

## Practical Success and the Nature of Truth

Chase B. Wrenn

University of Alabama

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### **1. Introduction**

Perhaps the most popular views of truth these days are deflationary views and causal correspondence views. According to deflationists, truth is not a “natural” property with an essence to be understood in causal terms. If it is any sort of property at all, it is a purely formal or “Cambridge” property. Truth, they say, does not have causal-explanatory power.

Causal correspondence views are almost exactly the opposite of deflationary ones. They maintain that truth is a natural property with a causal essence. More specifically, causal correspondentists claim that (a) truth’s nature is encapsulated by a Tarski-style, recursive definition employing no primitive semantic notions but reference, and (b) representational tokens refer to their semantic values in virtue of certain complex causal relations obtaining between them. Reference is or supervenes on one or more causal relations, and truth is a generalization of reference from singular and general terms to whole sentences.<sup>i</sup>

The causal correspondence view treats truth as a genuine property, eligible to participate in causal explanations. The deflationary view does not. There are apparently correct explanations, though, that seem to cite truth as a causal factor. Some of the most obvious cases are explanations of successful actions, such as:

Jack found Jill because his belief that she had gone up the hill was true.

Deflationists owe an account of these explanations that does not require treating truth as a genuine, causally relevant<sup>ii</sup> property. The most obvious deflationary move is to reinterpret the explanations disquotationally:

Jack found Jill because she had gone up the hill and he believed she had gone up the hill.

Some critics of deflationism maintain that these explanations are inferior to explanations that posit a robust property of truth that helps to cause actions to succeed.

Philip Kitcher, for example, has argued that deflationists can offer only “shallow” explanations of certain successful actions, and they cannot explain systematic practical success at all (2004, 204–211). Causal correspondence views, he thinks, offer deeper explanations, and they can explain systematic practical success. So, he thinks, causal correspondence views are superior to deflationary views of truth.

In my view, the sort of objection Kitcher raises to deflationism fails to show that causal correspondence theories have the advantage. Even if deflationary explanations of success are inadequate, causal correspondence explanations are no better. This is because the distinctive feature of causal correspondence theories, the positing of content-constituting causal connections between representations and the world, is irrelevant to explaining practical success. Consequently, the causal correspondence view is no better poised to explain practical success than deflationism is.

I make my case for this view as follows. In the next section, I distinguish between *singular success* and *systematic success*. I also explain why it is important to consider systematic success more carefully than deflationists often have done. Section 3 summarizes Kitcher’s argument to the effect that systematic success is inexplicable given deflationism but not given causal correspondentism. In Sections 4 and 5, I argue that Kitcher fails to show that causal correspondence explanations are better than deflationary explanations. I do that in Section 4 by showing that reference-fixing causal connections do not bear any of the most commonly cited explanatory relations to successful action. In Section 5, I cast doubt on the

claim that truth has causal powers, even as the causal correspondentists understand truth. An important theme in Sections 4 and 5 is that, according to causal correspondence theories, truth is a historical property of beliefs, but the success of our actions depends not on the history of our beliefs but on their intrinsic causal powers. Consequently, positing content-constituting causal connections does not enable causal correspondence theories to explain practical success any better than deflationary theories already can. Section 6 describes two ways in which we might explain systematic practical success without treating truth as a natural property.

Before going further, I should mention three preliminary points. First, there are many different deflationary theories of truth, differing in how they describe the function of the truth predicate or concept, in whether they are pitched at the level of propositions, sentences, utterances, or something else, in whether the notion of truth admits of a formally explicit definition, and in several other ways. For the most part, these differences among deflationary theories will not be relevant to what I have to say here. I will assume that deflationists not only deny that truth is a natural property, but hold that (a) our understanding of truth consists in our mastery of the usage of the truth predicate, and (b) the truth predicate is principally a device for disquotation, generalization and re-expression. Claims such as ‘Jack’s beliefs about  $x$  are true’ thus amount to claims such as ‘If Jack believes that ... $x$ ..., then ... $x$ ...’.

Most developed deflationary theories of truth include or presuppose enough of a theory of content to make sense of claims of the form, ‘ $p$ , according to representation  $R$ ’. Different deflationisms might embrace theories that differ in their details. For the purposes of this paper, I take it for granted that *some* such theory is available to deflationists, though I

will leave its precise details unspecified, apart from the fact that it does not treat content as a causal-historical property of representation tokens.

Second, there are also a wide variety of causal correspondence theories of truth. At least as many such theories are possible as there are causal theories of reference, and there are many causal theories of reference. My concern here is exclusively with causal theories of reference that are not in the tradition of “success semantics” or some forms of teleosemantics. Success semantics and teleosemantics give the role of a representation in coordinating successful action a part in determining its reference. My concept, SNOW, for example, refers to snow in virtue of its distinctive role in helping my snow-regarding actions to succeed, a role that it and only it plays with respect to those and only those successes. A theory of truth built around such an account of reference might qualify as a “causal correspondence theory,” but it is not a theory that explains successful action by appeal to the truth of beliefs. To the contrary, it explains the truth of a belief by appeal to the success of actions. The causal correspondence theories of truth that concern me in this paper are backward-looking theories, which make the truth of a representation a function of the way that representation came into being.

A fully developed causal correspondence theory will include a theory of content or of truth conditions, and different correspondence theories will differ in the details of those theories. For the purposes of this paper, I assume that such a theory is available to the causal correspondentist, and it has the resources to underwrite assignments of contents to representations. The details of how such a theory would work (apart from the fact that it would construe content as a causal-historical property of a representation) are beyond the scope of this paper.

Finally, it is important to distinguish Kitcher's criticism of deflationism from another, related criticism. Kitcher's criticism is that deflationary theories of truth do not explain systematic success as well as causal correspondence theories do, and he thinks this is a reason to prefer the correspondence view. The other criticism is that deflationary theories must be false because (a) the truth of beliefs makes a causal contribution to the success of actions, (b) such a contribution is impossible if the truth predicate is merely a device for generalization, but (c) deflationism says the truth predicate is merely a device for generalization. My primary aim is to undermine the claim that causal correspondence theories do better at explaining success than deflationary theories, not to undermine the other objection to deflationism. In my view, if this objection works against deflationism, then it should work against causal correspondence theories as well. For, as I argue in Section 5, truth as construed by the causal correspondence theory is just as causally impotent as deflationary truth.<sup>iii</sup>

## **2. Singular and Systematic Success**

*Singular success* occurs when a particular action has its intended outcome. Examples might include Jack's success at finding Jill atop the hill at time  $t1$ , Bill's success at getting a beer by nodding to the bartender at time  $t2$ , or Ophelia's success in traveling from the castle to the brook at time  $t3$ . Singular successfulness is a feature of dated, particular, token actions.

