EPISTEMIC AKRASIA AND BELIEF-CREDENCE DUALISM

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Abstract: We call attention to certain cases of epistemic akrasia, arguing that they support belief-credence dualism. Belief-credence dualism is the view that belief and credence are irreducible, equally fundamental attitudes. Consider the case of an agent who believes p, has low credence in p, and thus believes that they shouldn't believe p. We argue that dualists, as opposed to belief-firsters (who say credence reduces to belief) and credence-firsters (who say belief reduces to credence) can best explain features of akratic cases, including the observation that akratic beliefs seem to be held despite possessing a defeater for those beliefs, and that, in akratic cases, one can simultaneously believe and have low confidence in *the very same proposition.*

1. Introduction

Paradigmatically, epistemic akrasia occurs when a subject believes some proposition *p* and simultaneously believes that her belief that *p* is irrational (Horowitz 2014). This characterization is broad enough to admit of further precisification of a subject's possible mental states. For example, if a subject believes *p* despite taking *p* to be highly unlikely, she may take this low credence to suggest that her belief is irrational. Then she too counts as akratic. In this paper, we wish to call attention to cases like these. Let's consider a particular example.

Taylor believes that her close friends and family think ill of her. She knows that this is an irrational thing for her to believe, especially since she knows her only apparent evidence is that she and they have been speaking less lately. This lack of communication, she admits to herself, is easily and plausibly explained by the fact that she has just moved to a new country to start a demanding job. Thus, she has a low credence that they think ill of her. Still, she believes it, despite her low confidence that it is true. Taylor's case is one of epistemic akrasia: she believes *p*, but knows she ought not believe *p*.

Again, there are plausibly many ways to believe a proposition while taking that belief to be irrational. But let us focus on cases like Taylor's. We take cases like hers to be psychologically possible, even if irrational. Many of us, upon reflection, may even recognize that we personally have been in an epistemic situation similar to Taylor's—believing something while realizing it's unlikely to be true. (For the reader who is unconvinced that "Taylor cases" are psychologically possible, see the beginning of section 4.)

We shall argue that these cases provide evidence for the view that beliefs and credences are distinct attitudes. In other words, we argue that these cases support *dualism* about belief and credence: an agent can both have a belief that *p* and have a credence that *p*, and neither attitude is reducible to the other.

Dualism denies the popular view that belief reduces to credence: either maximal credence or credence above a certain threshold (call this the "credence-first" view: see, among many others, Wedgwood 2012, Greco 2015-a, Weatherson 2005, Douven & Williamson 2006, Lee & Silvia forthcoming). Dualism also denies the view that credences reduce to beliefs, in particular beliefs with probabilistic or modal content (call this the "belief-first" view: see, e.g., Holton 2008, Easwaran 2015, Moon 2018, Moon & Jackson 2020).[1]

Why take examples like Taylor the akratic to support belief-credence dualism? Our arguments in the rest of the paper are as follows. In **Section 2**, we explain why Taylor's case counts against the belief-first first view. Taylor has both a belief and a credence with the same content; the belief-first view cannot capture this datum. In **Section 3**, we argue Taylor's case also counts against the credence-first view. Taylor recognizes among her own attitudes a low credence in her loved ones' thinking ill of her. Not only this, but Taylor recognizes that her credence ought to be a defeater for her belief. After all, she herself recognizes that the belief is irrational, yet she believes it nonetheless—rendering the case an akratic one. We argue that dualism, rather than credence-first reductionism, best explains this feature of the case. In **Section 4**, we consider and reply to five objections.

2. Credences Are Not Beliefs

Dualism provides a more satisfying explanation of the attitudinal structure of Taylor's case than a belief-first view does. To see why, let us first clarify the tenets of the belief-first view. Belief-first views hold that credences are beliefs whose *content* is probabilistic or contains an epistemic modal, e.g., a 0.99 credence that it is raining is simply the belief that *the probability that it is raining is 0.99*; a high credence that *it is raining* is a belief that *it is probably raining*. In other words, what distinguishes belief and credence is the content of what is believed.[2] The attitude is always the same: belief.

