

Penultimate Draft.

Final version appears in Jenny Pelletier and Magali Roques (eds.), *The Language of Thought in Late Medieval Philosophy. Essays in Honour of Claude Panaccio* (Springer, 2017).

Causation and Mental Content: Against the Externalist Reading of Ockham

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On the dominant interpretation, Ockham is an externalist about mental content. This reading is founded principally on his theory of intuitive cognition. Intuitive cognition plays a foundational role in Ockham's account of concept formation and judgment, and Ockham insists that the content of intuitive states is determined by the causal relations such states bear to their objects. The aim of this chapter is to challenge the externalist interpretation by situating Ockham's account of intuitive cognition vis-à-vis his broader account of efficient causation. While there can be no doubt that intuitive states are causally individuated, I argue that, given Ockham's broader theory of efficient causation, this very fact entails that the content of such states is determined by factors internal (rather than external) to the states themselves.

Ockham is an externalist about mental content. Or so the majority of his commentators believe.¹ Indeed, Ockham is often compared to contemporary externalists such as Hilary Putnam and Tyler Burge on the grounds that, like these thinkers, Ockham takes the content of a subject's mental states to be determined by factors external to those states and to the subject herself. The case for Ockham's externalism is founded principally on his theory of intuitive cognition. And this for good reason: not only does intuitive cognition play a foundational role in Ockham's broader account of concept formation and judgment, but Ockham explicitly and repeatedly claims that the content of intuitive states is a function of the (efficient) causal relations such states bear to their worldly objects. But if the content of intuitive states is determined by their causal connection to entities in the external environment, and if the content of other mental states is determined by their causal connection to intuitive cognitions, then Ockham is an externalist about mental content.

Although this reading of Ockham is deeply entrenched in the literature, and staunchly defended by Ockham's leading commentators, I think it is mistaken. The aim of this paper is to challenge the externalist reading of Ockham by situating his account of intuitive cognition vis-à-vis his theory efficient causation. I argue that, properly understood, Ockham's reductionist account of causation tells decisively against the externalist reading of intuitive cognition. There can be no doubt that he holds that intuitive states are individuated by their causal connection to external objects. Yet, given his theory of efficient causation, this very fact guarantees that their content will be determined by factors that are internal (rather than external) to the states themselves. If

¹ Some of the earliest statements of this sort of interpretation are found in Normore (1990, 2003), but its leading champion is Claude Panaccio, who has done more than any other to develop, defend, and systematically incorporate the externalist reading into a broader interpretation of Ockham's philosophy of mind. See, for example, Panaccio (2005, 2010, 2014, 2015). Other notable discussions, elaborations, and defenses of the externalist reading can be found in King (2005, 2007, 2015); Schierbaum (2010, 2014); Klima (2015); and Choi (2016). While the foregoing list represents explicit treatments of externalist themes in Ockham, the externalist interpretation echoes pervasively in the literature. Indeed, it is often merely taken for granted by scholars writing on any aspect of Ockham's philosophy of mind.

I'm right about this, the fact that Ockham appeals to causation to explain the intentionality of intuitive states is no evidence of externalism about their content. And if Ockham is not an externalist about *intuitive* content, there is little reason to think he is an externalist about mental content in general.

The chapter divides into three parts. In Section 1, I begin with necessary preliminaries: a review of Ockham's account of intuitive cognition and of the motivations for the externalist reading. In Section 2, I consider an apparent counterexample to the externalist reading, namely, the fact that Ockham is willing to allow that God can cause an intuitive cognition of something that does not exist. It turns out that the implication of such cases is complicated by the fact that Ockham appeals to relations of counterfactual causal dependence to explain the intentionality of supernaturally induced states. I argue, however, that latent in Ockham's treatment of the supernatural cases is a certain thesis about the nature of causal dependence—one that emerges more explicitly in connection with his account of efficient causation. In Section 3, therefore, I turn to his account of causation, focusing in particular on his reductionism about action. Here, I show that Ockham's reductionist account of action requires him to explain all causal dependence (including counterfactual causal dependence) in terms of factors internal to the effect produced by a given agent.

1 Preliminaries: Intuitive Cognition and the Case for the Externalist Reading

Ockham divides mental (i.e., intellective) states into two broad categories: those that are propositional in content and those that are not.² The former category includes propositional attitudes such as belief and knowledge. The latter category is divided into two further sub-categories: intuitive cognition and abstractive cognition.