*Systematic success* occurs when a family of particular actions, all of which depend on some common stock of beliefs, is such that its members tend to succeed. Examples might include Bill's general success at getting the food and drinks he wants at bars and restaurants (by drawing on his stored information about how bars and restaurants work), Ophelia's tendency to find her destinations around Elsinore (by drawing on her beliefs about the area's

geography), and chemical engineers' success at inventing new compounds with desired properties (by applying various scientific theories, such as those encapsulated by the periodic table). An instance of systematic success is a collection of singular successes that result from actions that depend on a common stock of background beliefs.

Kitcher criticizes deflationism for giving too-shallow explanations of singular success and no explanation at all for systematic success. I think both criticisms are mistaken. Nevertheless, some prominent deflationary treatments of truth and practical success have erred by overemphasizing explanations of singular success and misconstruing the relationship between those explanations and explanations of systematic success.

Consider Paul Horwich's account. He considers the hypothetical case in which Bill succeeds in getting a beer by nodding to the bartender, which is an instance of singular success. We might explain Bill's success as follows:

1. Bill wants a beer.
2. Bill believes he can get a beer by nodding to the bartender.
3. Bill is in a situation such that, if he wants a beer and he believes he can get one by nodding to the bartender, then he will nod to the bartender.
4. Bill's belief that he can get a beer by nodding to the bartender is true.
5. So, Bill nods to the bartender. (from 1, 2, 3)
6. So, Bill gets a beer. (from 4, 5)

Horwich points out that there is no need for more than a disquotational understanding of the mention of truth in 4. The explanation works just as well if we replace 4 with:

- 4\*. Bill can get a beer by nodding to the bartender.

So, there is no need to construe truth as a robust, causal-explanatory property in order to explain Bill's success.

Here we have an explanation of a singular success that appears to appeal to the truth of a belief about means and ends. Horwich shows that a deflationary view of truth is sufficient in this case. But what about systematic success? For example, what about the success of engineering endeavors employing the periodic table, or those that depend on the theory that nothing can travel faster than light? We want to explain these successes by appealing to the truth of the background theories, but those are not theories about means and ends. Instead, they are theories about such things as chemical valences and the relationships between mass and velocity.

Horwich's strategy is to generalize from the case of singular success explained by true means-ends beliefs to the case of (possibly systematic) success explained by true background beliefs:

[Means-end] beliefs are more likely to be true if they are inferred from true premises; and very little of what we believe can be definitively excluded from the prospect of entering into such inferences as a premise. Therefore it is clear, in general, how true beliefs contribute to practical success. Nothing beyond the minimal theory is called for to explain this phenomenon.

(Horwich 1998, 45)

Suppose some set of actions (say, the actions of some engineers) are guided by the theory that nothing travels faster than light. We might say:

The actions tend to succeed because the theory that guides them (i.e., the theory that nothing travels faster than light) is true.

Horwich would have us understand this explanation as pointing to the fact that the actions are caused by means-ends beliefs, which are inferred from the theory that nothing travels faster than light. If nothing travels faster than light, and one infers that doing *X* will

accomplish *Y* from the theory that nothing travels faster than light, then it is more likely that doing *X* will accomplish *Y*. And if it is likely that doing *X* will accomplish *Y*, and one does *X* in an effort to accomplish *Y*, one will likely succeed. The actions tend to succeed because each is likely to succeed; each is likely to succeed because it is guided by a means-end belief that is likely to be true; and the means-end belief is likely to be true because it is inferred from true background beliefs. None of that requires us to assume more than a deflationary notion of truth.

Kitcher criticizes Horwich's explanation for its "shallowness." It does not explain why it is likely that doing *X* will accomplish *Y* if (a) one infers that doing *X* will accomplish *Y* from the theory that nothing travels faster than light and (b) nothing travels faster than light (Kitcher 2004, 204 – 211). This is a criticism I reject below (see Section 6), but there are better reasons to be unsatisfied with Horwich's approach.

First, the approach is too strongly tied to a particular account of the mechanisms that connect belief to action. According to that account, our actions are caused by means-end beliefs, those beliefs are inferred from other beliefs, and the only influence our background beliefs have on our actions is mediated by the inference of means-end beliefs from them. This is a substantive, if sketchy, model of how our beliefs influence our actions. If the view turns out to be mistaken, it could mean trouble for Horwich-style explanations of systematic success.

It only makes things worse that there is some reason to doubt that model. There is a growing body of evidence that many of our actions are guided directly by "background" beliefs, by perceptual beliefs, and by offline simulations.<sup>iv</sup> Even in cases in which such non-means-end beliefs influence our actions more indirectly, it is not at all clear that they do so by providing inputs to a process whereby means-end beliefs are *inferred*. Presumably, some



cases of systematic success are explicable by the truth of non-means-end beliefs, even though those beliefs do not function as an agent's premises in an inference whose conclusion is a true means-end belief. Taken strictly, Horwich's proposal is incompatible with that possibility.

A second problem with Horwich's approach arises from an ambiguity in his claim that means-end beliefs are more likely to be true when they are inferred from true background beliefs. The claim could be disambiguated in either of these two ways:

7. Means-end beliefs that are inferred from true background beliefs are more likely to be true than to be false.
8. Means-end beliefs inferred from true background beliefs are more likely to be true than means-end beliefs inferred from false background beliefs.

7 is intuitively plausible. It asserts that the mechanisms whereby we infer our means-end beliefs are generally truth-preserving. But if 8 were false, then the truth of background beliefs would not explain systematic success, even given the truth of 7. Horwich offers no argument for 8, though, and 8 is far from obviously true. Though our inferential mechanisms might be truth-preserving, it does not follow that they are *falsehood*-preserving. And it might turn out that, given our mechanisms, the right false background belief could make it *more* likely that we infer true means-end beliefs than a true belief would (Stich 1990).