This view clashes with a plausible observation, brought out by Taylor's case: one can have a belief that *p* and a credence that *p* with the same content. Taylor believes her close friends and family think ill of her, and has a low credence in the very same proposition.

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[1] Note that here we are concerned with a reduction in an ontological or descriptive sense—whether beliefs *just are* credences or whether credences *just are* beliefs. This leaves open whether one attitude might be more *normatively* fundamental, e.g. whether all the norms for belief might be derivable from the norms for credence, or whether the Lockean Thesis holds, and *rational* belief requires a credence above some threshold (see Jackson 2020-a). Thanks to Paul Weirich.

[2] This is true of almost every belief-first view in the literature, but one potential exception is Kauss (2020). For a recent objection to the belief-first view, see Jackson (Forthcoming).

However, on a belief-first view, there is only one attitude that doesn't come in degrees, so *content* is the only variable that individuates one's credences from one another. But on this picture, forming a credence requires varying the content of what is believed, and so one cannot believe p and have a credence in p at the same time. Of course, the bare proposition p is part of the credence's content, but the content is more complex than that. Believing that there's a low probability that p is different from being *unconfident* that p. Oddly, then, for belief-firsters, one cannot form a credence in a believed proposition. It seems unnatural to think of Taylor's case as a case of having two beliefs toward different propositions, but the belief-first view forces this reading of the case.

In contrast, on both the dualist view and the credence-first view, one can have both a belief that p and a credence that p at the same time. On a dualist view, a belief that p and a credence that p are fundamentally different attitudes; most dualists are explicit that agents can have both a belief and a credence with the same content (see e.g. Staffel 2017; Weisberg 2020). On a credence-first view, one's credence that p amounts to a belief that p when it hits a certain threshold. Every credence above that threshold is also a belief, so one can have both a belief and a credence in the same proposition. This observation brings out a notable difference between the credence-first reduction and the belief-first reduction. The credence-first view employs a maximally fine-grained attitude, which gives credence-firsters ample resources to distinguish between different levels of confidence. However, because the belief-first view has only one coarse-grained attitude, belief-firsters cannot maintain that an agent has a belief that p and a credence in p at the same time; there is merely one's belief that p, and any variation on that attitude requires varying the content believed.

Thus, the belief-first view renders it impossible to have a belief and a credence with the same content. This worry is especially pressing if one thinks of credences as something akin to confidence levels. When Taylor reports believing p, then introspects, and realizes she doesn't have much confidence that p, she is not forming or introspecting a new belief with a different content. Rather, she is considering her confidence level in p. It is natural to think that belief and confidence both apply directly to propositions, and that both attitudes could apply to the same proposition at the same time. Having a confidence level is not akin forming a new belief. Thus, dualism better explains Taylor's case than belief-first reductionism.

3. Beliefs Are Not Credences

Recall that, on a credence-first view, what it is to believe is to have a credence above some threshold. On some credence-first views, that threshold is 1; on other credence-first views, that threshold is below one (but normally above 0.5). Here, we will argue that cases of akrasia create problems for all credence-first views, whether the threshold is 1 or lower. The scope of our argument is thus broader than other arguments against credence-first views, who often treat credence-one threshold views separately from below-one threshold views (see Ross & Schroeder 2014, Buchak 2014, and the challenges presented by the lottery and preface paradoxes, e.g. Foley 1993, Christensen 2004).

There are two main problems that cases like Taylor's create for credence-first views. First, the credence-first view seems to judge incorrectly about how many attitudes there are in Taylor's case. If beliefs are either maximal credences *or* credences above a certain threshold, then Taylor simply does not believe that her loved ones think ill of her. After all, Taylor admits: it is unlikely to actually be true that my loved ones think ill of me. This low credence in that proposition is clearly not maximal, nor does it pass the 0.5 threshold. If beliefs are credences above a certain threshold, then Taylor does not believe the thing which she has a low credence in. But it is a stipulation of the case that she does; that is what her akrasia amounts to. The credence-first view thus miscounts the number of attitudes involved in cases like Taylor's.

