Suppose you wanted to design a creature capable of surmounting the problem of how to behave. (If it is helpful, we may extend the notion of 'creature' to include things like robots, so long as we specify what it is for them to do well or poorly.) What kind of creature will you need to build? Plainly, any creature capable of surmounting the problem must be able to adhere to good courses of behavior with regularity. So in order to build a creature with the

⁵ Stanley (2005) p. 6, Fantl & McGrath (2009) pp. 27-28.

ability to surmount the problem of how to behave, you will have to equip your creature with some suitable mechanism that will select a course of behavior in such a way so as to enable it to achieve regular success in its environment. Any creature so equipped implements a *behavioral strategy*. A behavioral strategy is a strategy for addressing the problem of how to behave.

Creatures in highly predictable environments might successfully be equipped with very simple behavioral strategies. Imagine a robotic car whose goal is to cover as much distance along a single dimension as possible. If the only environment it ever faces is a wide open field, with no possibility of obstacles, etc., then an effective behavioral strategy might well be that which enjoins it always to press on forwards; this might be implemented fairly simply, by installing a motor with no steering or off switch.

Realistically, of course, flesh-and-blood organisms must be more adaptable than our hypothetical robot. (So too must real-world robots.) So we need more sophisticated behavioral strategies. An effective strategy is what we call the *rational strategy*. The rational strategy is the strategy of factorizing the behavioral challenge into two independent problems: the problem of figuring out how things ought to be (henceforth, the *evaluative problem*), and the problem of figuring out what is the case (henceforth, the *epistemological problem*). By implementing a procedure for ordering possible outcomes, one is exhibiting a solution to the evaluative problem. In implementing a procedure for calculating which outcomes are likely to be achieved by which behaviors, one is exhibiting a solution to the epistemological problem. Creatures whose actions are explained by a belief-desire psychology have implemented the rational strategy. It is widely thought, of course, that humans are such creatures; so are many animals. So are robots that measure and represent the way the world is, and act accordingly to bring about the states for which they aim. (Suppose our robotic car is programmed to reach a certain location; it might take input from a GPS sensor to find out where it is, then program a trajectory accordingly.)

It is not a trivial commitment to think that the problem of how to behave can be factored in the way the rational strategy requires, but we don't find it easy to see how a creature could respond appropriately to novel situations without factorization of at least a similar sort. And it is worth emphasizing that this factorization is presupposed by contemporary theories of cognition. Such factorization was once widely denied—the idea that animals like rats, dogs, and humans needed no factorization was pursued tenaciously by the behaviorists. But as good students of the philosophy of mind well know, behaviorism failed as a theory of how such animals make their way around the world. Behaviorism ultimately failed to account for how animals can successfully change their behavior to address particular circumstances. The fact that all such animals *can* alter their behavior in this way strongly suggests that, in at least some range of circumstances, they are harvesting, processing, and storing information, and using this information to calculate what course of behavior they should exhibit. In other words, we have every reason to believe that these animals are implementing a behavioral strategy that factors the problem of how to behave into two problems—the problem of harvesting, processing, and storing information, and the problem of settling on courses of behavior depending on what information is made available by harvesting, processing, and storing information. It is, frankly, a strong point in favor of belief-desire psychology that it predicts the factorization strategy that led to the demise of behaviorism and the rise of cognitivism.

Of course, having a belief-desire psychology is only fruitful if a creature is somehow able to exhibit, at least in many cases, a solution to both the evaluative problem and the

epistemological problem. Furthermore, for the factorization to be useful, the creature must be able to exhibit such solutions prior to, and independently of, surmounting the problem of how to behave. If it turned out that the epistemological problem or the evaluative problem could only be solved by *first* solving the behavior problem, this would show that having an independently fruitful belief-desire psychology is impossible; beliefs and desires would be of no use to us in addressing the problem of how to behave. If a belief-desire psychology were not independently fruitful, then the thesis that humans come equipped with a belief-desire psychology as one of their principal tools for navigating the world would be in at least some tension with what we know about the origin of humanity and evolutionary biology. In any case, there would be no reason to think that belief-desire psychology plays an important role in getting humans around in the world successfully.