The problem with Horwich's proposal is not that it presupposes 8 and 8 is false, nor that it turns on an equivocation between 7 and 8. The problem is just that 8 *might* be false, and Horwich has provided us with no reason for thinking it isn't. In the absence of support for 8, Horwich's approach does not adequately explain systematic practical success.

Deflationists have little trouble explaining singular successes in terms of true beliefs about means and ends. It is thus no surprise that they might try to piggyback explanations of

systematic success on their explanations of singular successes. The trouble is that such an approach risks misconstruing the relationship between a person's actions and her beliefs that do not concern means and ends, and it relies on the unsupported assumption that true background beliefs are more likely to lead to true means-ends beliefs than false background beliefs are. To avoid these problems, deflationists need to show how to explain successful actions in terms of true beliefs *other than* beliefs about means and ends. Then they would be able to explain not only systematic success, but those singular successes where one's actions depend on what one believes but not on explicit beliefs about means and ends.

Stephen Leeds (1995) does try to show how to show how deflationists could give such explanations. When we attribute a person's (singular or systematic) success to the truth of her beliefs, Leeds says, we are pointing out three things. First, she acted on the basis of her believing true action-guiding sentences. Second, she believed those sentences because she believed certain background sentences. Third, the action-guiding sentences were (disquotationally) true because the background sentences were (disquotationally) true. To explain truth by appeal to success, on this account, is to point out that the epistemic order among an agent's beliefs recapitulates the explanatory order among their contents. Moreover, Leeds contends, this recapitulation is neither surprising nor in need of explanation in terms of a causal correspondence theory of truth. Instead, it is only to be expected given that principles of charity and rationality constrain us to interpret others in ways that maximize the similarity between the inferential relations among their beliefs and the explanatory relations among their beliefs' contents. (For reasons we need not go into here, Leeds takes belief to be a relation between subjects and sentences in an interpreter's language.)

Leeds' approach is not without problems, though. Like Horwich's, it presupposes a model of action according to which some beliefs are "action-guiding," and those action-guiding beliefs are conclusions of inferences whose premises are more theoretical, background beliefs. If that model is untrue to the psychodynamics of action, then Leeds' suggestion is of no help to deflationists.

A more serious problem for Leeds is that, also like Horwich, he proceeds as though the problem has been solved once we have shown how to account for the role of true background beliefs in singular success. To explain systematic success, on Leeds' approach, we just point out that some smallish number of background beliefs are implicated in the explanations of a largish number of singular successes.

Explaining a case of systematic success *only* by explaining its constituent singular successes, though, might not be very satisfying. It would be like "explaining" why the ratio of males to females in a population is  $m:f$  by explaining why each of the individual males is male and why each of the individual females is female. Such an explanation would seem to miss the point of the question, "Why is the ratio of males to females in this population  $m:f$ ?" Similarly, the conjunction of the explanations of a collection of singular successes might not explain their *systematicity*. When we aim to explain a case of systematic success, we might want to look beyond the success of her particular actions and explain the *pattern* of success her actions appear to exhibit. We might want to explain the apparent regularity that *she tends to succeed when her actions are of a certain type*. Given the regularity, we might predict that her actions *would* succeed if they were of that type or that they *will* succeed in the future when they are of that type. The conjunction of explanations of her singular successes sheds no light on why that would be so.

The most obvious move an advocate of Leeds' proposal might make is to say that the counterfactual and future success are neither surprising nor in need of explanation, given the roles that the principles of charity and rationality play in attributing beliefs to others. We must attribute mental contents in accord with those principles, and, consequently we are bound to interpret the agent counterfactually or in the future so that her behavior exhibits patterns of systematic success. She will or would succeed systematically because we will or would interpret her in ways that make her behavior count as successful.

This move is unconvincing, though, because it answers the wrong question. It tells us why, *given the agent's future or counterfactual behavior*, that behavior will or would include patterns of systematic success. (Answer: Because we are bound by the principles of charity and rationality to attribute mental contents that make the behavior include such patterns.) It does not tell us why, *given that the agent's beliefs have certain contents*, whatever behavior those beliefs guide will or would include patterns of systematic success. That is the question we must answer to explain the apparently projectable regularity that the agent succeeds when she acts on beliefs with certain contents.

None of this is to say that things are hopeless for an approach generally in keeping with Leeds'. The problems I have mentioned might be solvable. My point is not that Leeds or Horwich is wrong. My point is that they leave some of the important explanatory work undone by trying to build an explanation of systematically successful action out of explanations of singular success. The case of systematic success is importantly different from the case of singular success, and it is in deflationists' interest to address it on its own terms.

I return to the question of how deflationists might account for systematic practical success in Section 6. First, though, I examine Kitcher's case for thinking the causal

correspondence view provides better explanations than those that are available to deflationists.

### 3. Kitcher's Argument

Kitcher stresses the importance of explaining systematic success to the debate between deflationism and causal correspondentism. Even if deflationists could adequately explain every instance of singular success by appeal to the (disquotational) truth of means-end beliefs, their defense would completely miss the point of the causal correspondence criticism:

[We] should ask exactly what has been explained. The answer, surely, is that if an agent has a true belief about means-ends relations, then that agent is likely to be successful. That isn't quite the *explanandum* that realists have taken to be crucial in their defenses of correspondence truth. Correspondence truth has been supposed to be necessary because of the way in which true beliefs about means-ends relations, or behavior that is as if the agent has true beliefs about means-ends relations, result from true beliefs about the objects that figure in the desired goal-state. (Kitcher 2004, 204).

Kitcher goes on (rightly, in my view) to diagnose the deflationists' failure to address the right explanandum as a consequence of restricting their attention to singular, rather than systematic, practical success.

To remedy the failure, Kitcher takes as his paradigm not a case in which a single action, based on a single, straightforward means-end belief, has its desired outcome, but a case in which a person relies on an extensive *system* of beliefs to succeed in a variety of tasks on a variety of occasions. The hypothetical case he asks us to consider is that of Ophelia,

who has a map of Elsinore and relies on it to find her way around. Ophelia almost never gets lost, and she almost always reaches her desired destinations with little trouble. A natural explanation is that Ophelia succeeds (systematically) because her map is accurate.

To avoid complications concerning map reading, I will suppose Ophelia has memorized her map. She thus has a *cognitive model* of Elsinore's geography, which I will treat as comprising a certain large set of individual beliefs, whose contents are a certain large set of propositions. The more of those beliefs are true, the more accurate Ophelia's cognitive model of Elsinore is. I will refer to Ophelia's cognitive model as **M**.

