

Positive Illusion and the Normativity of Substantive and Structural Rationality

Tsung-Hsing Ho

Department of Philosophy, National Chung Cheng University, Taiwan

This is an Author's Original Manuscript of an article whose final and definitive form, the Version of Record, is published in Philosophical Explorations

(<https://doi.org/10.1080/13869795.2022.2160876>). Please refer to the published version.

ABSTRACT

To explain why we should be structurally rational—or mentally coherent—is notoriously difficult. Some philosophers argue that the normativity of structural rationality can be explained in terms of substantive rationality, which is a matter of correct response to reason. I argue that the psychological phenomena—positive illusions—are counterexamples to the substantivist approach. Substantivists dismiss the relevance of positive illusions because they accept evidentialism that reason for belief must be evidence. I argue that their evidentialist stance would imply that we are caught in unsolvable dilemmas arising from positive illusions.

KEYWORDS: structural rationality; substantive rationality; positive illusion; reason for belief; evidentialism; pragmatism

1. Introduction

Being rational looks good. Most philosophers are proud of themselves for being the custodians of rationality. It is surprising that philosophers now find that the value of rationality becomes difficult to defend. Particularly, it is the value of the so-called *structural rationality* that is under scrutiny. Structural rationality tries to capture the idea that being rational is a matter of mental coherence. If one is structurally irrational or mentally incoherent (such as believing that winning the lottery is unlikely while believing that one will be the winner), then one's mental states are incomprehensible, uninterpretable—or insane.¹

One popular way to characterise structural rationality is in terms of structural requirements that regulate how to be mentally coherent (Broome 2013; Wedgwood 2017; Worsnip 2021a).² For example, one is structurally irrational, if believing that p and believing that $\text{not-}p$ simultaneously (the doxastic consistency requirement)—or, if believing that one ought to ϕ but not intending to ϕ (the enkractic requirement). Intuitively, people who violate those requirements seem (structurally) irrational.

However, many philosophers have questioned the normativity of structural rationality (Broome 2013; Kolodny 2005; Lee 2020; Way 2010); it is unclear how mental coherence *per se* matters. For example, suppose that the reason we possess now sufficiently supports that we ought to do charity. Intuitively, that very reason would also require that we intend to do charity. That reason is sufficient enough for us to obey the enkractic requirement; adding the reason that violating the requirement causes mental incoherence seems superfluous.

In the above example lies another conception of rationality: *substantive rationality*, which is a matter of correct responses to reasons (Kiesewetter 2017; Lord 2018; Kolodny 2008). Presumably, the belief that we ought to do charity and the intention that we do

charity are the correct responses to the reason we have. Incorrect responses to reason make one substantively irrational.

To grasp the conceptions of structural and substantive rationality more concretely, the following example helps illustrate their difference.

David staunchly believes that the Covid vaccines are ineffective and unsafe. He comes to the belief from conspiracy theories. Despite being fully aware of the scientific evidence that shows otherwise, David dismisses the evidence without good reasons.

In this example, David's belief that the vaccines are harmful is substantively irrational but structurally rational: substantively irrational because the belief responds to reason incorrectly; and structurally rational since David is mentally coherent for not believing any scientific evidence that is against his beliefs.

Furthermore, substantive rationality appears to have an obvious advantage over structural rationality: that is, the former is normative. If having such and such mental states is a correct response to the reason, surely we should have them. Indeed, some philosophers (Kiesewetter 2017; Lord 2018) propose the *substantivist approach* that the normativity of structural rationality can be explained in terms of substantive rationality. As the charity example demonstrates, violating the enkratic requirement implies an incorrect response to reason (more in the next section).

However, I will argue that the substantivist approach to the normativity of structural rationality fails. Those who are concerned with the normativity of structural rationality should look elsewhere. My objection is based on the psychological phenomena—*positive illusions*—which are widely considered prudentially and evolutionarily beneficial, though having positive illusions are sometimes incoherent with other mental states. Therefore, we could be substantively rational to be structurally irrational for

having positive illusions. Positive illusions are counterexamples to the substantivist approach.³

Finally, I will address potential replies from substantivists, who argue that reason for belief can only be evidence—consideration or fact that supports the truth of the belief. The literature on evidentialism is too extensive and controversial to be discussed here. Instead, I will argue that, since the substantivist approach is committed to the evidentialist stance, it entails that people who suffer positive illusions could be caught in unsolvable dilemmas, which guarantee incorrect responses to reason. Given how prevalent positive illusions are, this implies that we are doomed to be substantively irrational. This provides a strong reason to reject the substantivist approach.