This miscounting is already strange. But to see another reason why it is worrying, notice that in cases of epistemic akrasia, it is *because* the akratic agent holds two or more attitudes that one of them is apt to count as irrational. The most natural reading of cases like Taylor's is that there is one attitude, a low credence (held with regard to her total evidence), and a second attitude, viz. a belief-despite-the-credence-and-evidence, against which the first attitude exerts normative force. The first attitude "says" that the second attitude, the belief, is irrational to hold. But notice, as we have argued, that according to the credence-first view, *Taylor does not even believe* the proposition under consideration, because her credence in it is so low. If she doesn't believe it, and her (low) credence fits her total evidence, then it is hard to see how her epistemic state constitutes a lapse in rationality. But cases of akrasia like this one paradigmatically constitute lapses in rationality.[3] So, not only does the credence-first view miscount the number of attitudes; it also does not allow us to explain how Taylor's case is akratic.

One response is to suggest that the threshold for belief is much lower than 0.5. Maybe Taylor can count as believing *p*, even if her credence in *p* is extremely low.[4] However, we don't think this credence-first view can recover a plausible reading of Taylor's case, either. Remember that Taylor views her own low credence in her loved ones' ill will is a defeater for her belief in their ill will. What renders Taylor's case an akratic one is in part the fact that her low credence serves as a defeater for her belief. But if her belief *just is* her credence, then it appears that the credence serves as a defeater for itself.

The idea that an attitude could serve as a defeater for itself seems odd, and, if it occurs at all, it occurs only in rare, peculiar cases, e.g., (i) beliefs in explicit contradictions or (ii) self-referring beliefs like "this belief is irrational." It's hard to see why (i) or (ii) would apply to Taylor's case. The content of Taylor's attitude doesn't have the peculiar structure of the other self-defeating attitudes like (i) and (ii); the content of her attitude is simply "my loved ones think ill of me." In the case being considered, her attitude seems importantly different from other self-defeating attitudes. Taylor's case is also much more psychologically realistic than the attitudes described in (i) and (ii). Thus, even if we concede that attitudes can sometimes undermine themselves, this seems to be the wrong understanding of Taylor's

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[3] Although see Coates (2012) for a discussion of the possibility of rational epistemic akrasia.
[4] Thanks to Alan Hájek.

situation. It is clear that, in her case, she recognizes that her belief is irrational on the basis of another attitude that is responsive to her all-things-considered evidence.

If beliefs and credences are separate attitudes, we can much better accommodate these observations. First, unlike views that take beliefs to be maximal or threshold-passing credences, dualism is consistent with the observation that Taylor both believes the proposition in question *and* has a low credence in it. Second, the belief-credence dualist need not maintain that Taylor's credence is a defeater for itself; rather, one attitude is a defeater for the other. Belief-credence dualism offers a better explanation of Taylor's akrasia than the credence-first view.

4. Objections

Objection 1: The Possibility of Taylor Cases

One might object that cases like Taylor's (or "Taylor cases") are impossible. That is, it is impossible to believe p while having a low credence in p. Taylor cases are best described in another way besides the combination of belief and low credence.

In response, first, there are a number of everyday cases, relevantly similar to Taylor's, that are common and familiar. Here's another: Bob is a paranoid and jealous person. He is worried that his partner is cheating on him, and finds himself believing she's been unfaithful. When he asks himself what evidence he has for this belief, he admits it is minimal. He acknowledges that the probability she is cheating is actually quite low, and he's not at all confident she's cheating. Nonetheless, he is paranoid, jealous, and very attached, and as a result, he's experiencing cognitive dissonance—he can't shake the belief. Thus, Bob both believes, and has a low credence, that his partner is cheating on him.