Suppose Ophelia tends to succeed in her navigations in Elsinore because **M** is accurate. The deflationary gloss of this explanation is:

Ophelia tends to succeed in her navigations because she tends to think things in Elsinore are where they are.<sup>v</sup>

The causal correspondence version is:

Ophelia tends to succeed in her navigations because they depend on **M**, and **M** has a certain causal connection to the world (namely, the complex causal relation that causal correspondence theorists identify with the substantive property of *being true*).

Kitcher thinks the deflationary explanation is inferior to the correspondence explanation.

The point of both explanations is that Ophelia's systematic success can be understood by the applicability of this explanatory schema to her successful navigations (Kitcher 2004, 206–208):

9. Ophelia's cognitive model of Elsinore is **M**.

10. Ophelia desires that  $q$ . (Possible replacements for  $q$  include ‘Ophelia reaches the brook’, ‘Ophelia reaches the chapel’, ‘Ophelia reaches the cliffs’, ‘Ophelia reaches the graveyard’, etc.)
11. If Ophelia’s cognitive model of Elsinore is  $\mathbf{M}$  and she desires that  $q$ , then she does  $A(q)$ .
12. If  $\mathbf{M}$  is accurate and Ophelia does  $A(q)$ , then  $q$ .
13.  $\mathbf{M}$  is accurate.
14. So, Ophelia does  $A(q)$ . (From 5,6,7)
15. So,  $q$ . (From 8, 9, 10)

The difference between deflationism and the correspondence theory lies in how each construes 13. Deflationists read it as an indirect way of asserting the contents of  $\mathbf{M}$ . Thus it means something like, “If Ophelia thinks  $x$  is at  $y$  in Elsinore, then  $x$  is at  $y$  or not far off.” Causal correspondentists see it as attributing a certain substantive causal relation between  $\mathbf{M}$  and the objects and properties  $\mathbf{M}$  refers to.

The problem Kitcher sees for deflationism concerns how we make sense of 11 and 12, given the deflationary rendering of 13. Both mention an action,  $A(q)$ , which Kitcher calls “the action pertinent to  $q$ .” The trouble is that there are two different notions of pertinence in play (Kitcher 2004, 208).

Let us call an action *psychologically pertinent to  $q$*  (relative to Ophelia and  $\mathbf{M}$ ) if and only if it is what Ophelia would do if she desired  $q$  and  $\mathbf{M}$  were her cognitive model of Elsinore. Call an action *effectively pertinent to  $q$*  (relative to Ophelia and  $\mathbf{M}$ ) if Ophelia’s doing it would bring it about that  $q$ , if  $\mathbf{M}$  were accurate.

We might define  $A(q)$  as the action that is psychologically pertinent to  $q$ . In that case, 11 is analytic, but we need an explanation for 12. Alternatively, we might define  $A(q)$  as

whatever is effectively pertinent to  $q$ . In that case, 12 is analytic, but we need an explanation for 11. Either way, Kitcher thinks, deflationists are stuck with an explanatory mystery: Why do psychological and effective pertinence coincide? Here is how he puts the point:

Deflationists might think that the schema of explanation [9 – 15] will go through, even if the notion of truth is interpreted as they prefer. But this fails to address the explanatory mystery. If we define the notion of “pertinence” so that [11] is automatically true, then we need grounds for [12] and conversely. *To read [13] in the deflationist’s sense leaves at least one of [11], [12] unexplained.* (Kitcher 2004, 208)

While deflationists are stuck with an explanatory mystery, Kitcher thinks causal correspondentists are not. The causal relation between **M** and Elsinore is such that **M** corresponds to the geography of Elsinore, and that correspondence is responsible for the fact that what is psychologically pertinent to **M** is also effectively pertinent. It explains why actions that fit **M** psychologically also fit Elsinore practically. Here is how Kitcher makes his point:

The parallel between the psychological life of the subject and the effectiveness of the action comes about because of the correspondence between elements in the subject’s representations and elements in the world. Ophelia’s decisions to orient her body in particular ways stem from [her application of **M**] in light of her preferred destinations. A full psychological understanding of those decisions must probe the ways in which the semantical relations between her tokens and the objects in her surroundings are akin to the causal relations between her perceptual states and those objects. Those decisions turn out to be effective ... because the causal



relations that connect Ophelia's tokens to entities in the world pick out entities that stand in the spatial relations represented in Ophelia's thoughts, the very spatial relations represented in **[M]**. (2004, 209)

As I see it, Kitcher is making three claims here. First, psychological and effective pertinence coincide because of the correspondence between **M** and Elsinore. Second, Ophelia's routes depend on the contents of her beliefs about Elsinore and where she wants to go. Third, Ophelia's routes succeed because things in Elsinore are where she thinks they are.

It is unclear to me whether Kitcher means these points to be independent of one another or, instead, he means the latter two points to support the first one. Because the second and third points seem not to give any particular support to the first, whatever Kitcher might intend, I will address each point independently in the next section.

#### **4. Correspondence and Explanation**

Kitcher's first point is that the correspondence relation between **M** and Elsinore explains why psychological and effective pertinence coincide. Even if this claim is true, we must consider whether it is true in a sense that is both unavailable given a deflationary notion of truth and available given a causal correspondence view of truth. Otherwise, it would not give us a reason to favor causal correspondentism over deflationism.

This is important because there is a deflationary notion of correspondence available. In this sense, for **M** to "correspond" to Elsinore is just for things in Elsinore to be where **M** says they are. The correspondence between **M** and Elsinore is just the correlation (in the statistical sense) between where **M** says things are and where they are. Note that it is perfectly in order for deflationists to talk about things being where **M** says they are. Doing so does not require invoking a substantive concept of truth.<sup>vi</sup>

Kitcher cannot have this sense of correspondence in mind when he says that correspondence explains the coincidence of psychological and effective pertinence. Rather, he must have in mind a notion of correspondence that is unavailable to deflationists and available to causal correspondentists. He must have in mind the causal relation in virtue of which **M** refers to the objects, properties, and relations that it refers to. That is the relation causal correspondentists posit but deflationists do not, and that is the relation causal correspondentists identify as part of the essence of truth. Let us call that relation **M**'s *content-constituting causal connection*.