Like any good Aristotelian, Ockham holds that our concepts and our knowledge derive ultimately from sense experience—that is, from our direct cognitive contact with the world around us. On Ockham's way of telling the story, intuitive cognition is the foundation of this process. According to him, intuitive cognition is a type of cognition by which we have direct access to objects in our environment and by which we form beliefs about their existence and observable properties.³ Indeed, Ockham defines intuitive cognition precisely in terms of the role it plays in the formation of such beliefs. An intuitive cognition of a given object is such that it automatically gives rise to and immediately justifies beliefs about that object's current existence as well as its contingent, sensible characteristics.⁴ By contrast, any non-propositional state that does not occasion or ground these sorts of beliefs counts, in Ockham's scheme, as abstractive. States such as memory, imagination, and general concepts are all types of abstractive cognition.

As Ockham sees it, the complex causal process that eventuates in our possession of general abstract concepts and knowledge is one that begins with sensory and intellective intuitive cognition (*Quodl.* I, q. 13, OTh IX, 73). The basic picture is this: when I am in sufficient proximity to some worldly object—my dog, Imogen, say—that object will

² Cf. *Ord. Prol.*, q. 1, OTh II, 49.

³ Ockham thinks one can also intuitively cognize one's own mental states. I have discussed this feature of his account elsewhere. See Brower-Toland (2012) and Brower-Toland (2014).

⁴ See Ockham's discussion at *Ord. Prol.*, q. 1, OTh I, 31ff.

cause an act of sensory intuition, say, an act of seeing this dog. The sensory intuition and the object itself (the act of seeing, and Imogen, in this case) jointly cause a further intuitive act, an *intellective* intuition of Imogen. This intellective intuitive cognition, in turn, causes a number of further intellective states including not only various perceptual beliefs about Imogen, but also several abstractive cognitions.⁵ For example, on the basis of this encounter with Imogen, I abstract the species concept, DOG, and perhaps (if I have encountered other species of animal as well) the more general concept, ANIMAL. Consequent on all this, is the formation of certain dispositional states (or “habits”) the possession of which allows me to reactivate the content of these states even when no animal is present. Such dispositions constitute a kind of intellective memory.

Thus, all cognitive activity originates in intuitive cognition of singular objects in our immediate environment. Indeed, intuitive states are such that they are always about or directed at a singular object. As Ockham explains: “the intellect, when intuitively apprehending a singular thing, forms in itself one intuitive cognition, which is a cognition of this singular thing alone” (*QP* q. 7, *Oph* VI, 411). In this respect, intuitive cognition in Ockham’s scheme constitutes a kind of *de re* thought. In order to explain the intentionality of such states—and, in particular, to distinguish them from other states whose content is general—Ockham appeals to causality. On his view, the content of a given intuitive state is fixed by its causal connection to a given individual object. The following passage is perfectly representative of the way he standardly speaks about intuitive content:

[1] I say that an intuitive cognition is a cognition proper to a singular thing not on account of a greater likeness to one thing rather than to another, but because it is naturally caused by only one and not by the other; nor can it be caused by the other. ... Hence, it is not because of likeness that an intuitive cognition (rather than a first abstractive cognition) is said to be a cognition that is proper to a singular thing. Rather it is only on account of causality; no other reason can be given (*Quodl.* I, q. 13, *OTh* IX, 76).⁶

The contrast Ockham is drawing here is between abstractive states, on the one hand, whose content is always general, and intuitive states, on the other. As this passage suggests, Ockham takes likeness to play a central role in determining the content of abstractive states, but not so in the case of intuitive states. After all, if the intentionality of a given mental state is a function of its being a likeness of what it represents, then its content will inevitably be general since, at least, in principle, it is capable of representing any number of relevantly similar entities.⁷ For the same reason, Ockham denies that the intentionality of intuitive states can be explained in this way. Instead, he insists that the content of an intuitive state is determined by its causal dependence on its individual worldly object.

It is here that the externalist reading of Ockham gets its foothold. Given the role that Ockham gives to (efficient) causation in intuitive cognition, it is an easy step to the

⁵ Panaccio (2014, 62ff) offers a fuller treatment of the various connections between intuition and other mental states.

⁶ I adopt, with slight modifications, Freddoso and Kelly’s translation of passages from the *Quodlibetal Questions* (Ockham 1991). All other translations of Latin texts are my own.

⁷ Ockham himself calls attention to this result: “No simple abstractive cognition is more a likeness of one singular thing than of another maximally similar to it. ... Therefore, no such act is proper to a singular, rather every [abstractive act] whatsoever is general.” (*Quodl.* I, q. 13, *OTh* IX, 76).

conclusion that he is committed to a causal externalist account of their content. Indeed, the externalist interpretation is motivated largely by Ockham's claim that the content of intuition is determined not by likeness, but by causality. This is precisely the rationale offered by Claude Panaccio, the leading proponent of the externalist interpretation: "the externalist reading of Ockham's theory of intuitive cognition entirely rests on his repeated insistence that what fixes the object of a given intuitive act is not similitude but causality" (Panaccio 2010, 242). And this makes sense. If the content an intuitive state is determined by its causal connection to its object, it is natural to conclude that its content is not a feature internal to the intuitive state. But, as another commentator, Peter King, aptly puts it: "This is externalism: what a given act of thinking is about depends solely on its cause, which is a matter of the external world rather than any 'internal' mental feature" (King 2015, 120).