Generally, cases of double-mindedness like Bob's and Taylor's are commonplace. Sometimes we find ourselves with a belief—based on wishful thinking, paranoia, or self-deception—that we know is unlikely to be true. If we know p is unlikely on our evidence, in most cases, we'll have a low credence in p. But we also believe p. Note also that in these cases, it isn't even required that the belief that p and the low credence in p are simultaneously occurrent. Reflection on the prevalence of Taylor cases in everyday life supports the psychologically possibility of both believing p and having a low credence in p.

Second, legal epistemology also contains cases of believing p with a low credence in p. Martin Smith (2016: 86ff) discusses cases where we learn of a base rate or get statistical evidence against some proposition for which we previously had good evidence. He argues that, in these cases, one can rationally believe p, even though one ought to have a low credence in p. For example, suppose a bus hits someone on a busy street, and you have reliable testimonial evidence that the bus was owned by the Blue Bus Company. Then, you learn that, on the day of the incident, only 5% of the buses operating in that part of town were owned by the Blue Bus Company. This doesn't seem like a good reason to give up your belief that the Blue Bus Company was responsible—after all, you have

trustworthy testimony supporting this proposition. Nonetheless, learning this statistic affects the probability the Blue Bus Company is responsible. Given the eyewitness was 85% reliable, you can use Bayesian likelihoods to calculate the probability the Blue Bus Company did it—and this turns out to be around 23%. Smith argues that a combination of belief and low credence (cr = 0.23) is the *rational* response to your evidence in these cases. We needn't commit to such a strong claim here. However, we maintain that, even if irrational, it is at least psychologically possible to respond to your evidence in this way (especially if you believe, as Smith does, that such a response is rational).

There are more cases besides these. Hawthorne, Rothschild, & Spectre (2016) discuss a 3-horse race in which the probability the first horse wins is 48%, the probability the second wins is 28%, and the probability the third wins is 27%. They argue you can believe the first horse will win, even though your credence is below 0.5. Finally, Smith (2016: 72ff) argues that a combination of belief and low credence is a rational response to Preface paradox scenarios.

To summarize, for this objection regarding the psychological impossibility of Taylor cases to be successful, a very strong claim is required: namely, that no creature cognitively similar to us could have a belief and a low credence in the same proposition. And it is just hard to see what would motivate this, especially given the prevalence of plausible examples—both pre-theoretically and throughout epistemology. Thus, in general, it seems irresponsible to rule out the possibility of Taylor cases without a convincing argument, given (i) the fact they seem common and familiar, and (ii) they are structurally similar to many others in the literature.

Objection 2: Characterizing Epistemic Akrasia

Is Taylor's case best described as a case of epistemic akrasia? We've relied on the appeal to various features of akrasia to motivate our arguments against belief- and credence-first views. But is it appropriate to characterize Taylor cases as akratic?[5]

We acknowledge that akrasia takes many forms, and not all involve believing something and having a low credence in it. A natural thought is that epistemic akrasia is essentially *level-splitting*: an akratic agent recognizes that her belief in p is irrationally held, and this may involve recognizing that the state of her higher-order or all-things-considered evidence weighs against p. However, as we have stipulated in the opening paragraphs, this is exactly Taylor's situation: she believes p, but believes (in fact, knows) she ought not believe p, and has a low credence in p.

If you are worried that there aren't *any* cases of akrasia which consist in believing something (akratically) while simultaneously holding a low credence in it, notice that we can recover these cases as cases of akrasia as follows. It's plausible that in cases like Taylor's, in addition to believing p and holding low credence in p, the akratic subject also believes it is irrational to believe p without a sufficiently high credence in p. This stipulation is not only psychologically realistic, it converges with

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widely-held views of the norms between belief and credence (i.e. the Lockean thesis).[6] Cases of belief-despite-low-credence in cases like Taylor's would thus straightforwardly be akratic.