The evaluative problem is the problem of determining of how non-instrumental preferences and desires are appropriately formed. The project of developing the solution to this problem falls in the domain of ethics, very broadly construed. One develops a solution to the evaluative problem by citing practical norms that govern a rational agent in forming and revising basic desire-like states. A creature that is successful due to its belief-desire psychology will implement this solution well enough (which, incidentally, need not be especially well). In other words, this creature will be equipped with mechanisms that help it to form and revise desire-like states with at least some sensitivity to the governing practical norms provided by the ideal ethical theory.

On the other hand, the epistemological problem is essentially the problem of determining how beliefs are appropriately formed. The project of developing the solution to this problem falls in the domain of epistemology. One develops a solution by citing the epistemic norms that govern a rational agent in forming and revising basic belief-like states. A creature that is successful due to its belief-desire psychology will also implement this solution well enough (which, again, need not be especially well). In other words, this creature will be equipped with mechanisms that help it to form and revise belief-like states with at least some sensitivity to the governing epistemic norms outlined by the ideal epistemology. A central project of epistemology is the identification and articulation of these norms—this is the project we will go on to argue is in tension with encroachment.⁶

For our purposes, governing epistemic norms need not be anything more than, for instance, norms of proper functioning for an epistemic agent;⁷ in particular, we need not (although we might) insist that it generally makes sense to hold an agent responsible for her beliefs.⁸ Governing epistemic norms are not action guiding norms. They *govern* the agent's doxastic *states*; they do not *guide* the agent's intentional *actions*.⁹ Matters of distinctively *voluntary* control plausibly restrict the applicable norms guiding intentional action, but not the norms governing belief states. For epistemic governing norms to be relevant to a subject, she must have cognitive abilities for controlling or managing her states of mind, but states of mind

⁶ We say this is one central project in epistemology; we do not mean to suggest it is the only one.

⁷ Plantinga (1993), Wolterstorff (2010), ch. 3.

⁸ Feldman (2008).

⁹ Cf. Hieronymi (2008). For the distinction between states and actions, see Chrisman (forthcoming). For the distinction between guiding and governing, see Jarvis (2010).

need not be managed or controlled intentionally.¹⁰ In any case, insofar as governing epistemic norms are deontological, we need not (and do not) suppose that they will be deontological in any way that is threatened from an agent's lack of voluntary control over belief.¹¹

Say that a creature is *robustly rational* to the extent that it approaches the limit of what is possible in managing its psychology with sensitivity to the governing norms just mentioned. Obviously, a creature need not think *about* these norms to exhibit sensitivity to them; certainly, the creature need not follow them by deploying a practical syllogism and means-ends reasoning. Nevertheless, to be robustly rational, the creature must be doing something that shows that the governing norms are having some influence in the management of its psychology. At least sometimes, it must be appropriate to explain the management of a robustly rational creature's psychology by citing these norms. In other words, if a creature is robustly rational, the governing practical and epistemic norms must be suitably realized by mechanisms that influence its psychology.

The important thing for our purposes is that if a creature is doing well, then it will, often enough, exhibit sensitivity to the relevant norms. It will believe because epistemic norms countenance the belief—or, at least because the epistemic norms don't censure it, or don't censure it too strongly. It will likewise desire a particular outcome because practical norms say to rank that outcome highly enough, and act because norms of means-ends reasoning dictate as much given his beliefs and desires. We focus on belief norms in what follows.

The governing role that practical and epistemic norms play in the successful deployment of belief-desire psychology is not to be overlooked. The norms may not infallibly govern the creature, but they must be genuinely influential in order for belief-desire psychology to be useful. Indeed, we are not suggesting that it will even be possible for a person to follow these governing norms to the letter. For instance, we are not ruling out the possibility that a norm like (K) is a governing norm:

(K) A belief is permissible if and only if it is knowledge.

Obviously, it is almost impossible to live up, without exception, to (K). However, (K) may nonetheless be influential in the belief formation process even if it cannot be followed without mistake (even in principle) in all possible circumstances. A subject might exhibit sensitivity to the norm, even if compliance must be, as a matter of principle, fallible. Consequently, for all that we have said, a norm of knowledge might well be a governing norm even if a perfect psychological realization of this norm is impossible.