In addition to Ockham's appeal to causality, the externalist interpretation gains further traction from a certain thought experiment Ockham develops in connection with a discussion about angelic mind reading. The case Ockham envisions is one in which one angel—Gabriel, let's say—is looking into the mind of another angel—Michael—who is intuitively cognizing some individual object. In such a case, can Gabriel determine the content of Michael's intuitive cognition just by inspecting what's in Michael's mind? Ockham says no: "One [angel] who intuitively sees an act of cognition of some singular [in another's mind] does not, nevertheless, intuitively see the singular thing itself" (*Rep.* II, q. 15, OTh V, 378-9). One natural explanation for why Gabriel cannot determine the content of Michael's intuition is that, on Ockham's view, the content of an intuitive act "ain't in the head" as it were.⁸ In any case, Ockham's remarks in this context, especially when taken in conjunction with his with emphasis on the role of causality in intuition, make the causal externalist reading of intuition tempting to say the least.

Given that abstractive states and perceptual beliefs are causally connected to prior acts of intuition, it is plausible to suppose that the content of the latter states is likewise fixed, at least in part, by the intuitive cognitions on which they depend. Thus, if the content of intuitive states is causally individuated, concepts and judgments formed on the basis of them will be too.⁹ In short, it is not hard to see why the externalist interpretation of Ockham's account of intuitive cognition has come to form the basis of an externalist reading of his theory of mental content generally

2 Against the Externalist Reading I: The Supernatural Cases

In nearly every context in which Ockham discusses intuitive cognition he acknowledges, at least implicitly, the possibility of supernaturally caused intuitive cognitions. This is possible, Ockham insists, given that "every effect that God can produce by means of a secondary cause he can produce directly on his own". And, since "God can produce any sensory intuitive cognition by means of an object; he can produce it directly on his own"

⁸ Indeed, this just the conclusion Panaccio (2015, 174) draws from this passage (and others like it).

⁹ Commentators go one of two ways in their account of the individuation of concepts: either they claim that causality alone determines the content of our general concepts (Normore 1990, 2003; King 2005, 2007, 2015) or they suppose that both causation and similitude play a role (Panaccio 2004, 2010, 2015; Schierbaum 2010). More recently, Normore has changed his mind about abstractive states; he now seems to think only intuitive states are externally individuated. For details, see Normore (2010).

(*Quodl.* VI, q. 6, OTh IX, 604-605). Thus, even if in the natural course of things intuitive states are only ever brought about by causal interaction with objects in the environment, such states could be supernaturally induced as well. As Ockham explains:

- [2] If [intuitive cognition] is naturally caused, then it cannot exist unless the object exists and is present in the required proximity. ... If, however, it is supernaturally caused—say, if God were to cause in me an intuitive cognition of some object existing in Rome—immediately, upon the possession of an intuitive cognition of it, I could judge that what I intuit and see exists, just as much as if I had the cognition naturally. ... Similarly, I can judge, by means of an intuitive cognition, that a thing does not exist when it does not. ... For instance, if God were to cause in me the intuitive cognition of some non-existent object and were to conserve that cognition in me, then, by means of that cognition, I could judge that the thing does not exist (*Rep.* II, qq. 12-13, OTh V, 258-260).

In this passage Ockham considers two ways in which God could act so as to cause an intuitive cognition of some object. In the first case, God causes an intuitive cognition of an object that exists—but not in the cognizer’s immediate environment (because, say, it’s in Rome). In such a case, Ockham thinks the cognizer will, nevertheless, still form true beliefs about the object despite lacking any actual causal contact with it. In the second case, God causes an intuitive cognition of an object that does not exist at all. And, here too, he thinks the cognizer will form a true belief about that object: namely, that it doesn’t exist.

Whatever else is to be said about such cases (which are, on their own, deeply puzzling), their significance for the externalist interpretation of Ockham seems clear. Indeed, as I have argued elsewhere, they appear to constitute a straightforward counter-example to any causal externalist reading of intuitive cognition (Brower-Toland 2007). Ockham is essentially admitting that for any naturally caused intuitive cognition, *that very state* could be caused by God alone.¹⁰ In principle, then, any intuitive state we have naturally, that is, *via* actual causal interactions with objects existing in the world around us, could be had in a world in which those objects do not exist. But, to countenance such a possibility appears tantamount to denying an externalist account of the content of such states. After all, if an intuitive cognition can be about a given object *regardless* of whether that object exists, then the content of such states is not essentially dependent on their worldly objects, much less on being caused by them.