We conclude that Taylor cases are indeed cases of akrasia, especially when the subject is aware of the norms governing belief and credence. But there is another point to note here. We've argued above that Taylor cases—belief despite low credence—are psychologically possible. The present observation, i.e., that agents in Taylor cases are akratic, makes it even more difficult to insist that Taylor's situation is impossible, as there is already a large literature that takes the psychological possibility of epistemic akrasia seriously (see, e.g. Horowitz 2014, Neta 2018, Daoust 2019, Skipper & Steglich-Petersen 2019). Moreover, as we argued above, insofar as Taylor's case is one of akrasia, *qua* akrasia it provides evidence against the credence-first view—viz., if beliefs reduce to credences, we are forced into an implausible reading of Taylor's case on which she has a single attitude that defeats itself.

Objection 3: Reductionist Rejoinders—Two Beliefs?

One might argue that, contra our points in section 2, that the belief-first view can give a satisfactory explanation of Taylor's case. As we note, on the most natural belief-first reading of our case, Taylor has two beliefs with different contents: "my close family and friends think ill of me," and "it is unlikely that my close family and friends think ill of me." While the belief-first view forces this reading of Taylor's case, is this really such an implausible description of her case? Even if Taylor cannot, strictly speaking, have a belief and a credence with the exact same content, something nearby is true: Taylor can believe *p*, and then form a second belief that embeds *p* in a probabilistic modifier or epistemic modal. Our arguments in section 2 are thus unlikely to convince a belief-firster, who can simply deny that the alleged datum (i.e., that it is possible to form a belief and credence with the same content) is really a datum.[7]

We have two responses. Our first response begins with a concession: we agree that our argument is unlikely to convince a committed belief-firster, since they will have principled reasons to interpret the data differently. But though there are reasons for a committed belief-firster to reject a premise of our argument, we think that the premise under dispute—that it is possible to form a credence and belief in the same content—remains *independently* plausible, and furthermore, its independent plausibility should be given evidential weight in deciding between dualism and the reductionist alternatives.

Consider the point from earlier about the phenomenology of forming a credence: when one forms a credence in *p*, it sure *seems* like one is making a judgment about *p* itself. As we explained above, credence-firsters and dualists alike can uphold this datum, agreeing that when one forms a credence, one *is* indeed making a judgment about *p*. Belief-firsters, on the other hand, must say that while things

sure do *seem* that way, that datum is strictly-speaking false—the claim that one forms a credence in the same content must be interpreted carefully. Belief-first views imply that if S has a credence in *p*, then S's attitude isn't toward (or in) *p*. S's attitude is to a different, and more complex, proposition, such as *probably-p* or *p is 0.45 likely to be true*. And, on the belief-first view, one can only form beliefs with more (or less) complex contents, so it turns out to be impossible to form credences in bare propositions at all.

We are not claiming this argument concerning the phenomenology of belief and credence is a knock-down case. But inasmuch as the belief-first view is alone among the three views in needing to deny that an apparent datum is in fact a datum, this seems to be *pro tanto* evidence in favor of the dualist and credence-first views. (And obviously we prefer dualism, as we reject credence-first reductionism for other reasons.) Put another way: to be sure, the belief-firster can give an account of Taylor's attitudinal structure. But she must *first* convince us that the overall plausibility of the belief-first view is sufficient to overweigh the way things appear to be, phenomenologically. And if one were not already a committed belief-firster, one would not have reason to prefer the belief-firster's reading over the much more straightforward dualist or credence-first reading of the case. This is what we mean by saying that the contested premise remains independently plausible. Even if the belief-firster is likely to bite the bullet by denying the premise, it's nonetheless a bullet that dualists can happily avoid.

This brings us to our second response, which involves another reason to think that it is indeed possible to form a credence and belief with the same content. Recall that, for belief-firsters, it is impossible to form credences in "bare" propositions. But suppose that one were to begin to explain, in a neutral way, what a credence is supposed to be. As is familiar, one might appeal to cases of betting: "You'd bet on Seabiscuit if you were pretty confident that Seabiscuit would win." This suggests the following: credence presents its contents *like* belief, but presents the content in a probabilistic way. Now consider an analogy to other propositional attitudes, such as desiring that *p*, hoping that *p*, or fearing that *p*. Using analogous examples—desiring that your team wins, hoping that you will be promoted, fearing that you will fall ill—we might say that each of these propositional attitudes presents its content in a particular way, but with an added conative component. For instance: desiring your favored sports team to win presents the proposition *that my team wins* as good. Fearing you will fall ill presents the proposition *that I will fall ill* as bad.