2. The Substantivist Approach to the Normativity of Structural Rationality

The substantivist approach to the normativity of rationality consists of two theses: *substantivism* and *perspectivism* (Kiesewetter 2017; Lord 2018):

Substantivism: S is substantively rationally required to ϕ , if and only if S has *decisive available reason* to ϕ .

A reason to ϕ is decisive when it outweighs other *pro tanto* reasons concerning whether one should ϕ . What makes a reason available to S is complicated; substantivists (Kiesewetter 2017, ch.8; Lord 2018, ch.3-4) have painstakingly delineated the idea of available reason. Fortunately, we don't need to go into the details. All we need to know is that, very roughly, for a reason to be available to someone is, at least, for it to be epistemically accessible to them.

Perspectivism: S ought to ϕ , if and only if S has decisive available reason to ϕ .

Perspectivism is a thesis of normativity about what determines an agent's normative requirements. It is in contrast to *objectivism*, the view that what one ought to do is

determined by what reason is actually there. Imagine that I want to donate most of my fortune to charity. I check all the available and reliable evidence, which shows that Scam is a creditable charity. Unfortunately, Scam does a lousy job and it hides its scheme very well. According to objectivism, since Scam is not creditable, I ought not to donate to it. According to perspectivism, however, I ought to because my belief is justified. If I donate to Scam, intuitively I should not be blamed for making such a mistake because it is not my fault for being fooled. Perspectivism captures this intuition because it considers only the reason that is accessible to us, not beyond.

Substantivism and perspectivism together imply a very strong thesis about the normativity of substantive rationality:

Normativism: S is (substantively) rationally required to ϕ , if and only if S ought to ϕ .

Normativism demonstrates that substantive rationality is normative. Accordingly, we ought to do what substantive rationality requires us to do.

The substantivist approach then explains the normativity of structural rationality as follows: ‘whenever one is incoherent, one is failing to correctly respond to the reasons one possesses’ (Lord 2018, 27; see also Kiesewetter 2017, ch.9). In other words, necessarily, if one is structurally irrational, one is substantively irrational.

To prove their case, substantivists—such as Kiesewetter (2017, ch.9-10) and Lord (2017, ch.8)—meticulously demonstrate how violating the structural requirements of mental coherence entails incorrect responses to reasons. Fortunately, one example suffices to illustrate the idea. If you believe both that p and that not-p (violating the doxastic consistency requirement), you are guaranteed to be substantively irrational. Given two plausible assumptions—the law of excluded middle (either p or not-p is true) and the thesis that the evidence for p is what makes it more likely that p is true, it follows that

the total evidence you have cannot equally support p and not- p . Necessarily, at least one of your beliefs responds to reason incorrectly (this presupposes that only evidence is reason for belief, which I will discuss later). Hence, substantivists conclude that structural irrationality entails substantive irrationality.

3. Positive Illusion

In this section, I argue that the psychological phenomena—*positive illusions*—are counterexamples to the substantivist approach. In psychology, positive illusions refer to cases in which beliefs are not commensurate with evidence, but evolutionarily and prudentially beneficial. When the practical benefit outweighs the epistemic cost, it appears that we have decisive reason to have positive illusion.

Furthermore, structural rationality often includes some evidential requirements, such as ‘it cannot be [structurally] rational to have high confidence in both “P” and “my evidence doesn’t support P”’ (Horowitz 2014, 740). To be clear, the evidential requirement of structural rationality is *subjective*. That is, structuralism only requires people to *think* that their beliefs have adequate evidential support. Therefore, while positive illusions by definition are not supported by evidence adequately, people can remain structurally rational for having positive illusions *if* they do not think that the evidence fails to support the illusions, as in the above example that David is still structurally rational for believing conspiracy theories about vaccination.

However, as I’ll explain later, in some cases people are aware that their positive illusions lack evidential support. And when incentives outweigh evidence, they are substantively rational for being structurally irrational. Cases like those are counterexamples to the substantivist approach.