With this background in mind, the problem for the marriage of pragmatic encroachment with belief-desire psychology becomes clear.

§3. Total Pragmatic Encroachment and Belief-Desire Psychology

Anybody who is committed to total pragmatic encroachment is thereby committed to the idea that any interesting epistemic normative status a belief might have must depend, at least in part, on how the subject ought to behave—*i.e.*, whether the subject ought to rely on that

¹⁰ For discussion of cognitive abilities that are not implemented by intentional action, see Millikan (2000), ch. 4.

¹¹ Cf. Alston (1988). Chrisman (forthcoming) notes a lingering dissatisfaction with Alston's resulting position. It is worth noting that some of the authors that we engage with overly admit epistemic deontology, e.g. Fantl & McGrath (2009), pp. 109-11, so that any controversial assumption is likely to be common ground.

belief in its practical reasoning. The epistemic normative status a believer achieves by exhibiting robust rationality in his belief-formation presumably corresponds to an interesting epistemic normative status that beliefs might have. (Let us say that beliefs are *robustly rational* when they are formed by exhibiting robust rationality.) Thus, total pragmatic encroachment commits one to thinking that the robust rationality of beliefs depends in part on questions about what the creature ought to do.

Let us unpack what this commitment involves. If whether or not a belief is robustly rational depends on what the creature ought to do, then *ipso facto*, the epistemic norms that govern belief formation must be norms that demand that the creature form beliefs with sensitivity to what the creature ought to do. That is to say, to be governed by these norms in the requisite sense, a creature must be sensitive to these very pragmatic factors affecting it. And, crucially, the creature must be so sensitive, *antecedent to* forming beliefs—for the norms to be genuinely governing, the beliefs must be formed in response to this sensitivity.

So, on total pragmatic encroachment, a creature must be sensitive to pragmatic factors—what it ought to—do in order rationally to form beliefs. Consequently, in order for a creature to exhibit robust rationality in forming beliefs, this creature must *already* be tracking (at least fairly well) how to behave. In other words, the cognitive resources must already be in place for the creature to implement an independent and successful behavioral strategy. The result is that the creature cannot be surmounting the problem of how to behave in any circumstance solely in virtue of its ability to exhibit robust rationality. In other words, a commitment to total pragmatic encroachment requires one to think that an independently fruitful belief-desire psychology is impossible.

This problem is quite serious for anyone who wants to maintain, with contemporary orthodoxy, that belief-desire psychologies are the actual functioning psychologies of, at least, human beings. Total pragmatic encroachment threatens to undermine the possibility of factoring the problem of how to behave into the evaluative and epistemological problems, since one needs to be capable of surmounting the problem of how to behave *before* one can be capable surmounting the epistemological problem of figuring out what is the case.

An advocate of total pragmatic encroachment could try insisting that there's no problem in rejecting this factorization: the problem of how to behave can be solved simultaneously with the epistemological problem.¹² But we see no reason to take this speculation very seriously. Factorization is crucial because it helps to show how a difficult problem can be solved by reducing it to two, more straightforwardly tractable, problems. As we pointed out last section, postulating factorization was a serious advance in cognitive science because it allowed us to see how complex patterns of behavior might be engineered. Rejecting factorization in belief-desire psychology makes it very difficult to see how creatures will be able to solve the problem of how to behave by forming beliefs because creatures will have to be able to solve the problem of how to behave in order to form beliefs.

To substantiate this point, it may be helpful to consider an example. Suppose that you are engaged in doxastic deliberation, considering whether to believe that the ice will hold if you walk across it. According to total pragmatic encroachment, the governing epistemological

¹² Another *ad hoc* approach for evading the problem: practical considerations might make a difference, but only a negligible difference in the vast majority of cases, and so can be ignored for the purposes of belief governance. This approach effectively concedes that there is no significant theoretical motivation for pragmatic encroachment (because it doesn't ultimately make a difference), so we will not pursue it further.

norm demands that your doxastic choice be made, at least in part, by taking into account the pragmatic upshot of acting as if the ice will hold if you walk across it. If acting as if the ice will hold is a bad idea, then you ought not believe that it will—if acting as if the ice will hold is a good idea, you may well appropriately believe that the ice will hold. But whether it's a good idea to act as if the ice will hold depends in part, of course, on what would happen, were you to walk across the ice. In particular, would it hold? The present question—whether to believe the ice would hold—therefore turns in substantial part on the question whether the ice would hold. You're in no position, of course, to say—that's precisely the question you are trying to settle.

