### **Epistemic Dispositions**

In Briggs and Nolan 2012, we suggested that advocates of a Nozickian tracking theory of knowledge might do well to appeal to dispositions rather than counterfactuals. (Gundersen 2003 and 2010 makes a similar suggestion, though he prefers a dispositional account of counterfactuals that enables him to retain a conditional tracking analysis.) John Turri (2012) and Ben Bronner (2012) have offered a series of purported counterexamples to the dispositionalised Nozickian view we suggest.

We question whether the Turri and Bronner cases are genuine counterexamples. Instead, we claim, the cases reveal a number of interesting choice points for theories of epistemic dispositions. We think the right choices at these choice points allow the dispositional Nozickian to hold to the conditions proposed in our earlier paper, though we will also indicate how a dispositional tracking account might be modified to accommodate alternative choices. Even if some dispositional tracking theorists have reason to reject the letter of our original account, we doubt that Turri and Bronner have demonstrated anything seriously amiss with its spirit.

The significance of what we say here extends beyond dispositional tracking accounts. A number of the issues we raise here involve general theses about dispositions and disposition ascriptions that are controversial in the wider literature on dispositions, especially our suggestion in section 2 that disposition ascriptions are context-sensitive.

Dispositions also matter in a wide range of epistemological settings. Virtue epistemologists claim that knowledge and justification are grounded in the virtues or characters of epistemic inquirers, which seem to be psychological dispositions. (See e.g. Zagzebski 1996.) Other theorists justify norms of belief updating by considering which epistemic dispositions would be preferred by rational agents (see Gibbard 2008). Finally, it is valuable in its own right to investigate which epistemic dispositions of agents are worth having and cultivating. Just like other entities that have drawn the attention of epistemologists—mental states, processes of inquiry,

agents, communities—dispositions may be either epistemically valuable or epistemically harmful, and so seem a natural topic for epistemological examination.

In the next section, we will begin by drawing two (controversial) lessons from the Turri and Bronner cases: that some important epistemic dispositions are partly extrinsic, and that objects may have non-trivial dispositions concerning circumstances where they fail to exist. If those lessons are correct, then neither Turri's second case nor Bronner's case is a clear counterexample to our proposed dispositional tracking view. Section 3 draws an even more controversial lesson about the behaviour of disposition attributions. If that lesson is correct, then neither of Turri's two remaining cases is a clear counterexample to our proposed dispositional tracking view either. We leave it to readers to decide if the responses we suggest on the dispositional Nozickian's behalf are prices worth paying.

# 1. Initial Lessons: Extrinsic Dispositions; Dispositions Concerning Non-Existence

Some changes in dispositions are entirely extrinsic. My disposition to go bankrupt can be produced or removed by broader economic conditions, attitudes of my creditors, sudden crashes in house-prices, and so on. I can gain or lose the disposition without changing any of my relevant intrinsic properties—without watching the news, talking to my creditors, or doing anything of the sort. (See McKitrick 2003, Nolan 2005 pp 104-105.) Likewise, some differences in knowledge are due to extrinsic differences; two agents who are intrinsically the same may differ in what they know. To adapt a case from Williamson (2000, sec 3.1), suppose that two intrinsically identical perceivers, Vera and Imogene, both truly believe that there is a sheep in a particular field. But Vera's belief is caused by veridical perception of a sheep, while Imogene's belief is caused by a complicated illusion. It seems that Vera knows there is a sheep in the field, while Imogene does not.

Given that some epistemic states and some non-epistemic dispositions are extrinsic, we should suspect that some epistemic dispositions are extrinsic. In our view, Bronner's case illustrates how differences in knowledge can turn on extrinsic differences in dispositions. Bronner's strategy is to begin with one of our cases from

the 2012 paper, which we claim is a case of knowledge. He then develops a similar example in which an intrinsically similar agent seems to lack knowledge. Bronner claims that the agents in the two examples have the same dispositions, so that the dispositional tracking theory cannot capture the verdict that only one of them is a case of knowledge. But as we will see, Bronner seems to assume that all differences in dispositions are grounded in differences in intrinsic properties. Let us now turn to the two examples.