In the psychological literature, there are at least three types of positive illusion: *unrealistic optimism*, *better-than-average effect*, and *illusion of control* (Bortolotti 2015;

Taylor and Brown 1988).

Unrealistic optimism is the tendency that most people believe that they will have a rosier future than the one warranted by evidence. In particular, people tend to believe that their futures will be brighter than the futures of their peers. So, psychologists Taylor and Brown comment: 'In effect, most people seem to say, "the future will be great, especially for me"' (1988, 197). Since it is impossible for most people to have a future better than average, many people's unrealistic optimism cannot have adequate evidential support.

The better-than-average effect and illusion of control similarly refer to our psychological tendency to have inflated self-conceptions and likely contribute to unrealistic optimism. The better-than-average effect is the phenomenon that 'normal individuals appear to be very cognizant of their strengths and assets and considerably less aware of their weaknesses and faults' (Taylor and Brown 1988, 195). For example, people tend to credit themselves with positive rather than negative results. Interestingly, most professors believe that they are better-than-average teachers in comparison to their colleagues (Cross 1977). And people tend to believe that they are more skilful and less risky drivers than average; even those who have had accidents serious enough to require hospitalisation are no exception (Svenson 1981). Furthermore, the better-than-average effect extends to one's family; most people view their partners and children as above average (Gagné and Lydon 2004; Wenger and Fowers 2008). Again, since it is impossible for most people to be above average, they cannot all have evidence to support their beliefs.

Illusion of control refers to the phenomenon that people often overestimate their ability to control largely chance-determined events (Langer 1975). For example, people prefer selecting their lottery tickets to receiving random tickets, as if they could exert control

over the outcome. Curiously, depressed patients are less likely than normal people to suffer the illusion of control (Taylor and Brown 1988). Since the events are chance-determined, there is no evidence for our ability to control them.

More importantly, positive illusions are often beneficial, thus in some cases providing decisive reason for us to have them. They are correlated with positive personal relationships, a better ability to cope with health-related stressors, and higher motivation for achievement (Taylor and Brown 1994). As mentioned, the better-than-average effect makes you biased in favour of people you love, which makes you more willing to devote yourself to them. Also, studies show that HIV patients who have positive illusions about their illness show slower development of illness and a longer time of life (Taylor et al. 2000). After reviewing the literature on the evolutionary and prudential benefits of positive illusion, McKay and Dennett conclude:

We have seen a variety of ways in which these suboptimal systems may generate misbeliefs not by malfunctioning but by functioning normally, creating families of errors that are, if not themselves adaptive, apparently tolerable. But beyond that, we have explored special circumstances ... where the truth hurts so systematically that we are actually better off with falsehood. We have seen that in such circumstances falsehood can be sustained by evolved systems of misbelief. So, in certain rarefied contexts, misbelief itself can actually be adaptive. (McKay and Dennett 2009, 509)

According to McKay and Dennett, positive illusions are created and fostered by normal psychological mechanisms that are adaptive. In circumstances when the benefits outweigh the fault of falsehood and epistemic irrationality (namely, incorrect responses to evidence), we have decisive reason and are substantively rational to have positive illusions.

More importantly, in some cases, people do aware that the evidence does not support their positive illusions. For example, parents often know that their children are below average in comparison with other children in school, but still believe that their future will be better than average. Similarly, as mentioned above, the patients know that their illnesses are severe and life-threatening, and those hospitalised for accidents certainly know that they just suffered car crashes. If asked whether they can support their beliefs, they may acknowledge that their evidence is inadequate, but they remain fairly confident in their recovery or driving skills.⁴ Therefore, they fail to satisfy the above evidential requirement of structural rationality. And when the practical benefit outweighs the epistemic cost, they are substantively rational to be structurally irrational. Hence, positive illusions are real-life counterexamples to the substantivist approach to the normativity of structural rationality.

4. The Substantivist Response: No Pragmatic Reason for Belief

Substantivists would dismiss my counterexamples by responding that I simply assume that pragmatic reasons are reasons for beliefs. They accept the evidentialist stance that reason for belief can only be evidence (Kiesewetter 2017, 12; Lord 2017, 1126), so the correct response to reason (namely, evidence alone) is discarding positive illusions. From the previous discussion, we can see that the success of the substantivist approach hinges entirely on the truth of evidentialism.⁵

It is unclear, however, which side can claim the theoretical high ground. The debate around evidentialism and pragmatic is extensive (Chignell 2018; Marušić 2011). The assumption of evidentialism is no less controversial than that of pragmatism. It is fair to say that the substantivist approach rests on shaky ground.