It's hard to see how doxastic deliberation will make any progress here. You might try to answer the question under consideration by consulting other related beliefs. For instance, you might try to bring to bear beliefs about the recent outside temperatures. However, the same problem will recur in considering these beliefs. Because these beliefs will bear on whether you will act as if the ice will hold, these beliefs must be subject to revision depending on the pragmatic upshot of acting as if the ice will hold if you walk across it. They too must be reconsidered in light of your current practical environment, and, so, the vicious circle continues.

Indeed, the vicious circle affects even those beliefs that are relevant to deciding the stakes involved in forming a belief that the ice would hold. Suppose you started out believing that it would be a life-threatening matter if you wrongly thought the ice would hold. To the extent that this belief has an impact on whether you believe that the ice will hold if you walk across it, it too must be reconsidered in light of your practical environment. After all, if you have practical reason to act as if the ice will hold if you walk across it, then the stakes are raised for this belief—since it might naturally impede you from walking across the ice by suppressing the formation of the belief that the ice will hold. As a result, even the belief relevant to the stakes involved must be re-thought, taking into account the pragmatic upshot of acting as if the ice will support you.

Ultimately, the only way we can see to avoid this problem of vicious circularity is for you to have an *independent* way of solving the problem of how to behave. For instance, you might have a credence-preference psychology whereby credence was assigned and preferences structured so as to calculate expected values in accordance with classical decision theory. Then, you might settle upon the belief that the ice will hold if you walk across it if it looks like you can approximate the relevant expected value calculations by setting to your credence in that proposition equal to one, and adjusting your credence in other propositions accordingly. In this way, given your credence-preference psychology, you have a method for settling what to believe that takes into account, not only truth-related, but also pragmatic factors. However, in this case, your belief-desire psychology is clearly not playing a very central role in cognition. It may be useful for you to regularly estimate (rather than accurately calculate) expected values by rounding off credence to one or zero whenever there is little at stake. To be sure, this rounding off clearly simplifies the calculations you have to make. Whenever you do make such round-offs, we might attribute absolute beliefs and denials to you. However, clearly the real cognitive-load in this psychology is carried by credence. Your belief-desire psychology is merely a shadow of your credence-preference psychology.

Because, in such a case, your belief-desire psychology emerges from simplifying expected value calculations, and because simplifying expected value calculations might be useful, there might be some sense in which having a belief-desire psychology is fruitful for you. Clearly, though, it is not *independently fruitful*; it is entirely parasitic on the fruitfulness of

your credence-preference psychology. Consequently, this result vindicates the primary thesis of this paper: accepting pragmatic encroachment about the governing norm for belief leads one to abandon the possibility of an independently fruitful belief-desire psychology.

Notice also that that even this much is to some degree against the spirit of total pragmatic encroachment. A fruitful credence-preference psychology is only feasible so long as the analogue of robust rationality in the assignment of credence is not *also* pragmatically encroached upon. After all, a credence-preference psychology, like a belief-desire psychology, also requires thinking that the problem of how to behave is factored into problems that are analogously evaluative and epistemological in nature. That the norms of the epistemology-analogue are not encroached upon is consistent with the letter of total pragmatic encroachment (which we've defined as restricted to norms on belief), but as far as we can see, any motivation one might have for total pragmatic encroachment in our sense might well press one on to an even wider 'totality'—one would then posit pragmatic norms on proper credential assignments. Such would, then, for reasons entirely parallel to those in the case of belief-desire psychology, involve a commitment to the idea that the problem of how to behave is never thus surmounted.