However, the argument from the possibility of supernaturally caused intuition to the falsity of the causal externalist reading turns out to be more complicated than the foregoing would suggest. This is because, as commentators are keen to point out, *in the very contexts* in which Ockham admits the possibility of supernaturally caused intuitions

¹⁰ This is a point that I think Philip Choi (2016) fails to appreciate in his recent article defending a kind of two-factor interpretation of Ockham’s theory of intuitive cognition. Choi (responding to my own earlier paper) is willing to concede that intuitive states are at least partly individuated by appeal to some internal feature of the state itself. However, Choi also wants to insist that intuitive states are, nonetheless, object-dependent. Hence, he claims that “there is an essential difference between the content of a natural, veridical intuitive cognition and that of a supernaturally produced intuitive cognition” (Choi 2016, 8). But his interpretation violates the very principle that motivates Ockham’s entire discussion of supernaturally caused intuitions—namely that every effect that God can bring about via a secondary cause he can bring about directly on his own. Ockham’s insistence on of this principle is both explicit and unrelenting. For an illuminating discussion of this issue in Ockham’s philosophy see Keele (2007).

he continues to insist that their intentionality is a function of a kind of causal dependence on their individual objects. Consider, for example, his remarks in the following passage:

- [3] You may claim that [an intuitive cognition] can be caused by God alone, and I admit that this is true. But such a vision is always naturally suited to be caused by one object and not by another; and if it is naturally caused, it can be caused only by one object and not by another. Hence, it is not because of likeness that an intuitive cognition ... is said to be a cognition that is proper to a singular thing. Rather it is only on account of causality; no other reason can be given (*Quodl.* I, q. 13, OTh IX, 76).

And, again:

- [4] You may say that God can directly and totally cause an intention, and in that case...causality does not produce an intention [which is] of one thing but not of another. After all, it is directly caused by nothing other than God. To this, I reply that any intention of a creature that is caused by God [is such that it] *could be* (partly) caused by a creature, even if, in fact, it is not so caused. Therefore, the intention cognizes that singular thing by which it *would be* determinately caused if it were caused by a creature (*Rep.* II, qq. 12-13, OTh V, 289).

In these (and other) texts, Ockham maintains that even when intuitive cognitions are not actually caused by the singular objects to which they are directed, nevertheless, these states are such that if they *had been* caused naturally, they would have been caused by the objects at which they are directed. Indeed, even in cases where the intuition is of a non-existent object, Ockham still invokes broadly causal notions to explain why the intuition is “proper to” (i.e., is *of* or *about*) one thing and not any other. These sorts of remarks suggest that Ockham thinks that even supernaturally produced intuitions still involve some kind of causal dependence on their individual objects.

In light of such remarks, therefore, it’s less clear that the supernatural cases do count against the causal externalist reading. The externalist interpreter is likely to think that such passages needn’t be taken as undermining the claim that the relationship between an intuition and its object is determined by external factors. It just turns out that the story about how such factors are fixed is more complicated than initially supposed. To my knowledge, only one commentator, Claude Panaccio, has attempted to spell out this story in any detail.¹¹ Panaccio claims that what the supernatural cases show is that God himself must be taken to play a role in securing the relevant causal connections such that where an effect is miraculously produced, it remains the case that had God not intervened that effect would have been produced by a particular created agent.¹² Thus, even in cases of divinely caused intuitive cognition, the intuitive state still stands in a relation of causal dependence (albeit a counterfactual one) on the object that is its *natural* cause. And since this relation is determined by divine decree, its content cannot be regarded as internal to it. In cases where the object of the intuitive state does not actually exist, it will be a merely possible object that serves as the *relatum* of the relevant counterfactual relation.

¹¹ In his 2010 paper, Panaccio directly addresses the challenge I had issued in Brower-Toland (2007).

¹² More precisely, Panaccio (2010) argues that these relations of counterfactual causal dependence are a result of a pre-ordained divine ordering of causes and effects. On Panaccio’s reading, God, as part of his creative activity, sets things up so that for each naturally producible thing “there is only one individual thing—or one possible individual thing—that is its possible cause *in this natural ordering*” (250). What this means, then, is that “what in general uniquely fixes what the singular cause of a thing is, is not an internal feature of the thing itself, but something else: namely, the natural order as designed by God.” (250)

The plausibility of this more complicated story depends crucially on two things: a certain understanding of Ockham's views about *possibilia* (namely, that his ontology includes such entities) and a certain understanding of his views about what grounds relations of counterfactual causal dependence. On my view, the weight of the textual evidence suggests that Ockham denies that there are *possibilia*. But I won't insist on the point here.¹³ It is no easy matter to settle this broader interpretive issue decisively nor, for my purposes, is it necessary to do so.¹⁴ It will be sufficient to focus instead on Ockham's views about counterfactual causal dependence. Once we appreciate implications of his appeal to such dependence we will be in a position to see why, regardless of his stance on *possibilia*, such cases clearly do tell against any externalist interpretation.