For Kitcher's first point to tell in favor of causal correspondentism, as against deflationism, **M**'s content-constituting causal connection must explain why psychological and effective pertinence coincide. There is good reason to think it does not.

For one thing to explain another, it must bear some explanatory relation to the other. I do not know what all possible explanatory relations are. Nevertheless, if it can be shown that (a)  $x$  is not necessary for  $y$ , (b)  $x$  is not sufficient for  $y$ , (c)  $x$  is not an insufficient but necessary part of an unnecessary but (minimal) sufficient condition for  $y$  (i.e., an "INUS" condition, see Mackie [1974]), and (d)  $x$  does not make  $y$  more likely, then we have very good reason to deny that  $x$  explains  $y$ . **M**'s content-constituting causal connection bears none of those relations to Ophelia's success, and so we should doubt that it explains her success.

To see that the causal connection is not *sufficient* for Ophelia's success, remember that it suffices only to fix the content of **M**. It is possible for **M** to have the very same content-constituting causal connection to Elsinore, and so to have the very same content, even if the correlation between where things are and where **M** says they are is very weak. In that case, Ophelia would not systematically succeed in finding her destinations by relying on

**M**; she might even systematically fail. Because **M** could have the very same content-constituting connections in cases where Ophelia fails systematically, those connections are not sufficient for her systematic success.

Similar considerations show that the content-constituting connection does not make Ophelia's success more likely, either. The mere existence of a representation with the content that  $p$  has no influence on the likelihood that  $p$ . Many American girls enjoy drawing pictures of unicorns, but the unicorn-representations they create do not make it any more likely that unicorns exist. The fact that **M** is connected to the world so as to have the content that the cemetery is beside the brook does not alter the likelihood that the cemetery is beside the brook one bit. So, if Ophelia's success requires the cemetery to be beside the brook, **M**'s content-constituting causal connection does nothing to make her success more likely.

We can make the point somewhat more directly. For every case in which Ophelia relies on **M** and succeeds, there is a possible case in which **M** has the very same content-constituting connection, Ophelia relies on **M**, and yet Ophelia *fails* (because Elsinore is not arranged as **M** says it is). Since we can hold the content-constituting connection constant and find a possible failure for every possible success, the content-constituting connection does not make success more likely.<sup>vii</sup>

To see that the content-constituting connection is not *necessary* for Ophelia's success, we can consider an imaginary scenario of the following sort: Ophelia is struck by lightning, and the lightning strike obliterates the part of her brain that constitutes **M**. Immediately, though, the swamp gases ignite so that a perfect intrinsic duplicate of **M** forms spontaneously and replaces **M**. Call the duplicate **M\***, and call Ophelia "Swamp Ophelia" after the transformation.

**M\*** has the exact same influence on Swamp Ophelia's behavior that **M** has on Ophelia's behavior. In particular, **M\*** has the same influence on Swamp Ophelia's route selections. So, Swamp Ophelia is exactly as successful at reaching her destinations as Ophelia is at reaching hers. But **M\*** lacks **M**'s content-constituting causal connection. Indeed, **M\*** has no content-constituting connections at all. So, those connections are not a necessary condition for Ophelia's success; she could succeed without them.

A causal correspondentist might contend that **M\*** has no content. On that basis, she might reply that Swamp Ophelia's movements through Elsinore do not qualify as actions, and so they are not successful actions either. Consequently, Swamp Ophelia does not succeed after all.<sup>viii</sup>

Such a reply is of no help. It requires either a too-narrow conception of action or a too-narrow conception of success. When Swamp Ophelia wants to go to the cemetery, she plots a course through Elsinore and follows that course. She arrives at the cemetery. Because **M\*** is intrinsically the same as **M**, everything seems to Swamp Ophelia just as it seems to Ophelia. She wants to go to a certain place, and she deploys **M\*** to guide her bodily movements in trying to get there. It is a Procrustean notion of action that treats Swamp Ophelia's endogenously motivated and controlled movements through Elsinore as things that happen to her rather than things she does.<sup>ix</sup> On the other hand, even if we do refuse to call her movements actions, we cannot deny that they systematically culminate in the satisfaction of her desires.

Is the systematic satisfaction of Swamp Ophelia's desires an example of *success*? On the restrictive conceptions of success and of action, the answer is no, but it is not an example of *failure* either. Rather, what happens to Swamp Ophelia is outside the logical space of success and failure altogether, and it is a category mistake to call it either. So, if we grant

the restrictive conception of action or of success, **M**'s content-constituting connection is a necessary condition for Ophelia's success, but not the sort that would explain why she succeeds rather than fails. Causal correspondentists, however, need the connection to explain why Ophelia's actions systematically succeed rather than fail, not why her movements fall under the label 'action'.

The key point here is that **M** and **M\*** play precisely the same role, in precisely the same way, in causing the systematic satisfaction of Ophelia's desires, which is what we want to explain when we explain her success. **M\*** does not have **M**'s content-constituting connection, so the connection is not a necessary condition that causes Ophelia's systematic success.<sup>x</sup>

Another objection might be that the Swamp Ophelia case is too fanciful. Sure, **M**'s content-constituting connection isn't *logically* necessary for Ophelia's success, as the case shows, but it might be *nomologically* necessary. It might be a matter of natural law that Ophelia could not succeed as she does without a mental representation that has **M**'s precise content-constituting causal connection to the geography of Elsinore.

Such an objection would not work, however. If we suppose that **M**'s content-constituting connections are necessary for Ophelia's success, we should ask why that is so. There are two possibilities. Either they are necessary because, as a matter of fact, those connections are the only nomologically possible way to bring something with **M**'s intrinsic features into the world (so an intrinsic duplicate with different or no content is nomologically impossible), or they are necessary because **M**'s intrinsic properties, the layout of Elsinore, and the rest of Ophelia's mental states do not suffice for her to succeed, but they do suffice if we add **M**'s content-constituting causal connection into the mix.

The first possibility is irrelevant. First, it is doubtful that a state with **M**'s intrinsic properties could come into being only by having **M**'s content-constituting connection to the world, even when we restrict our attention to nomological possibility. Second, even if there is only one nomologically possible way to bring something with **M**'s intrinsic features into being, it is doubtful that Ophelia needs such a state to succeed anyway. Sometimes false beliefs lead to practical success, and sometimes false beliefs can help us in cases when true beliefs would not (see, e.g., Stich 1990).