Fortunately, we do not need to engage in that debate. My criticism does not presume the falsity of evidentialism. The reason that I bring in positive illusions is not that they

speak loudly in favour of pragmatism—though I believe they do—but that they are ubiquitous. I argue that the price for assuming the evidentialist stance is that the substantivist approach will be caught in unsolvable dilemmas—and thus substantive irrationality—when having positive illusions. Since we are disposed to have positive illusions, the substantivist approach implies that the situations where we are doomed to be substantively irrational are common. This consequence of the substantivist approach is undesirable.

Of course, substantivists would insist that evidentialism is correct and we just have to accept its consequences, however undesirable they are. As mentioned, the debate concerning evidentialism is ongoing. Thus, substantivists cannot ask us to accept evidentialism at any cost. We should examine whether the theoretical benefit of the substantivist approach—the explanation of the normativity of structural rationality—outweighs its cost—the degradation of the advantages of positive illusion into normative failure.

To see how the substantivist approach leads us into dilemmas, we must know what evidentialism is committed to. Evidentialism is an error theory about the folk conception about reason for belief; as Way explains, ‘it holds that people mistakenly think that incentives for attitudes are reasons for those attitudes because they confuse reasons for attitudes with reasons to want or bring about an attitude’ (2012, 511). Assume that evidentialism is correct: evidence is reason for beliefs, whereas pragmatic consideration is reason for states or actions that promote those beliefs.⁶ Thus, when having positive illusions, we face two requirements separately from evidence and pragmatic reason:

Evidential Requirement: We are required to remove positive illusions.

Pragmatic Requirement: We are required to maintain positive illusions.⁷

Thus, the substantivist approach implies that those who have positive illusions would be caught in a dilemma: if removing positive illusions, we fail to meet the pragmatic requirement; but if maintaining the illusions, then we fail to meet the evidential requirement. Either way, we cannot respond correctly to reason. And, worse, given how prone to positive illusions we are, substantive irrationality is widespread.

Ironically, the substantivist approach also gives rise to structural irrationality. When being caught in the dilemmas from positive illusions, intuitively we are mentally incoherent. On the one hand, we believe that we should remove positive illusions and are thus required to intend to remove them. On the other hand, we believe that we should maintain positive illusions and are thus required to intend so. Clearly, intending to remove and maintain positive illusions is mentally incoherent. Accepting the evidentialist stance, the substantivist approach would be committed to substantive and structural irrationality.

To be clear, while I focus on positive illusions here, the conundrum can happen in any situation, where evidence and pragmatic consideration give rise to conflicting requirements. If the substantivist approach is true, then our lives will be full of structural irrationality—and thus substantive irrationality becomes a necessity. This, I contend, offers a strong reason to reject the substantivist approach.

Substantivists might say that the situation is not worrisome because they acknowledge that to be fully rational—to have perfectly correct responses to reason—is a normative ideal that we often fall short of (Kiesewetter 2017, 235; Lord 2018, 4). We often fail to adjust our beliefs in light of new evidence, or fail to form correct intentions that reason requires. Besides positive illusion, psychological literature extensively documents human irrationality (Kahneman, Slovic, and Tversky 1982; Nisbett and Ross 1980). So, it is a brute fact that we are often irrational. Indeed, substantivists may argue that a theory

of rationality that allows the popularity of irrationality is not only unproblematic, but is welcome. While being less than fully rational means that we are still open to rational criticisms—to avoid being accused of over-demandingness—substantivists do not require us to be fully rational.

But this reply underestimates how irrational positive illusion is if the substantivist approach is true. In ordinary cases of structural irrationality, it is clear how we can restore rationality, such as giving up some mental states that are incoherent with the others. However, positive illusions impose two requirements that we cannot both meet. The problem for substantivists is not that we are prone to be irrational, but that we are prone to be irrational that cannot be restored.