To fully understand Ockham's claims about the counterfactual dependence of intuitive states on their objects, we need to consider them in the context of his broader theory of (efficient) causation. It is, therefore, to his account of causation that I propose to turn next. Before doing so, however, I want to call attention to one final, and particularly salient, feature of Ockham's characterization of supernaturally caused intuitive states. For, what Ockham says about such cases already hints at the thesis I want to defend in connection with his account of efficient causation: namely, that the relation of dependence a given effect bears to its cause is determined by features internal to the effect itself. If this is right, Ockham's appeal to causality as what determines intuitive content is perfectly consistent with his being an internalist about such content. Indeed, it would seem to require it.

Consider again Ockham's remarks in passage 3 above. There Ockham tells us that while an intuitive cognition *can* be caused by God alone (who, even in ordinary cases, acts alongside the natural cause in producing them), even in such a case that cognition will be such that it is, nonetheless, "naturally suited" to be caused by one and only one created thing. The suggestion is that the intuitive state is *by its own nature* disposed to be caused by a particular created thing, namely, the entity that serves as its object. Indeed, it cannot be caused by any other created thing. And this, in turn, suggests that there is a kind of natural disposition internal to the intuitive state itself that determines its causal dependence on its object. While talk of such a disposition might seem strange, it is no mere slip on Ockham's part. He regularly speaks of intuitive states in this way. Consider another example:

- [5] It is evident that this an intuitive cognition is proper to one singular thing since it is immediately caused (or is apt by nature to be caused) by it, and it is not by nature apt to be caused by any other singular thing, even one of the same species. (*Quodl.* I, q. 13, OTh IX, 73)

¹³ To take just one example, consider the following passage from *SL* I, c. 38, "Being is divided into being in potentiality and being in actuality. This should not be understood to mean that something that can exist, but does not actually exist, is truly a being, or that something other than what actually exists is also a being." (OPh I, 108). What is more, Ockham has straightforward theological reasons for denying existence to *possibilia*. According to Ockham, God is the only being that exists necessarily—everything else is both created and contingent. This is likely why Ockham claims that all uncreated creatures (i.e., *possibilia*) exist only "in their cause" (namely, in God). See *Ord.* d. 36, q. 1, OTh IV, 550.

¹⁴ Ockham's stance on the ontological status of *possibilia* is a matter of some controversy. Some scholars deny commitment to such entities on Ockham's part (e.g., Adams 1990, Freddoso 1980), others (e.g., Panaccio 1999, Spade 1999, McGrade 1985, Karger 1980) have argued that his semantics requires their postulation. But this is a contentious reading of his semantics. Calvin Normore (2012, 91-95), for example, argues against it.

Again, the implication is that intuitive states have a kind of intrinsic, natural disposition with respect to the entity that serves as its object—a disposition that makes it “apt by nature” to *be caused by it* and it alone. And it is precisely this disposition to which Ockham appeals in the supernatural cases. In cases where God produces an intuitive state directly, that state nevertheless retains the natural disposition to be caused by its object.

Interestingly, in these same contexts Ockham suggests that this way of understanding the relationship between intuitive states and their natural causes is just a particular instance of a broader thesis about the way any effect relates to its natural cause. Consider, for example, his remarks in the following passage (which occurs just prior to—and helps set the stage for—the discussion of supernaturally produced intuitive states in passage 4 above). Here, Ockham is explaining the role causality plays in determining the intentionality of intuitive states:

- [6] Likeness is not the only explanation for why one thinks about one thing and not another. This can be shown with an example, for likeness is univocal with respect to cognizability and causation. A univocal cause causes by likeness and is, therefore, univocal because the effect is similar to it. Nevertheless, [an effect] is not determinately produced by one univocal cause rather than another on account of it being similar [to the one and not the other]. After all, if we suppose there are two heats of equal intensity and one produces a third heat, this third is as similar to the one as to the other—and equally to each. Yet, only one produces it. Therefore, similarity is not the reason why one causes it and the other does not. So too in the case at hand. For while the intellect ...can determinately cognize one thing and not another, this is not on account of similarity. Rather the reason is this that *every naturally producible effect, on the basis of its nature, determines for itself that it is efficiently produced by one cause and not by another*, just as it determines for itself that it is produced in one matter and not in another. [...] And so it is the same in the case at hand. Although an intention (or a species if posited) is equally similar to many individuals, nevertheless, from its nature it determines for itself that it leads the intellect to cognition of that object by which it is (partially) caused.¹⁵ This is because it [namely, the intuitive state] determines for itself that it is caused by that object and, as a result, no other object can cause it (*Rep.* II, qq. 12-13, OTh V, 287-9).