At the risk of repetition, we will make the parallel explicit. If whether or not a credence assignment is robustly rational depends on the pragmatic question of what the creature ought to do, then, *ipso facto*, the epistemic norms that govern credence assignments must be norms that demand that the creature assign credence depending upon what it ought to do. To be governed by these norms in the requisite sense, a creature must be sensitive to these very pragmatic factors affecting it—and it must be so, *antecedent* to assigning credence. But this just is to be sensitive to the answer to the problem of how to behave. Consequently, in order for a creature to exhibit robust rationality in credence assignment, this creature must already be tracking (fairly well) how to behave. In other words, the cognitive resources must already be in place for the creature to implement an independent and at least somewhat successful behavioral strategy. The result is that the creature cannot be surmounting the problem of how to behave in an arbitrary circumstance solely in virtue of its ability to exhibit robust rationality. In other words, a commitment to total pragmatic encroachment in this broader sense requires one to think that an independently fruitful credence-preference psychology is impossible.

As before, total pragmatic encroachment undermines the possibility of factoring the problem of how to behave into an evaluative and an epistemological problem. In further analogy to the belief case, it would appear that the problem of how to assign credence becomes intractable unless some other way to solve the problem of how to behave is available. Thus, it might appear that the problem of how to behave could not be solved by implementing a version of the rational strategy. Consequently, it would appear that we have no reason to postulate either a belief-desire psychology or a credence-preference psychology as serious theories in cognitive science.

This concludes our central case for the first of our two central theses: that total pragmatic encroachment is in serious tension with belief-desire psychology. Even if Stanley is right that knowledge is not an epistemic matter, it had better be that *something* epistemologically important is a purely epistemic matter; this is just what total pragmatic encroachment denies. This argument will be rehearsed and clarified in the consideration of potential objections in §5; for now, we turn to our second central thesis: that pragmatic encroachment about knowledge or any other particular state comes at a significant theoretical cost with respect to

the significance of that state. It is, in many ways, a straightforward generalization on the argument just given.

§4. Partial Pragmatic Encroachment

Total pragmatic encroachment leads to conclusions that many of us would find unsavory. There probably are some philosophers who are perfectly content to discover that belief-desire psychology doesn't carry any real cognitive-load so long as something like a credence-preference psychology can be retained. However, at least many philosophers are, we think, likely to resist the conclusion that belief-desire psychology is not independently fruitful. Such should, given the argument of §3, reject total pragmatic encroachment.

Maybe, though, that's because total pragmatic encroachment—like toffee for breakfast, toffee for dinner, toffee for tea—is simply too much of a good thing. Perhaps not every interesting epistemic normative status a belief might have is pragmatically encroached upon; but maybe most of them, including many of the most epistemologically interesting, are?

Such a view is, we think, difficult to maintain. Evaluating it comprehensively will, for obvious reasons, turn on questions about which states are and are not more and less theoretically interesting; plausibly, interest is, to a considerable extent, in the eye of the beholder—we certainly don't mean to be in the business of telling epistemologists what they should and should not care about. Nevertheless, anyone who accepts our picture of the significance of belief-desire psychology is committed to there being at least one epistemological question of significant theoretical interest: what are the governing norms for belief, in the sense articulated in §2? When we confront the behavioral challenge, we factor it into two questions: roughly, what to believe, and what to desire. How ought we to go about determining what to believe? What are the norms that govern rational belief formation and revision? To our minds, these are among the most central questions in epistemology, and it is a very strong mark in favor of the theoretical interest of some state that it figures essentially into the answers to these questions.

We have argued that pragmatic encroachment upon any given epistemic normative status, S, effectively forestalls the possibility of governing epistemic norms that promote S or denigrate S. So pragmatic encroachment upon S likewise forestalls the possibility of S playing such a central theoretical epistemological role. No state that is encroached upon can figure into this role; so any state that is encroached upon fails, at least, to be interesting in this central way. We leave open that there can be other reasons, independent of governing norms, why epistemologists ought to care about such states, but they do not play this critical role.