The problem substantivists face is analogous to *moral dilemma*, namely, the conflict between two (or more) moral requirements that cannot be both met. Some philosophers acknowledge the possibility of moral dilemma (Mason 1996; Sinnott-Armstrong 1988; Tessman 2015) and think that we can only live with it. Some other philosophers argue against moral dilemmas because moral theories that allow them will violate the ought-implies-can principle and fail to be uniquely action-guiding (McConnell 2018; Zimmerman 1996). Substantivists, therefore, have two options: either acknowledging that normative dilemmas are inevitable, or arguing that they are solvable.

The first option does not seem desirable for substantivists. If normative dilemmas are genuine, one is required—thus *permitted*—to choose one of the horns, but also blameworthy for not choosing the other. Thus, when having positive illusions, necessarily one is substantively irrational regardless of which requirement one chooses to satisfy. But one is always permitted to maintain positive illusions, despite the evidential requirement begging otherwise. It is undesirable for most evidentialists, who

maintain that beliefs should be in accordance with evidence. Thus, the first option is in tension with the substantivists' evidentialist stance.

Hence, substantivists may want to choose the second option. To see how normative dilemmas can be dissolved, we can look to the literature on moral dilemmas. Examples of moral dilemma are often distinguished into two kinds: *asymmetric*, in which moral dilemmas arise from conflicts among two or more moral principles; and *symmetric*, in which one moral principle gives rise to moral dilemmas (Sinnott-Armstrong 1988; McConnell 2018). Opponents of moral dilemmas argue that both can be dissolved.

Let me begin with symmetric dilemmas. Taking the famous dilemma from *Sophie's Choice* for example, a soldier told Sophie that he would kill one of her two children and she had to choose which one was allowed to live (both would be killed if she refused to choose). Sophie's dilemma is symmetric because her conflicting choices arise equally from the same principle of protecting her children. To dissolve symmetric dilemmas, one plausible strategy is that a symmetric dilemma is not a pair of two conflicting requirements, but a single *disjunctive requirement* that one should ϕ or not ϕ (Zimmerman 1996, ch.7). Hence, Sophie did not face a dilemma. What she had was a disjunctive requirement that she should choose either one of her children; choosing any one of them would satisfy the requirement. This strategy seems plausible; after all, Sophie should not be blamed for letting one of her children be killed. So, while life could be brutal and we may face terrible situations like Sophie did, we could still satisfy normative requirements. Therefore, it is questionable whether symmetric dilemmas are genuine moral dilemmas.

However, this solution still poses the same problem for the substantivist approach. That is, people can always choose to ignore evidence to maintain their evidentially inadequate beliefs. Thus, people can be substantively rational to be structurally

irrational (holding a belief whereas believing it to be evidentially inadequate). Not only is this solution remains in tension with the evidentialist stance, but also it invalidates the substantivist approach because now being structurally irrational could be a correct response to reason.

How about asymmetric dilemmas? Examples of asymmetric dilemmas arise when two or more principles conflict with each other. For example, Agamemnon faced two conflicting choices: as the king, he ought to lead the Greek army to victory, which required him to sacrifice his daughter; however, as a father, he ought to protect her. Although the situation Agamemnon faced did seem dilemmatic, it is unclear whether it was genuine. The reason is that when moral principles conflict, normally one side will override the other side and hence render a followable requirement. True, in difficult situations, such as Agamemnon's, we are unsure which side prevails. The problem is, however, epistemological, not ontological. That is, it is not moral theories that deliver conflicting requirements, but our epistemic limitation that makes us unable to weigh and compare all moral principles properly. Hence, it is not that two (or more) requirements conflict with each other, but that we don't know which side is correct. The dilemma is merely apparent.

Accordingly, substantivists could say that the dilemmas that positive illusions cause are asymmetric. That seems correct because they are caused by two distinct requirements. Then, substantivists may argue that the dilemmas from positive illusions are likewise unreal; the substantivist approach does not imply any dilemma.

But this way to dissolve asymmetric dilemmas is still in tension with the evidentialist stance, because it acknowledges that normative principles can be weighed against each other. But the evidentialist stance requires that evidence and pragmatic consideration are reasons *for different attitudes*. Thus, pragmatic consideration cannot outweigh

evidence with regards to whether to believe. Acknowledging that they can be weighed together means nothing but renouncing the evidentialist stance.⁸

To recap, in the face of putative dilemmas from positive illusions, substantivists have only two choices. They could ask us to swallow them as brute facts, but it implies that we are permitted to ignore the evidential requirement to maintain positive illusions. Or, they could try to dissolve them; but the strategies to dissolve dilemmas either accept that maintaining positive illusions is permissible, or acknowledge that evidential requirements can be weighed against pragmatic requirements. Whichever way is in tension with their evidentialist stance. So, the substantivist approach is internally incoherent.