Ockham’s overarching aim is to show why (contrary to the view of many of his contemporaries) similitude is not sufficient to explain how we manage to think about particular objects in the world around us. To make his case, he compares the role similarity plays in cognition, on the one hand, and in causation, on the other. It is his remarks about causation, however, that are particularly interesting. He begins by pointing out that even in cases of univocal causation—that is, cases where an effect is similar to its cause in sharing its specific nature—likeness cannot explain why a given cause produces a given effect. Instead, he appeals to an effect’s natural, dispositional causal dependence on a given entity as its cause. By way of illustration, he considers a case in which two maximally similar instances of heat (two fires, say) are equally proximate to a given patient (a piece of wood, say). Each of the two flames is capable of causing a third instance of heat (a third fire) in the wood. But Ockham wants to resist the idea that the fire produced in the patient was over-determined: “only one [of the fires] produces it”. To

¹⁵ Ockham refers here (and elsewhere) to the natural cause a ‘partial’ cause merely to signal the fact that even when a given creature functions as the *complete natural* cause, it nonetheless does not produce its effect without God’s concurrence.

explain how this is possible, Ockham appeals to the following principle: “every naturally producible effect, on the basis of its nature, determines for itself that it is efficiently produced by one cause and not by another.”¹⁶ That is to say, every effect is such that, *on the basis of its nature*, it can have only one thing—only one individual—as its natural cause.

On its face, this is an odd claim to make. Ockham appears to think not only that efficient causation is an internal relation between individual causes and individual effects, but also that this relation is grounded in a natural disposition of the effect itself. Indeed, it is (as I suggested earlier) this latter dispositional feature to which Ockham appeals to explain the counterfactual causal dependence of effects on their natural causes in cases where God acts miraculously to produce the effects in question.¹⁷ What I want to show now is that these claims about the relationship between cause and effect, while perhaps initially odd, are nonetheless well motivated within the context of Ockham’s broader theory of efficient causation.

3 Against the Externalist Reading II: Reductionism about Efficient Causation

Medieval Aristotelians frame their theorizing about efficient causation within a substance-accident ontology. Given this framework, the entities that figure as the *relata* for causation are not events, but substances or accidents. Thus, paradigmatic cases of efficient causation involve one or more substances acting on another substance so as to produce some effect or change in it—where the effect is, typically, some accidental form in the entity undergoing the change. To take our earlier example: if a bit of wood is brought near a fire, the fire will act on the wood so as to produce heat in it. In standard terminology, the fire is the causal “agent” and its producing or causing heat its ‘action’; wood serves as the ‘patient’ on which the fire acts, and the accidental form of heat is the produced effect or ‘motion’. Now, on the Aristotelian model, the causal interaction between agent and patient is to be explained in terms of the respective causal powers or dispositions inherent in each. Thus, the fact that fire causes the wood to heat is explained both by the active powers that belong to any instance of the natural kind fire (in this case, a power for heating), and the passive powers inherent in any instance of wood (in this case, a capacity for being heated).¹⁸

Within this basic framework for thinking about causation, a number of issues were widely disputed. One of the most controversial issues has to do with the nature and proper analysis of the agent’s action.¹⁹ In general, it was taken for granted that causation

¹⁶ The Latin reads: “sed causa est quia omnis effectus naturaliter producibilis ex natura sua determinat sibi quod producat ab una causa efficiente et non ab alia”.

¹⁷ This is precisely the point Ockham goes on to make just after passage 6. Thus, he goes on to argue (and this is from the text cited above as passage 4): “any intention of a creature that is caused by God [is such that it] *could be* (partially) caused by a creature, even if, in fact, it is not so caused” (*Rep.* II, qq. 12-13, OTh V, 289).

¹⁸ For an overview of Ockham’s views on causation that pays special attention to the role of active and passive powers, see Robert (2002).

¹⁹ For example, scholastics disagree about whether action and passion are entities that belong only to the patient, and if so whether they are to be identified with one and the same entity in the patient. With regard to the latter question, for example, Scotus argues (against the standard view, which takes both action and passion as an entity that exists in the patient) that action exists in the agent and passion in the patient. For a

was to be understood in terms of the agent's acting on the patient. But how is such action itself to be explained? In particular, must the action be regarded something distinct from and additional to the substance that acts and the effect produced in the patient? Or is it possible to somehow reduce the action to agent, patient, and produced effect?