These propositional attitudes display a pattern. Different attitudes present their contents in different lights (positive, negative, probabilistic, etc.), without, crucially, each having different contents. In fact, many of these attitudes seem to be irreducible and held toward propositions directly, that is, they do not involve merely holding another, more fundamental, attitude plus some modifier to the content. To illustrate: desiring that *I will receive a promotion* need not be understood as believing that '*I will receive a promotion*' would be a good thing. In fact, there is widespread agreement that desire should not be understood in this way, going back at least to Hume.[8]

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[8] Almost all who are writing on the nature of desire reject the desire-as-belief view; the only two exceptions we are aware of are Price (1989) and Gregory (2017).

We think this is instructive for understanding the nature of belief and credence. Belief and credence both present their contents in an assertoric way, but differently—the latter involves uncertainty while the former does not. Simply because a credence's presentation involves uncertainty doesn't mean that its content is different. And in fact, insofar as a unified story of propositional attitudes is desirable, we have reason to believe, contrary to the belief-first view, that one can have credences toward bare propositions. The uncertainty of credence is part of the attitude, rather than the content. This brings our account of credence in symmetry with other mental states, and thus is evidence for dualism over belief-first reductionism.

In sum, the dualist can better explain Taylor's case, for two reasons. The first involves the phenomenology of forming a credence, and the second involves an analogy with other propositional attitudes like desire. Though the committed belief-firster may have principled reasons to interpret this "data" differently, independent of such commitments, these considerations seem to be perfectly admissible as fuel for arguments against the belief-first view. We think this is sufficient to convince undecided readers that dualism is more plausible than belief-first reductionism.

Objection 4: Reductionist Rejoinders — Two Credences?

One might suggest the following reading of Taylor's case on behalf of the credence-first view. Taylor has two credences at the same time: a high credence in *p* and a low credence in *p*. So the credence-first view need not miscount Taylor's attitudes; she *does* have an additional attitude—a high credence. Her belief is constituted by this high credence.[9]

First, the possibility of holding two credences in the same proposition at the same time is rarely discussed in the literature on credences, and it is not clear that this is psychologically possible, even for an irrational agent.[10] The credence-first view thus owes us independent evidence to think that this is a theoretically-available characterization of epistemic akrasia. Without more general reasons that it is possible to have two conflicting credences in the same proposition, this suggestion risks being *ad hoc*.

Second, this objection does not seem to characterize Taylor's case correctly. If beliefs just are credences, and if Taylor has two credences each of sufficiently high and low value (e.g., 0.2 and 0.8) in the proposition *that my family and friends think ill of me*, then she just believes the proposition and believes its negation. But Taylor's case doesn't seem to be one of simply believing a contradiction.

This is important because it seems plausible that there is a key difference between believing a contradiction and having two credences, one high and one low. When you believe a contradiction, you have two beliefs, each with different content: "p" and, separately, "not-p." In the credence case,

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[9] Thanks to Chloe Uffenheimer for helpful discussion regarding this objection.
[10] The only discussion we are aware of is Roeber (2020: endnote 17).

you have two attitude-tokens of the same attitude-type in *the same proposition*. Thus, there is a principled way to explain the psychological possibility of believing contradictions—you can have two attitude-tokens of the same type with different content at the same time. The credence-first view would be required to commit to something stronger—namely, that it is possible to have two attitude-tokens of the same type with the same content at the same time. This is odd. Given that, on the other hand, the dualist has a nice explanation of cases like Taylor's, this is a cost to the credence-first view that the dualist does not have to bear.