Consider an example. On a paradigmatically knowledge-first picture of epistemology, the central governing norm is (K):

(K) Belief is permissible if and only if it is knowledge.¹³

This norm is external at least in the sense that there is no way for a person to be infallibly governed by it—as we discussed in §2, this is consistent with its being a governing norm in the requisite sense. Suppose that we learned that (K) and all other similar knowledge norms don't govern belief-formation. This would show that reflection on knowledge couldn't help

¹³ Although (K) is the central governing norm, to be effective it must presumably be supplemented by a substantive theory of knowledge.

us to elucidate our behavioral strategy. This is a significant respect in which it would turn out that knowledge is uninteresting. (Perhaps there are other respects in which it is more interesting.) The same goes for other states. Instead of (K), we might consider (J):

(J) Belief is permissible if and only if it is justified.

Suppose that we learned that (J) and all other similar norms of justification don't govern belief-formation either. Then we would have a respect in which justification is not very interesting.

Again, we do not rule out the possibility that there are other respects in which encroached-upon states may hold interest. For instance, we see no considerations that obviously rule out the combination of encroachment upon knowledge with idea that knowledge plays a significant role in, say, the nature of assertion or the theory of reference.¹⁴ Perhaps an encroached-upon state might also have a distinctively epistemically interesting role to play as well; we do not rule it out—but we do not see what it would be. In our view, the most obviously interesting distinctively epistemic question is the one articulated above—this is the one that straightforwardly impacts questions about how to behave. At its core, belief-centric epistemology just is, in our view, the study of how a person would ideally form beliefs so as to best take advantage of certainty-based means-ends reasoning as an implemented behavioral strategy.¹⁵

So a discovery of pragmatic encroachment on a given epistemic normative status is *ipso facto* a discovery that the status in question cannot play this interesting role. This is a serious theoretical cost.

We pause briefly here to note an interesting symmetry. A number of authors have argued that contextualism about 'knows' is in significant tension with important normative roles for knowledge, such as the knowledge norm of belief.¹⁶ It is natural to think that invariantists who accept pragmatic encroachment thereby enjoy a significant advantage; but if what we have argued is right, pragmatic encroachment theorists have difficulties with knowledge norms of their own.

§5. The Scope of the Argument

Does our argument prove too much? Here's a bad argument with superficial similarity to ours; it purports to show that no state involving truth can be a governing norm for belief.

Say that a state that constitutively depends on what is true is *alethically encroached upon*. For instance, plausibly, there is alethic encroachment on knowledge, because whether a state—for instance, the belief that p—is a case of knowledge depends in part upon what is true—for instance, whether p is true. For knowledge to be a governing norm on belief in the sense of §2, it

¹⁴ On assertion, see Williamson (2002), ch. 11 and DeRose (2004). On reference, see Williamson (2007) ch. 8. (Neither of these authors endorses encroachment.)

¹⁵ "Certainty-based" means-ends reasoning contrasts with the "probability-based" means-ends reasoning associated with rational decision-making under risk. Hill and Schechter (2007) draw and explain this distinction.

¹⁶ Hawthorne (2004), Williamson (2005).

must be that creatures forming beliefs are *antecedently* sensitive to what is true. So it must be that the creature could *already* know that p is true in order to countenance belief that p; but how could it do that? It apparently must know, in advance, that it is true that p. But now, we're caught in a vicious regress.

As we said in §2, we have no quarrel with 'external' norms like knowledge or truth governing belief formation. Consequently, we do not want to endorse the sort of argument here sketched. Why is our own argument any different? The argument here questionably insists that in order to decide what to believe, you must have antecedent sensitivity to what is true via pre-existing beliefs about what is true. That one must have antecedent sensitivity in some way to what is true seems obvious: without some way to be sensitive to the facts, one will be lost *qua* doxastic agent. That this antecedent sensitivity must come via pre-existing beliefs about what is true seems questionable. In any case, our argument is not of this form at all. According to our argument, if there is pragmatic encroachment on the norms of belief, then in order to be governed by these norms, one must be antecedently sensitive to what one ought to do. We are not claiming that this antecedent sensitivity must involve pre-existing beliefs about what one ought to do. Nor do we insist that having antecedent sensitivity to what we ought to do is necessarily incoherent, if it doesn't proceed via beliefs about what one ought to do. We argue only that it flies in the face of the value and plausibility of belief-desire psychology. For this reason, our argument against pragmatic encroachment doesn't generalize to an argument against alethic encroachment.