Third, and perhaps most important, we must be careful about what we treat as causally explanatory of what. In virtue of its intrinsic features, **M** interacts with Ophelia's other mental states to cause certain behavior. The precise nature of that behavior depends on **M**'s intrinsic features. Suppose it is nomologically impossible for a token with **M**'s intrinsic features to exist without **M**'s content-constituting causal connections. As it happens, anything with those intrinsic features will have a causal history of a certain sort; that is just the only way to get something with those features into the world. That still does not give causal correspondentists what they need, for what matters in this case is not that those causal-historical properties bestow a certain content on **M**, but that they cause something with **M**'s intrinsic features to exist. If the content-constituting connections are necessary for Ophelia's success in this case, they are still not necessary *qua* content-constituting connections, and that is what correspondentists would need for the connections to carry explanatory weight.

The very same argument applies if we turn to an even weaker notion than nomological necessity, *counterfactual dependence*. One might claim that **M**'s content-constituting connection explains Ophelia's systematic success because, if Ophelia had not had a token

with that content-constituting connection, she would not have succeeded (even though, perhaps, she *could* have succeeded).

Let us suppose, for the sake of argument, that Ophelia would not have succeeded without a token with **M**'s content-constituting connection. Still we must ask why *that* is so. There are two candidate explanations. One is that, if Ophelia did not have a token with **M**'s content-constituting connection, she would not have a token with **M**'s *content*. The other is that, if she did not have a token with **M**'s content-constituting connection, she would not have a token with **M**'s *intrinsic causal powers*. So long as Ophelia has a token with **M**'s intrinsic causal powers, though, she will enjoy systematic navigational success, *regardless* of that token's content properties. So, if Ophelia would not succeed without a token with **M**'s content-constituting connection, it would have to be because such a token would lack **M**'s intrinsic causal powers, not because it would lack **M**'s content. But then her success does not counterfactually depend on the content-constituting connection *qua* content-constituting connection, and so the connection does not bear the explanatory weight causal correspondents would need it to.

There is also reason to deny that Ophelia's success counterfactually depends on **M**'s content-constituting connection. Suppose Ophelia did not have a token with **M**'s content-constituting connection. What would the world be like? How one answers depends on how one interprets counterfactual conditionals.

We *might* treat 'If Ophelia had not had a token with **M**'s content-constituting connection, she would not have succeeded' as a "backtracking" conditional (Lewis 1979). In that case, we would have to consider what in Ophelia's past would have been different to lead to her not having a token with **M**'s content-constituting connection, and we would have to ask whether such a different past would undermine Ophelia's later success. *One* possibility

is that Elsinore's geography was the same but Ophelia wound up with various mistaken beliefs about where things in Elsinore were. *Other* possibilities also exist, though. For example, if Fr. Jenssen rather than Fr. Nielssen had consecrated the cemetery, then Ophelia would not have had a token with **M**'s content constituting connection, and yet she still might have enjoyed systematic success. Also, so long as we allow backtracking, we should take into account the possibility that Ophelia winds up with a token whose content-constituting connection is different because *Elsinore* is different, and Ophelia still succeeds systematically in getting where she wants to go. It is not clear what to say about whether Ophelia would have succeeded without a token that has **M**'s content-constituting connection, if we allow backtracking.

If we do not allow backtracking, though, we simply try to hold as much constant as we can, while deleting **M**'s content-constituting connection from the world. (We use, as Karen Bennett [2003] has put it, “metaphysical hole punchers” to eliminate the connection while leaving everything else the same.) In particular, we leave the arrangement of Elsinore the same, and we leave **M**'s intrinsic features the same. **M** no longer has its content, but it still has its intrinsic causal powers, and those are enough (given the arrangement of Elsinore) to get Ophelia where she wants to go. If **M** did not have its content-constituting connection, Ophelia would still succeed. So, her success does not depend counterfactually on **M**'s content-constituting connection.

Ophelia's success does not require **M**'s content-constituting connection, logically, nomologically, or merely counterfactually. And the connection neither suffices for her success nor makes her success more probable. If the connection explains her success, then, we are left with only the possibility that the content-constituting connection is an INUS condition for Ophelia's success—an insufficient but necessary part of an unnecessary,



(minimal) sufficient condition for her success. (A sufficient condition for something is “minimal” when none of its proper parts are sufficient for it. Without the restriction to minimal sufficient conditions, everything turns out to be an INUS condition of everything logically independent of it.<sup>xi</sup>)

**M**'s content-constituting causal connection is not an explanatory INUS condition for Ophelia's success. Suppose it were. Then it would be a necessary part of some condition *S*, such that *S* is sufficient for Ophelia's success, and no proper part of *S* is sufficient for Ophelia's success. But, as the Swamp Ophelia case shows, we can hold *S*'s intrinsic features and causal powers constant while varying **M**'s content-constituting causal connection (or removing it entirely). So, either the content-constituting connection isn't necessary for *S* or *S* isn't a minimal sufficient condition for Ophelia's success. Either way, the content-constituting connection is not an explanatory INUS condition for Ophelia's success.

Kitcher claims that psychological and effective pertinence coincide because of **M**'s “correspondence” to Elsinore. If he means correspondence in the sense that is available to deflationists, then this point does not count against their view. On the other hand, if by ‘correspondence’ Kitcher means **M**'s content-constituting causal connection, then what he says looks false. Those connections appear to bear no explanatory relation to her success.

The other two points Kitcher raises are that **M** is causally relevant to the actions Ophelia takes and that the actions succeed because things in Elsinore tend to be where **M** says they are. But deflationists are not in the business of denying the causal efficacy of mental representations, nor are they in the business of denying that representations with different contents are apt to cause different actions. Indeed, the canonical deflationary explanation of Ophelia's tendency to succeed is that she succeeds because things are (or tend

to be) where she thinks they are. So, deflationists have nothing to fear from these other points.

None of this is to say that the deflationist really can resolve the mystery and explain why psychological and effective pertinence coincide. For now, my only point is that causal correspondentists are in at least as much trouble as deflationists. The claims Kitcher makes in favor of correspondentism do not really support that view over deflationism. In Section 6, I consider what conclusions we ought to draw from all this. But first, there is a more general argument against correspondence explanations of success that I would like to make.