It will, perhaps, come as no surprise that Ockham favors a reductionist account. On his view, facts about causation can be explained in terms of agents, patients, and the form or effect produced in the patient. He recognizes, of course, that standard Aristotelian analyses of efficient causal situations make reference to the "action" of agents, but he insists that this way of speaking is merely a way of representing certain facts about the effect, namely, its causal, or existential dependence on the agent.²⁰

- [7] When the Philosopher says that "action is the act of the agent" he takes "action" for that effect that is made and produced [in the patient]. That the act and the thing produced is the action *of the agent* owes to the fact that it is in the patient *from* the agent (*QP* q. 25, *OTh* VI, 462).

According to Ockham, the agent's action is identical to the form produced in the patient. Thus, for example, when we refer to the heat in the wood as the agent's action, we are signaling the fact that that heat is, as Ockham puts it here, "from the agent". We are, in other words, signaling that the heat is *causally dependent* on that agent. But this causal connection, namely, the agent's *action*—its production of the heat—is not distinct from the heat produced.

Ockham's reductionism about causation in general and action in particular is part of his broader reductionist approach to Aristotle's categories.²¹ As is well known, Ockham reduces all categorical entities to individuals falling in the Aristotelian categories of Substance and Quality. Thus, Ockham holds that facts about action can be explained in terms of entities falling in just these two categories. Ockham offers various arguments in various contexts for his reductionist account of action, but here it will suffice to call attention to just one—an argument from considerations of parsimony. According to Ockham, actions, understood as entities distinct from agents, patients, and their effects, are explanatorily superfluous. All truths about efficient causation, including predications involving the attribution of an action to some agent, can be explained in terms of individual substances and their qualities. Here's Ockham:

- [8] When a proposition is made true by things, if three things are sufficient for its truth, it is not necessary to posit a fourth. But the proposition 'the fire is acting on the water' is made true by things, and [the following three things] are, in the absence of any mediating relations,

brief summary of Scotus's views on this score see Nielsen (2011, 381-382). But even among those who agree that action and passion exist in the patient, some resist the claim that they are to be identified with one and the same entity. Thus, Peter Auriol, for example, agrees that action and passion are both to be identified with something in the patient, but he resists the claim that they refer to one and the same entity. See Nielsen (2011), Amerini (2014, 523-524), Frost (forthcoming), and Löwe (forthcoming).

²⁰ Here, I focus only on Ockham's account of action, but he employs the same strategy in explaining the Aristotelian notion of passion. Thus, while "action" and "passion" are conceptually distinct, he insists that these expressions refer to one and the same entity: the effect in the patient. See his discussion at *Summula* III, c. 28, *Oph* VI, 333-334.

²¹ Although Ockham's reductionism about the categories has been the subject of much study, I know of no single treatment of his reductionism about action. For a survey of the broader reductionist program, however, see Adams (1987, cc. 5-7) and Klima (1999).

sufficient for its truth: (i) the fire, (ii) the water, and (iii) the heat, which, in the presence of the fire, is produced in the water in such a way that had the fire not been present to the water, the heat would not have been naturally produced there. In such a case, the fire is truly said to be the agent, the water truly said to be the patient, and the heat is truly said to be an effect that has been produced. Nothing further [beyond the agent, patient, and effect] is required for the truth of such a proposition (*Quodl.* VII, q. 3, OTh IX, 710).

This time, Ockham's example involves a fire heating not wood, but some water. Ockham begins by considering the following proposition: 'the fire is acting on the water'. The issue, as Ockham frames it, is a question about the truthmakers for such a proposition: in particular, can we account for its truth without the introduction of some causal entity over and above the agent, patient, and effect—namely, the fire's *action*? Ockham takes it as obvious that if the existence of the fire, the water, and the quality of heat in the water are sufficient for the truth of this proposition, the postulation of anything further will be explanatorily otiose: "if three things are sufficient, it is not necessary to posit a fourth".²² But, as he goes on to insist, "nothing further [beyond the agent, patient, and effect] is required". And this is because the heat depends on the fire in such a way that it will naturally exist when *and only when* the fire exists (in requisite proximity to the heat's subject, namely the water). There is no need to appeal to some further entity that is the causal connection between the fire and heat: the fire's action of causing or producing heat just is the heat's existential dependence on the fire. Hence, Ockham's conclusion: the truth of any proposition of the form 'x is acting on y' requires only the existence of the cause and its effect in the patient.²³