In the situation we describe, Adolf believes that he has a rare, almost always fatal, brain condition. He is disposed to so believe because of his medical knowledge and what he has been told by experts. He is also disposed to not believe he has the condition if he does not; the reliable and informed authorities would not have detected the disease had he not had it. In Bronner's modified case, even though Adolf has the disease, his belief that he has the disease is due to the machinations of Olaf, who hires actors to impersonate doctors and laces Adolf's food with a drug that mimics the symptoms of the disease.

Bronner claims that in his version of the case, "all of Adolf's dispositions are the same as in the original case". And indeed, Adolf is relatively unchanged *intrinsically* between Bronner's case and ours (leaving aside any internal differences due to his symptoms being due to drugs rather than the disease). But it seems to us very natural to think that Adolf does have different dispositions in Bronner's case. Bronner's Adolf is disposed to think he has the disease *whether or not he has it*; hence, it is *false* that Adolf is disposed *not* to believe he has the disease in circumstances where he does not have it. (Because of Olaf's actions, Adolf would be surrounded by actors and exhibiting fake symptoms even were he to lack the disease.) Therefore, Adolf does not count as knowing on the dispositional account we offer to Nozickians.

You might suspect that we are substituting a counterfactual judgement for a dispositional one. To see that we are not, consider a case just like Bronner's except that Adolf lacks the disease. In this case, Adolf is disposed to believe he has the disease; after all, Olaf's minions are still lying to Adolf, and his symptoms are still being faked. Plausibly, in this variant of Bronner's case Adolf has the same relevant epistemic dispositions as in Bronner's case. Thus, since in our variant case Adolf has

the disposition to believe he has the disease even in circumstances where he does not have the disease, in Bronner's original case, Adolf is disposed to believe he has the disease even in the circumstance in which he does not have the disease.

We think this diagnosis of Bronner's case can be extended to other Gettier-style cases. The woman who sees a cleverly-disguised dog in the sheep field is disposed to believe there are sheep there in circumstances where there are not (even though there happen to also be hidden sheep in that field). The man in fake-barn country is disposed to believe there is a barn in front of him in circumstances in which there is not (even though, as it happens, there is a real barn in front of him at the time). The field-gazer and barn-spotter need not be intrinsically different from counterparts in epistemically better environments, but may differ in epistemically relevant dispositions for all that.

Let us now turn to a case from Turri, from which we will draw a second lesson. Turri exists, and believes that he does. Turri claims that on a dispositional tracking view, his belief cannot count as knowledge. For Turri cannot have a disposition that manifests in circumstances where he does not exist. *A fortiori*, Turri is not disposed not to believe he exists, in the circumstance where he does not exist. But this is absurd—surely Turri knows he exists.

We agree that Turri knows he exists, but disagree about whether the dispositional tracking view can capture this judgment. We are inclined to think that there are many true disposition claims about what Turri is disposed to do on condition he does not exist. He is disposed to not dance when he doesn't exist. (The non-existent don't get out much.) He is disposed to not vote when he does not exist (perhaps unlike some of the voters in 1960s Chicago, who were rumoured to continue voting after death). And, we think, he is disposed to not believe anything on condition that he does not exist: and inter alia, to not believe that he exists.

Distinguish this claim from the claim that if he were he non-existent, he would be disposed to not dance, or not vote, or not believe. Maybe it is true that the only entities with dispositions are existent entities. (We are not sure, but let us grant that for the sake of the argument.) It could still be that existing entities could be disposed to PHI in C, where C is the non-existence of the entity. There are many

circumstances in which Turri does not sing, including those where he does not exist. (And this is true even if there are no non-existent non-singers.) Likewise, we think, there are many circumstances where he is disposed to not sing: most of the ones where he does not sing, and all of the ones where his non-singing is explained by his non-existence.