Finally, consider the subjective phenomenology in cases of akrasia like Taylor's. It does not seem that one has anything like a fine-grained credence level regarding the proposition that is irrationally-held. One simply regards it as true (or false, in other cases) in the face of one's higher-order evidence. Indeed, this subjective feeling of akrasia is that there is a particular belief which you regard as true; you think this belief is irrational, but you simply cannot shake it.

While possibly, there's a story to tell about the subjective experience of epistemic akrasia that relies only on credences, we suggest that dualism provides a better explanation. For one thing, if akratic belief consists in both having a credence *and* a belief, we can easily explain how the felt character of akrasia is to simply regard the akratic belief as true, without degree: beliefs are thought to be exactly this sort of attitude (Schwitzgebel 2015; Moon 2017). Additionally, a core datum about the subjective phenomenology of belief is that it is not sensitive to certain evidential changes, even though those changes affect one's credences. There is thus an important structural similarity between our akratic cases and previously-discussed cases of belief and low credence, e.g. the Blue Bus case and the Preface paradox.

This indicates that there are cases where belief is resilient to the sort of evidence that credence is sensitive to, and they naturally suggest a dualist reading (Buchak 2014; Smith 2016; Jackson 2020-b). Given that these sorts of cases *already* support dualism about belief and credence, there is reason to think that a dualist interpretation of akratic cases is preferable to a credence-only interpretation: dualism can unify our akratic cases with other cases of belief and low credence in a natural way. After all, in cases of akrasia, too, belief is resilient in the face of changes in credence and evidence—just in a way that is irrational. Acknowledging a fundamental difference in what belief and credence *are* provides a unified explanation of the cases of interest in this literature.

Objection 5: Fragmentation

A final way a credence-firster might reply to these cases is by appealing to fragmentation. Consider: people engage in different tasks and seek to answer different questions. Defenders of fragmentation argue that the beliefs that guide one in task A might be totally different from the beliefs that guide one in task B, so one can have conflicting or contradictory beliefs operating consistently in different

domains.[11] The credence-firster could appeal to fragmentation to make it more plausible that Taylor has two credences in the same proposition; if Taylor is fragmented, it is more plausible that she actually has four mental states operating in two different domains: a belief that p and a corresponding high credence, and disbelief that p and a corresponding low credence. Appealing to fragmentation makes it more plausible that Taylor has all four attitudes, and in both cases, the credence-firster can appeal to a credence to ground the relevant belief.[12]

In response, first, it is controversial whether fragmentation occurs at all, and whether it can successfully explain the cases it purports to explain (see Norby 2014). Second, and relatedly, it would be a notable burden if credence-firsters are forced to commit to a controversial phenomenon like fragmentation in order to explain mundane cases of irrationality. If nothing else, this is a cost that credence-firsters have to bear that dualists do not. Third, appealing to fragmentation still commits the credence-firster to the view that it is possible to have two credences at the same time with the same content, a result that many credence-firsters will likely be unhappy with, even against a backdrop of fragmentation. Finally, one might worry that fragmentation does not seem to satisfactorily capture the extent to which Taylor is irrational. It is not as though she has two different goals and the diverging attitudes help her accomplish each goal; she is irrational due to paranoia. Fragmentation appears to be over-rationalizing Taylor's situation.

5. Conclusion

We have argued that familiar cases of epistemic akrasia support dualism about belief and credence. Views on which credences reduce to probabilistic beliefs do not do justice to the attitudinal structure of akrasia. And views on which beliefs are threshold-passing or maximal credences cannot adequately capture the datum that Taylor's case is akratic. By contrast, on dualism, we recover judgments both about which attitudes there are in a case of akrasia and about the internal normative structure of akratic beliefs. These are powerful reasons to endorse dualism.

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[11] For more on fragmentation, see Lewis (1982), Eagan (2008), Greco (2015-b, 2019), Yalcin (2016), Fleisher (Forthcoming), Elga and Rayo (Forthcoming).
[12] Thanks to David Barnett and Will Fleisher for raising this objection.

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