A corollary, worth pausing to emphasize, is that our project here is not a general defense of 'purism' or 'intellectualism', in the senses of Stanley (2005) and Fantl & McGrath (2009), about knowledge or any other state. Our target is distinctively *pragmatic* encroachment. This does not capture all of the views that posit dependence of epistemic statuses like knowledge on non-traditional factors. For example, our arguments are neutral with respect to the 'moderate sensitive invariantism' of Hawthorne (2004), which suggests that whether a subject knows that p depends in part on whether various skeptical possibilities are *salient* to that subject. What is salient to a subject is not a matter of how that subject ought to behave. Hawthorne's proposal, combined with knowledge as a guiding norm for belief, implies that creatures must govern their beliefs with antecedent sensitivity to what possibilities for error are salient; this in no way requires antecedent sensitivity to what they ought to do. So beliefs formed in the service of a Hawthornian knowledge norm may still have a useful and independent role to play with respect to how to behave.

Our argument is also silent on contextualism, the thesis that the English verb 'knows' is context-sensitive. Even those contextualists, like DeRose (1992), who think that pragmatic factors influence the content of a given sentence containing 'knows,' do not thereby commit to pragmatic encroachment. Indeed, an important historical motivation for contextualism of this kind is to account for the relevant intuitive data without admitting pragmatic encroachment.¹⁷

§6. Pragmatic Encroachment Without Sensitivity to What to Do?

We have characterized pragmatic encroachment about S as the thesis that whether S obtains depends in part on how the subject ought to behave. Proponents of pragmatic encroachment

¹⁷ However, 'knows' contextualists cannot straightforwardly adopt knowledge as a governing norm for belief in the way invariantists can. See Williamson (2005), Hawthorne (2004).

sometimes characterize their view in this way, but not always. Embracing our version, Fantl and McGrath give us knowledge-action links like

If you know that *p*, then if the question of *p* is relevant to the question of what to do, it is proper for you to act on *p*. (Fantl & McGrath 2007, p. 59).

But sometimes, the views in question appear to be given in terms, not of what to do, but of stakes:

“[W]hether you are in a position to know could be affected by stakes.” (*ibid.* p. 27)

“[K]nowledge is not just a matter of non-practical facts, but is also a matter of *how much is at stake*.” (Stanley 2004, p. 6)

“The *practical facts* about a situation are facts about the costs of being right or wrong about one’s beliefs.” (Combined with the thesis that knowledge depends constitutively on practical facts. *ibid.*)

It may appear that our argument does not straightforwardly apply to someone who embraces ‘pragmatic encroachment,’ characterizing it minimally as the claim that knowledge (or another epistemic state) depends constitutively on stakes. *Prima facie*, it may seem as if one might have the capacity for independent and antecedent sensitivity to stakes, without independent and antecedent sensitivity to what to do. If so, our regress argument would not apply. Nevertheless, we think that things are not so easy for the defender of this stakes-emphasizing version of pragmatic encroachment. Once the details are filled in, the view will be vulnerable to a very similar argument.

Stakes-dependent views about knowledge are typically views according to which beliefs that relevantly affect courses of behavior in higher stakes situations require the subject to be in a relatively stronger epistemic position in order to know. Thus, if knowledge is a governing norm, belief-formation must be sensitive to, for instance, whether the subject is in a high stakes situation. So, to have some understanding of what this sensitivity entails, we must have some understanding of what, for instance, a high stakes situation is, and how it is that agents can exhibit sensitivity to them.

Certainly subjects can exhibit sensitivity to stakes—we can and often do react differentially, depending on whether we face a high stakes situation or a low stakes situation. But how do we do this? According to one natural answer, we exhibit sensitivity to high stakes by forming beliefs about them: we consider the situation, judge it to be a high stakes one, and modulate our behavior accordingly. This answer is patently unavailable to the proponent of stakes-emphasizing pragmatic encroachment who wants to avoid our critique. If a stakes-sensitive state is to figure into a governing norm for belief, then agents must have the capacity for stakes-sensitivity in a way antecedent to and independent of belief.