If you do not agree with us about dispositions to behave in conditions where one does not exist, then the letter of account we offer Nozickians will need to be tweaked: we think the special cases involving the believer's existence will not be fatal to the spirit of the dispositional tracking project. We do not ourselves see the need for any tweak here, but we also think that a principled account of dispositions that said otherwise, by agreeing with Turri's preferred verdicts about dispositions under conditions of non-existence, would be of interest well beyond disputes about the role of dispositions in epistemology.

# 2. A Third Lesson: Paying Attention to Contrast

Turri's two remaining cases raise the issue of contrast between a disposition's conditions and different alternatives to that condition. We suggest a way of responding to the cases that enable a Nozickian to hold onto our original proposal.

In the first of Turri's remaining cases, Dora's ankle is struck hard, causing her pain, and a belief that she is pain, in the obvious way. But Dora is a hypochondriac, and even a glancing blow that caused only discomfort would cause her to believe she was in pain. Turri claims that Dora "is not disposed to not believe she is in pain in the circumstance where she isn't in pain" (p 292), and so the account we propose is forced to judge that she does not know she is in pain.

Whether Turri is right rather depends on what counterfactual circumstances in which Dora is not in pain are relevant. (Presumably not every possible circumstance: a robust object may be disposed to not break if struck, even if it is possible for it to be struck and break – e.g. if it is struck as a bomb is detonated.) In a typical situation where she is not struck at all, she does not believe she is in pain. In a typical situation

where she suffers discomfort (but not pain) from being struck, she does believe she is in pain, due to her hypochondria.

A plausible thing to think about disposition ascriptions is that whether they are true or not goes along with what happens in the relevant counterfactual scenarios: when X is disposed to PHI in C, then X PHIs in the relevant actual and counterfactual C situations (all of them, or maybe most of them, or if Fara 2005 is right, generically across them, which does not invariable require that X PHIs in all, and may not even require that it PHIs in most). So, how is the relevant class of counterfactual circumstances to be fixed?

We will not essay a general answer to this question here. We will suggest, however, that the right answer for evaluating a given dispositional claim might depend on context: there is a sense in which Dora is not disposed to believe she is in pain when she is not in pain (since she is typically not suffering from hypochondriac beliefs that she is in pain), and a sense in which it is *not* the case that she is not disposed to believe she is in pain when she is not (after all, in some situations much like the actual one she is experiencing only mild discomfort but believing it is pain). If the truth of this disposition ascription does depend on context, then our Nozickian can hold onto the claim that Dora knows she is in pain despite Turri's claim she is not disposed to think she is not: they are talking past each other due to context shift.

But our Nozickian may have gone from the frying pan to the fire. *Which* available disposition claim ought we rely on when making a judgement about knowledge? One could go contextualist about knowledge claims in a way that matches the contextualism about disposition claims, allowing that Turri has set up a context "Dora does not know she is in pain" is true, contra intuition. Another approach would be to say that the Nozickian's conditions are correct, *provided the right contextual parameter is used to interpret them.* (Compare Lewis 1973's counterfactual theory of causation, that requires the right contextual parameter for counterfactuals to be used in the analysis – according to Lewis, the context governed by the rules of Lewis 1979).

A challenge would then be to articulate independent criteria for which disposition

ascriptions counted. If independent criteria cannot be given, the dispositional tracking theory risks circularity: S knows that p when she is disposed to track p's truth, where we understand the disposition claim in terms of whatever gets the facts about S's knowledge correct. Of course, even a circular tracking theory might still offer some sort of illumination, and might still be informative enough to remain susceptible to counterexamples.