Besides incoherence, there is another reason for rejecting the substantivist approach.

The reason is that cases of moral dilemmas are intuitive and pre-theoretical.

Proponents of moral dilemmas do not ask us to acknowledge moral dilemmas on the grounds of their theoretical commitments to particular moral theories. On the contrary, the dilemmas from positive illusion are the theoretical product of the substantivist approach. The reason to acknowledge them is that the normativity of structural rationality can thus be explained. Now, we should examine whether it is worth this price to accept the substantivist approach.

I think that the benefit does not outweigh to cost. First, it is not intuitive that positive illusions cause genuine dilemmas. As discussed, many philosophers and psychologists maintain that the pragmatic considerations in favour of positive illusions often outweigh evidence. Second, the benefit of explaining the normativity of structural irrationality is unclear. As mentioned, it remains controversial whether structural rationality is genuinely normative. If not, then no benefit at all; even if it is, the substantivist approach would be a normative theory that fails to be uniquely action-

guiding.

In conclusion, the substantivist approach has to adopt evidentialism to succeed. But its theoretical consequence is that, whenever evidence and pragmatic considerations oppose each other concerning whether to maintain a belief, we are trapped in an unsolvable dilemma, that is, necessarily we are substantively irrational. Given the psychological phenomena of positive illusions, the dilemmas can happen frequently. While this does not mean that the substantivist approach is false (since there are theories that accept normative dilemmas), we have seen that it pays a terrible cost for its success. This constitutes a strong reason against the substantivist approach.

References

- Berker, Selim. 2018. "A Combinatorial Argument against Practical Reasons for Belief." *Analytic Philosophy* 59 (4):427-470.
- Bortolotti, Lisa. 2015. *Irrationality*. Cambridge: Polity.
- Broome, John. 2013. *Rationality Through Reasoning*. Chichester: Wiley-Blackwell.
- Chignell, Andrew. 2018. "The Ethics of Belief." <https://plato.stanford.edu/archives/spr2018/entries/ethics-belief/>.
- Cross, K. Patricia. 1977. "Not Can, but Will College Teaching be Improved?" *New Directions for Higher Education* 1977 (17):1-15. doi: 10.1002/he.36919771703.
- Daoust, Marc-Kevin. 2020. "The Explanatory Role of Consistency Requirements." *Synthese* 197 (10):4551-4569. doi: 10.1007/s11229-018-01942-8.
- Daoust, Marc-Kevin. forthcoming. "Structural Rationality and the Property of Coherence." *Pacific Philosophical Quarterly*. doi: <https://doi.org/10.1111/papq.12404>.
- Dennett, Daniel. 1987. *The Intentional Stance*: MIT Press.
- Gagné, Faby M., and John E. Lydon. 2004. "Bias and Accuracy in Close Relationships: An Integrative Review." *Personality and Social Psychology Review* 8 (4):322-338. doi: 10.1207/s15327957pspro804_1.
- Hieronymi, Pamela. 2005. "The Wrong Kind of Reason." *The Journal of Philosophy* 102 (9):437-457. doi: 10.2307/3655632.
- Ho, Tsung-Hsing. 2018. "The Normativity of Doxastic Correctness." *American Philosophical Quarterly* 55 (4):379-388. doi: 10.2307/45128632.
- Ho, Tsung-Hsing. 2021. "Evidentialists' Internalist Argument for Pragmatism." *Logos and Episteme* 12 (4):427-436. doi: 10.5840/logos-episteme202112433.
- Horowitz, Sophie. 2014. "Epistemic Akrasia." *Noûs* 48 (4):718-744.
- Kahneman, Daniel, Paul Slovic, and Amos Tversky. 1982. *Judgment Under Uncertainty*:

- Heuristics and Biases*. Vol. 36: Cambridge University Press.
- Kiesewetter, Benjamin. 2017. *The Normativity of Rationality*: Oxford University Press.
- Kolodny, Niko. 2005. "Why Be Rational?" *Mind* 114 (455):509-563. doi: 10.1093/mind/fzi509.
- Kolodny, Niko. 2008. "Why Be Disposed to Be Coherent?" *Ethics* 118 (3):437-463. doi: 10.1086/528783.
- Langer, Ellen J. 1975. "The Illusion of Control." *Journal of Personality and Social Psychology* 32 (2):311-328. doi: 10.1037/0022-3514.32.2.311.
- Lee, Wooram. 2020. "The Real Myth of Coherence." *Erkenntnis*. doi: 10.1007/s10670-020-00239-y.
- Lee, Wooram. 2021. "The Independence of (In)coherence." *Synthese* 199 (3-4):6563-6584. doi: 10.1007/s11229-021-03081-z.
- Lord, Errol. 2017. "What You're Rationally Required to Do and What You Ought to Do (Are the Same Thing!)." *Mind*. doi: 10.1093/mind/fzw023.
- Lord, Errol. 2018. *The Importance of Being Rational*. Oxford: Oxford University Press.
- Marušić, Berislav. 2011. "The Ethics of Belief." *Philosophy Compass* 6 (1):33-43. doi: 10.1111/j.1747-9991.2010.00368.x.
- Mason, H. E., ed. 1996. *Moral Dilemmas and Moral Theory*. Oxford: Oxford University Press.
- McConnell, Terrance. 2018. "Moral Dilemmas." <https://plato.stanford.edu/archives/fall2018/entries/moral-dilemmas>.
- McKay, Ryan T., and Daniel C. Dennett. 2009. "The Evolution of Misbelief." *Behavioral and Brain Sciences* 32 (6):493-510. doi: 10.1017/S0140525X09990975.
- Nisbett, Richard E., and Lee Ross. 1980. *Human Inference: Strategies and Shortcomings of Social Judgment*: Prentice-Hall.
- Olson, Jonas. 2004. "Buck-Passing and the Wrong Kind of Reasons." *The Philosophical Quarterly* 54 (215):295-300. doi: 10.2307/3542822.
- Parfit, Derek. 2011. *On What Matters*. 3 vols. Vol. 1. Oxford: Oxford University Press.
- Shah, Nishi. 2006. "A New Argument for Evidentialism." *Philosophical Quarterly* 56 (225):481-498.
- Sinnott-Armstrong, Walter. 1988. *Moral Dilemmas*. Vol. 39: Blackwell.
- Svenson, Ola. 1981. "Are We All Less Risky and More Skillful than Our Fellow Drivers?" *Acta Psychologica* 47 (2):143-148.
- Taylor, S. E., M. E. Kemeny, G. M. Reed, J. E. Bower, and T. L. Gruenewald. 2000. "Psychological resources, positive illusions, and health." *Am Psychol* 55 (1):99-109. doi: 10.1037//0003-066x.55.1.99.
- Taylor, Shelley E., and Jonathon D. Brown. 1988. "Illusion and Well-Being: A Social Psychological Perspective on Mental Health." *Psychological Bulletin* 103 (2):193-210.
- Taylor, Shelley E., and Jonathon D. Brown. 1994. "Positive Illusions and Well-Being Revisited: Separating Fact from Fiction." *Psychological Bulletin* 116 (1):21-27.
- Tessman, Lisa. 2015. *Moral Failure: On the Impossible Demands of Morality*: Oup Usa.
- Way, Jonathan. 2010. "The Normativity of Rationality." *Philosophy Compass* 5 (12):1057-1068. doi: 10.1111/j.1747-9991.2010.00357.x.
- Way, Jonathan. 2012. "Transmission and the Wrong Kind of Reason." *Ethics* 122 (3):489-515. doi: 10.1086/664749.
- Way, Jonathan. 2016. "Two Arguments for Evidentialism." *Philosophical Quarterly* 66 (265):805-818. doi: 10.1093/pq/pqw026.
- Wedgwood, Ralph. 2017. *The Value of Rationality*: Oxford University Press.
- Wenger, Andrew, and Blaine J. Fowers. 2008. "Positive Illusions in Parenting: Every Child Is Above Average." *Journal of Applied Social Psychology* 38 (3):611-634.