## **5. A More General Argument**

Let it be granted that deflationists owe an account of why psychological and effective pertinence should ever coincide. The more general argument I offer in this section aims to show that causal correspondentists have the same, undischarged debt. The argument depends on a substantive but widely accepted metaphysical assumption.

According to that assumption, genuine properties are individuated by the causal powers they bestow on their bearers. Objects cannot differ in their causal powers without differing in their properties, and they cannot differ in their properties without differing in their causal powers.

Causal powers are dispositions. As such, they are intrinsic to the objects that have them, and they need not all be manifested all the time. A brick has the power to break a vase of a certain kind, but that does not mean that it ever actually does break the vase. Its power to break such a vase (in the right circumstances) is a standing, intrinsic feature of the brick, which can exist even if there are no vases and even if the right circumstances do not ever obtain. It is not that the brick, upon striking a vase with a certain force, suddenly acquires

the power to break the vase just in time to break it. Rather, the brick has the power to break the vase all along, and that power manifests itself when the brick hits the vase.

Truth, by this standard, is not a genuine property.<sup>xii</sup> Imagine two versions of Ophelia, True-Ophelia and False-Ophelia, who are intrinsic duplicates of one another. True-Ophelia lives in a world where her token of **M** is accurate. False-Ophelia's token is inaccurate. The accuracy of the tokens makes no difference to their causal powers. It matters only to how the powers are manifested. A hammer in a world where all vases are made of steel and a microphysical duplicate in a world where all vases are made of crystal do not differ in their causal powers. They differ only in how their causal powers are manifested and in their opportunities to manifest them.

Now, we might still want to explain Ophelia's success by pointing to the truth of her beliefs (or the accuracy of **M**). In so doing, we would be pointing simultaneously to some of the circumstances in which her causal powers are manifested (e.g., the cemetery's being by the brook) and to some of her causal powers (e.g., those involved in thinking the cemetery is by the brook). Such a move is, surprisingly enough, off limits on the causal correspondence view of truth.

The reason is that the causal correspondence view makes a token's *causal history*, rather than its intrinsic causal powers, constitutive of its content. (Remember, "success semantics" and "teleosemantics" are out of the running as bases for a causal theory of truth; they explain truth by appeal to success, rather than explaining success by appeal to truth.) But a token's causal history is extrinsic to it, and so having a given causal history is not a genuine property. Causal history does not bestow causal powers on a token, it just tells how the token came to be. So, on the causal correspondence view, to explain Ophelia's success by appeal to **M**'s accuracy is to explain it in terms of **M**'s causal antecedents and the

geography of Elsinore. Such an explanation leaves out what is explanatorily crucial: the causal powers of **M** that are involved in the production of effectively pertinent actions.

The causal correspondence view has no more to say about psychological pertinence than the deflationary view has. It has nothing to say about the causal powers of mental representation tokens, and so it has nothing to say about why what is psychologically pertinent to a given end (relative to a given agent and belief) would also be effectively pertinent (relative to that agent and belief). The causal correspondence view does not resolve Kitcher's explanatory mystery.

## 6. Everybody's Mystery

I have been arguing that explaining systematic success is at least as much of a problem for causal correspondence theories of truth as it is for deflationary theories. This is because causal correspondence theories are not better suited to solving Kitcher's "explanatory mystery" than deflationary theories. I now take up the task of explaining why it is deflationism that has the advantage.

Kitcher's explanatory mystery is everybody's mystery, but everybody's mystery is still *everybody's* mystery. If neither the causal correspondence view nor deflationism is well positioned to solve the mystery, then one might think that counts against both views, and that some other view of truth – pragmatism, coherentism, or functionalism,<sup>xiii</sup> perhaps – is called for. In my view, that would be a mistake.

It would be a mistake because Kitcher's explanatory mystery has nothing to do with truth. It is the mystery of why it should often be the case that one and the same action satisfies the following two descriptions:

- a. It is what a given agent with a given belief, whose content is that  $p$ , would do in pursuit of some end,  $q$ .
- b. It is what would bring it about that  $q$  if a given agent performed it and  $p$ .

This is a mystery to be addressed by theories in the philosophy of mind, not by theories of truth. At least two views in the philosophy of mind are readily available to explain why psychological and effective pertinence so often coincide.

One of those views concerns the nature of belief. According to it, what makes an attitude with the content that  $p$  a *belief* is that it is disposed to cause actions that would succeed if  $p$ . It is not that those dispositions make it into a belief with that content, for various attitudes with the same content (such as desires and hopes) do not have those dispositions. Rather, those are the sorts of dispositions that constitute the *believhood* of an attitude with a given content.

The view is not implausible. Suppose that Bill has an attitude X with the propositional content that there is beer in the refrigerator, yet it is not the case that the actions that attitude tends to cause are actions that would tend to succeed if there were beer in the refrigerator. This seems to be very powerful *prima facie* evidence that attitude X is not the attitude of belief. Maybe it is hope or desire, but it isn't belief. And if we suppose that attitude X *is* belief, then we owe a story about what other factors are in the picture that override Bill's disposition to take actions that would succeed if there were beer in the refrigerator.

If this view of the nature of belief is correct, the "explanatory mystery" is pretty easy to solve. Psychological and effective pertinence coincide because, by its nature, belief is an attitude that causes effectively pertinent actions. An attitude that does not do that is not belief. And, because deflationists are not committed to denying that *belief* is a genuine

property, this is an explanation to which they and causal correspondentists can both help themselves.

Some philosophers will object to this view of the nature of belief. They might be more persuaded by a second sort of view, which does not suppose that belief is *essentially* an attitude that causes effectively pertinent actions. The second view is generally adaptationist and naturalistic in spirit.

Our psychological mechanisms are the products of natural selection. Those that take beliefs and desires as inputs and produce actions as outputs can do better or worse at producing effectively pertinent outputs. The worse they do, the worse job a critter with such mechanisms will do at satisfying its desires. Critters that do badly enough will display what Quine calls the “pathetic but praiseworthy tendency to die before reproducing their kind.” Natural selection will favor mechanisms that are better at making psychological and effective pertinence coincide. The coincidence does not arise because of the nature of truth, but because of the details of our cognitive mechanisms and their phylogeny. This explanation is also available to deflationists.<sup>xiv</sup>

There are probably other ways we might resolve the explanatory mystery in the philosophy of mind.<sup>xv</sup> Let us call all such explanations “PM explanations.” (‘PM’ stands for “Philosophy of Mind.”) Deflationists could use PM explanations that do not presuppose inflationary theories of truth to answer Kitcher’s challenge, but so too could causal correspondentists. Nevertheless, I think deflationism has the advantage for two reasons.