Alternatively, if disposition claims are sensitive to the relevant class of alternative counterfactual situations, but this class does not vary with context, then there might be a once-and-for-all answer about whether Dora is disposed to not believe she is in pain when she is not in pain. The once-and-for-all answer might come out the way Turri suggests. However, noticing the role of the class of alternatives suggests a way for dispositional Nozickians to modify their account: instead of stating the relevant dispositions in terms of circumstances in which p is true, or in which p is not true, they could state the dispositions with more careful attention to privileged circumstances in which p obtains or in which p fails. Such Nozickians would again face the challenge of spelling out these circumstances in independent terms, or face the risk of circularity.

With these observations in hand, we are ready to handle Turri's last remaining case. Suppose I know an ordinary proposition q, and I believe, on the basis of carefully considering my evidence, that I know q. In standard cases, we would be inclined to think that I know that I know q. However, Turri contends, I am *not* disposed to not believe that I know q in circumstances where I do not in fact know it. If my belief in q were false, I would still believe I knew q. This is not a welcome result: it would be very surprising if we knew so little about what we know.

Turri's verdict about the case turns on the assumption that some of the relevant alternative circumstances where I do not know q are cases in which I nevertheless believe q. We find this assumption dubious. Since I tend to know q when I believe it, I will tend not to believe it—much less believe that I know it—when it is not true. If context plays a role in determining the relevant alternatives, the Nozickian can plead that in most contexts, the relevant cases where I do not know q tend to be cases where do not believe q either. Or if there is a once-and-for-all answer to whether I am

disposed to not believe that I know, it is not at all clear that Turri's case can be spelled out so as to be a plausible counterexample. Even if the case does turn out to be a plausible counterexample to the dispositional Nozickian view, the Nozickian can modify the account by appealing to a more careful pair of disposition claims.

The broader lesson of this reflection, whatever verdict we have about Turri's cases in particular, is that when specifying dispositions considerations of contrast seem important: and insofar as presenting us with different contrasts inclines us to different judgements about which dispositional ascriptions are apt, this is some support for the claim that disposition ascriptions are dependent on context. (We take no stand here on whether the contextual parameter just is a contrast class, or whether it is something that can be affected by introducing contrasts to the conversational score.)

#### Conclusion

While we are not convinced by the proposed counterexamples offered by Bronner and Turri, we hope that this is no mere stalemate. We think that the cases point to interesting lessons about the nature of dispositions and disposition claims in general, and to potential ways of refining theories of epistemic dispositions in particular. While our discussion here has focused on a particular Nozickian theory of knowledge, it also has a broader significance. Given the role of dispositional thinking in our understanding of each other, dispositional thought must surely play a role in our epistemic evaluations of each other. So whatever the fate of dispositional Nozickianism, resolving the issues we have pointed to here will surely play a significant role in any complete epistemological theory.

#### References

Briggs, R. and Nolan, D. 2012. "Mad, Bad and Dangerous to Know". *Analysis* 72.2: 314-316

Bronner, B. 2012. "Problems With the Dispositional Tracking Theory of Knowledge". *Logos & Episteme*, forthcoming

Fara, M. 2005. "Dispositions and Habituals". Nous 39.1: 43-82

Gibbard, A. 2008. "Aiming at Truth Over Time". Oxford Studies in Epistemology 2: 190-204

Gundersen, L. 2003. Dispositional Theories of Knowledge. Ashgate, Farnham.

Gundersen, L. 2010. "Tracking, Epistemic Dispositions and the Conditional Analysis". *Erkenntnis* 72: 353-364

Lewis, D. 1973. "Causation". Journal of Philosophy 70: 556-67

Lewis, D. 1979. "Counterfactual Dependence and Time's Arrow". Nous 13: 455-76

McKitrick, J. 2003. "A Case for Extrinsic Dispositions". *Australasian Journal of Philosophy* 81.2: 155-174

Nolan, D. 2005. David Lewis. Acumen, Chesham.

Turri, J. 2012. "Stumbling in Nozick's Tracks". Logos & Episteme 3.2: 291-293

Williamson, T. 2000. Knowledge and its Limits. Oxford University Press, Oxford

Zagzebski, L. 1996. Virtues of the Mind. Cambridge University Press, Cambridge.