- doi: 10.1111/j.1559-1816.2007.00319.x.
- Worsnip, Alex. 2018. "What is (In)coherence?" *Oxford Studies in Metaethics* 13:184-206.
- Worsnip, Alex. 2021a. *Fitting Things Together: Coherence and the Demands of Structural Rationality*: Oxford University Press.
- Worsnip, Alex. 2021b. "Making Space for the Normativity of Coherence." *Noûs* 56 (2):393-415. doi: 10.1111/nous.12362.
- Zimmerman, Michael J. 1996. *The Concept of Moral Obligation*: Cambridge University Press.

-
- ¹ The idea of linking rationality to interpretability can be traced back to Donald Davidson and Daniel Dennett (1987).
- ² See Daoust (forthcoming) for a coherence-based, rather than requirement-based, account of structural rationality.
- ³ For different objections to the substantivist approach, see Daoust (2020) and Worsnip (2021b). Daoust focuses specifically on epistemic rationality, but the substantivist approach here is broader, concerning substantive and structural *in general* (see note. 6). Worsnip argues that substantive rationality does not exhaust the normativity of structural rationality. Coherence per se offers its own reason. My paper is silent on whether structural rationality is truly normative.
- ⁴ Substantivists may respond that, given evidentialism (see the next section), it is impossible to consciously believe that p and believe that p lacks evidential support, which is from the so-called internalist argument for evidentialism (Shah 2006; Way 2016). Likewise, critics of the substantivist approach (Worsnip 2018; Lee 2020) argue that one cannot violate coherence requirement consciously; thus, if my description of the cases is true, it suggests that the evidential requirement is not a genuine structural requirement. But I cannot respond to those issues here because the phenomena of positive illusions could also be counterexamples to evidentialism. If so, then we can reject the substantivist approach and discard that the evidential requirement. However,

as I explain below, I do not want to turn this paper into another objection to evidentialism (for my objections, see Ho (2018, 2021)).

⁵ It is tempting to think that substantivists would distinguish between *epistemic rationality* and *practical rationality* and maintain that structural requirements about beliefs are epistemic and thus respond only to evidence; accordingly, substantivists could happily acknowledge positive illusions as being practically rational, but epistemically irrational. However, this misconstrues the substantivist approach. As presented in section 2, substantivists hold Normativism, which is a thesis about what one *ought to do*, not merely what one *epistemically (or practically) ought to do*. Substantivists such as Kieseewetter (2017, 11-13) and Lord (2017, 1126) explicitly state that only evidence is *reason for belief* (rather than *merely epistemic reason for belief*). See Lee (2021) and Worsnip (2021b) for the same interpretation that the substantivist approach presumes evidentialism. If they retreat to the revised and weaker view, then the substantivist approach only explains why we are *epistemically ought to remove* positive illusion, but not why we *ought to do so*. The normativity of structural rationality still receives no explanation. More importantly, this interpretation would still face dilemmas similar to the ones discussed in this section.

⁶ In the literature, philosophers who deny pragmatic reason as reason for belief often draw the distinction between *object-given reason* (the right kind of reason; reason concerning whether the content of a state fits that state) and *state-given reason* (the wrong kind of reason; reason concerning the benefit of having a state) (Hieronymi 2005; Olson 2004; Parfit 2011; Way 2012).

⁷ Evidentialists might reply that I have misconstrued their view about the pragmatic requirement. Their view is that pragmatic considerations require us only to *want or take*

action to maintain the illusions, without successfully maintaining the illusion. But this response gets the fact wrong. Without successfully maintaining positive illusions, we cannot enjoy the benefits. What the pragmatic considerations require must be that we take action in order to *successfully maintain* the illusions, not merely want or take action to maintain them.

⁸ Particularly, Berker (2018) defends evidentialism on the grounds that evidence and pragmatic considerations cannot be weighed together.

Acknowledgements

The research is funded by the National Science and Technology Council, Taiwan (110-2410-H-194-081-MY3). I am grateful for the helpful feedback from Huei-Rong Li and the reviewers of this journal.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes on contributor

Tsung-Hsing Ho is a professor at National Chung Cheng University. He received his PhD at the University of Southampton. He is a philosopher of normativity and has published in several areas, including normative ethics, the normativity of mental states (beliefs in particular), AI ethics, Chinese Philosophy, and the philosophy of Kant and John McDowell.