Is there a way we might exhibit sensitivity to stakes without antecedent sensitivity to what to believe or what to do? To see what it would take, consider just what a high stakes situation is.

In a high stakes situation, there will be at least two possible courses of behavior, at least one of which is relatively dangerous, relative to a certain positive or negative potential outcome. If a subject is in a high stakes situation, then she stands to lose or gain a significant amount, depending on her action. Facing the prospect of making a very large bet on black at the roulette table is a stereotypical instance of a high stakes situation. Clearly, the safe course of

behavior is not to bet; the dangerous course is to bet. And the worse off she would be upon losing, the higher the stakes for her.

It is worth contrasting this stereotype with situations that are clearly *not* high stakes. Consider an ordinary day when Mr. Brown is thinking about walking out of our front door. There is a possible outcome of Mr. Brown's walking out the door where he encounters a maniac who has been lying in wait to kill him. However, Mr. Brown is much like the rest of us, and this outcome is very unlikely. Perhaps there is a sense in which, in leaving the protection of his home, Mr. Brown is putting his life at stake—but it is not a sense which renders his situation a high stakes one. Despite the enormous cost of one possible outcome of his behavior, this outcome is of negligible likelihood. So being in a high stakes is not only a matter of how much a possible course of behavior might cost the subject; it also depends upon how likely this cost is.

High stakes situations also need not be situations in which there are possible outcomes of non-negligible likelihood that are especially bad in absolute terms. A hedge fund manager might be in a high stakes situation even if, in the worst case scenario, he will lose ninety million of his one hundred million dollars, and thus be left with *only* ten million dollars—this is, absolutely speaking, not a disastrous state of affairs. What makes a course of behavior dangerous versus safe is how the value of possible outcomes compare. For this same reason, a situation in which, no matter what the subject does, he suffers a terrible death is not a high stakes situation; it's just a bad situation.

Given this rough characterization of a high stakes situation, it is not too hard to see that identifying high stakes situations is a significant cognitive achievement. (Of course, the same goes for low stakes situations.) This achievement requires assigning, at least approximately, both values and likelihoods to outcomes of different courses of behavior so as to be able to sort them according to whether they are relatively safe and relatively dangerous. The nature of this procedure strongly suggests that a subject capable of systematic sensitivity to whether he is in a high stakes situation or not, *antecedent* to forming beliefs, doesn't really need beliefs at all. The subject would already seem to have the capacity to assign approximate expected values to courses of behavior, because he already has the capacity to track and compare not only the approximate values of outcomes, but their approximate likelihood. Given that the subject has already gone to the trouble of keeping track of approximate likelihoods, forming beliefs would appear to be gratuitous, unless it is merely part and parcel of simplifying approximate expected value calculations. In other words, stakes dependent views about knowledge (or anything else) would appear to suffer the same theoretical burden as views that insist that knowledge (or whatever else) is constitutively dependent on what the subject ought to do. Given sensitivity to the level of stakes antecedent to forming beliefs, belief-desire psychology begins to look gratuitous. Consequently, if belief-desire psychology is to be fruitful, no stakes dependent status can be involved in norms governing belief-formation.

§7. Conclusion

By the very nature of her domain of inquiry, the epistemologist is a friend of belief-desire psychology. The pragmatic encroachment research program, however, is not friendly to belief-desire psychology. Indeed, we have argued that this research program is straightforwardly antithetical to it. Taken to its limit, pragmatic encroachment undermines the behavioral strategy at the core of a belief-desire psychology. This strategy involves factoring the problem of how to behave (in at least certain circumstances) into two more manageable

problems. Total pragmatic encroachment is in direct tension with factoring in the manner described, and, *ipso facto*, is against belief-desire psychology.

Furthermore, any epistemic normative status that is pragmatically encroached upon cannot play any important role in explaining how a successful solution to the problem of how to behave can be implemented. Understanding this fact should convince anybody interested in belief-desire psychology that the pragmatic encroachment research program is only important insofar as it tells us what sorts of epistemic normative statuses we can safely ignore.¹⁸

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