First, if the dispute is to be between deflationism plus a PM explanation and a causal correspondence theory plus a PM explanation, the causal correspondence theorist owes a justification for preferring the logically stronger theory. What reason is there for thinking that truth is a genuine property? By employing a PM explanation, the correspondence

theorist cannot answer that we must treat truth as a genuine property to explain practical success. So the additional logical strength of correspondentism is, for the moment, anyway, unmotivated.

Second, if the dispute is between deflationism plus a PM explanation and a causal correspondence theory *without* a PM explanation, such as what Kitcher recommends, then the deflationist's explanation of systematic success is just *better*. The correspondence explanation appeals to various extraneous factors – particularly the causal history of mental representation tokens – that fail to produce deeper or more powerful explanations than deflationism provides before adding a PM explanation. Adding the PM explanation to a deflationary view of truth then allows one to answer the correspondence challenge directly, giving precisely the deeper and more powerful explanation the challenge calls for, without having to compromise the view the truth is not a genuine property.

## **8. Conclusion**

Kitcher's argument for the superiority of causal correspondence theories to deflationary theories of truth depends on the claim that the former, but not the latter, can explain the coincidence of psychological and effective pertinence. Consideration of Kitcher's "explanatory mystery," though, shows that it is no less a mystery for causal correspondentists than for deflationists. Neither theory of truth offers a clear solution to the mystery, but we can expect a solution to come from a theory of mind rather than a theory of truth. If the adoption of the logically stronger, correspondence view of truth is to be justified, it will have to be on other grounds.

## **Endnotes**

<sup>i</sup> See Field (1972) for a classic elaboration of this view.

<sup>ii</sup> There is one notion of “causal relevance” according which deflationism is compatible with the idea that truth is causally relevant to successful action. On that notion, any predicate that figures in a causal explanation of any sort trivially picks out a “causally relevant property,” even if that property has no causal powers, has no essence to be understood in terms of causation, and is in fact a purely formal or Cambridge property. See Damnjanovic (2005) for details. That thin notion of causal relevance is not the one at play in the disagreement between deflationists and causal correspondence theorists.

<sup>iii</sup> Deflationism and causal correspondentism are not the only theories of truth on the market. There are also phenomenological theories, pluralist theories, identity theories, “indirect” correspondence theories, primitivist theories such as that of Donald Davidson (1990), and all manner of relativisms. This paper, however, concerns only causal correspondentism and deflationism, and the question whether former provides better explanations of practical success than the latter.

<sup>iv</sup> See, for example, Grush (2004), Clark and Grush (1999), and Clark (2001, Chh. 5 and 6).

<sup>v</sup> That is, she tends to succeed because, ordinarily, if  $x$  is at  $y$  according to  $\mathbf{M}$ , then  $x$  is at  $y$ .

<sup>vi</sup> As an anonymous reviewer has noted, it *might* be possible to formulate a formally explicit definition of truth along the lines of “ $R$  is true if and only if the world is the way it is according to  $R$ .” That would be consistent with the basic deflationist position, which denies that truth is a natural property with a causal essence and is neutral with respect to the possibility of explicitly defining truth.

<sup>vii</sup> This point can be made more precisely: When there are no more cases in which  $P \& Q$  than cases in which  $P \& \sim Q$ ,  $\Pr(Q | P)$  can be no greater than  $\Pr(\sim Q | P)$ . There are no more



cases in which **M** has a given content-constituting connection and Ophelia succeeds, than there are cases in which **M** has that content-constituting connection and Ophelia fails. So, the probability that Ophelia succeeds, given **M**'s content-constituting connection, is no greater than the probability that she fails, given **M**'s content-constituting connection. This follows from an interpretation of probabilities as relative frequencies among possibilities. It also follows so long as we assume that, whatever probabilities are, relative frequencies track them.

<sup>viii</sup> I thank an anonymous reviewer for suggesting I consider this line of argument.

<sup>ix</sup> An anonymous reviewer has suggested our actions might be grounded in the phenomenology of our mental states rather than their causal histories. In that case, because **M** and **M\*** are phenomenologically indistinguishable, the bodily movements **M\*** guides would qualify as actions and qualify as successful.

<sup>x</sup> I thank an anonymous referee for encouraging me to put the point in this way.

<sup>xi</sup> Let  $P$  and  $Q$  be logically independent of one another. Then  $P\&Q$  is an unnecessary sufficient condition for  $P$ , and  $Q$  is an insufficient necessary condition for  $P\&Q$ . So,  $Q$  is, in this trivial way, an INUS condition for  $P$ .

<sup>xii</sup> Some philosophers think this test is too strict; it rules that all manner of logical and mathematical properties are not “genuine.” What matters for my purposes, though, is less the claim that *all* properties are individuated by the powers they bestow than the claim that there is a class of properties (the “natural” properties, perhaps) that *are* individuated in that way, and that truth isn't one because truth does not bestow causal powers on representations. As I argue below, causal-historical properties do not bestow causal powers either, and that makes them bad candidates to qualify as “causal-explanatory properties.”

<sup>xiii</sup> For functionalism, see Lynch (2004).

<sup>xiv</sup> Of course, it is available only if the explanation does not ultimately depend on the view that systems where the pertinences coincide were selected for in virtue of causal correspondence to the world. But such a view is unnecessary. Critters that do what is effectively pertinent have a fitness advantage over critters that do not; they are selected for *doing what is effectively pertinent*. But critters will do what is psychologically pertinent, by definition. That means selection for doing what is effectively pertinent is *automatically* selection for the coincidence of psychological and effective pertinence, independent of any putative content-constituting causal connections.

<sup>xv</sup> One might even take Leeds' (1995) proposal as a PM explanation. If Leeds' point is that psychological and effective pertinence coincide because (a) the contents of our mental states are interpretation-dependent and (b) the interpretation we standardly use assigns contents in such a way that the two sorts of pertinence coincide by design, then once more the solution to Kitcher's mystery is not to be found in the nature of truth but in the nature of our mental states and our practices of mentalistic explanation.

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