This is, of course, a controversial conclusion. As Ockham is aware, non-reductionists will want to resist his sufficiency thesis—that is, the claim that the mere existence of an agent and an effect in the patient is sufficient to secure causal dependence between them. Indeed, Ockham develops his position partly in response to non-reductionists such as Duns Scotus, Peter Auriol, and Walter Chatton.²⁴ While such thinkers disagree about the proper analysis of entities falling in the category of action, they share in common the view that such entities are distinct from agent, patient, and its effect. In support of their position, non-reductionists often develop various counter-examples to the reductionist position—that is, they develop cases designed to demonstrate the need for something more than agents, patients, and effects to explain action or causation.²⁵ And here two types of counterexample are common. First, are cases of causal redundancy—that is, scenarios in which there are two potential agents, both independently capable of bringing about the effect in question.²⁶ Second, are cases of divine intervention in which God

²² Of course, as Ockham points out, these things only suffice on the assumption that the fire is "present to" the water, which apparently just means that it is in contact with, or relevant proximity to, it. But it is worth keeping in mind that Ockham doesn't regard relations as things, and hence doesn't take "presence" or proximity as fourth thing to be considered alongside the other three. For more on Ockham's theory of relations see Adams (1987, c. 7).

²³ In these cases, Ockham is also assuming that no impediment to the fire's action is present.

²⁴ Cf. n. 21 above. See Keele (2007) for a discussion of Ockham's debate with Walter Chatton over the status of causal relations.

²⁵ As the ensuing discussion makes clear, versions of both kinds of case can be found in Auriol. It may be, in fact, that presence of these cases in subsequent debates about action and causality owes something to his influence.

²⁶ Löwe (forthcoming) cites several instances of this kind of example in Auriol. Adam Wodeham (at d. 3, q. 2 of his *Lectura Secunda*) also mentions such cases, though not so much to defend non-reductionism as to

impedes the action of the natural agent, acting in its stead to bring about the very same effect.²⁷ In each of these cases, it looks like we need something more than mere agents, patients, and effects to explain why one thing is acting rather than another.

As an illustration of each of these two types of cases, consider the following passage from Peter Auriol (who substitutes talk of ‘mover, movable, and motion’ for ‘agent, patient, and action’):

[Case 1] If action and passion are not distinct from motion and are not true things with respect to their formal nature, then, supposing there is motion in some movable thing [and] supposing that there are two movers both in proximity to the movable thing, no reason could be assigned as to why it [namely, the action] would be more from one mover than from another. For it stands that the motion of such a movable object could flow from either of the movers... Therefore unless we grant that the motion has some connection more to one mover than to the other outside the intellect (especially since it arises from one and not the other, and since one mover acts on the moved thing and the other does not act) the intellect cannot connect motion with its proper and determinate mover.

[Case 2] Again, [...] it is clear that by divine power the very same motion and mover could exist without the mover’s action existing... For with a fire being near some combustible matter, God can suspend the activity of the fire preventing it from acting for some time, and he could produce the same motion that the fire would have produced in the combustible matter at that time [had God not suspended its activity]. And given this, the same mover, and the same motion would remain, with the action of the mover (and the motion being brought about by the mover) removed, which acting and being brought about nevertheless would have been produced if God had not suspended each. Therefore, it is necessary that the acting of the mover is something really distinct from the motion and the mover... (*Scriptum in I Sententiarum* d. 27.1.1, ed. Friedman, 10, ll. 392-415)²⁸

Let us consider each case in turn. In the first, there are two potential agents (“movers”) each equally close to a suitably disposed patient (“a movable thing”), but only one acts so as to produce the effect (the “motion”). Auriol’s contention is that since (a) the effect could be produced by either agent, and (b) there is nothing in the agents, patient, or effect that determines which of the two potential agents acts to produce the effect, it follows that (c) the existence of these alone (namely, agent, patient, effect) cannot account for the causal “connection” between the effect and the agent that in fact produces it. Hence, something further must be introduced, namely, the *action* of the efficient agent. In the second case, there is just one natural agent, in this case, fire, existing in near proximity to a disposed patient, some “combustible” matter—wood, say. Additionally, there is the fire’s natural effect, heat in the wood. And yet, as Auriol has designed the case, despite the existence of these three things the fire is not what causes the heat. For, by hypothesis, God intervenes to impede the fire’s acting on the wood and instead directly produces the effect that the fire would have caused had its action not been impeded. But if God can

call attention to some of the implications of positions held by non-reductionists. See Wodeham, *Lectura Secunda*.

²⁷ In addition to the example from Auriol cited just below (from his *Scriptum*), see also his *Quodlibet* q. 2, a. 1 (§ 2.3.3.1.1) a critical edition of which can be found as an appendix to Nielsen (2011). Walter Chatton also uses this sort of case explicitly against Ockham in his *Reportatio super Sententias* I d. 30, q. 1, a. 4, ed. Wey and Etkorn, 237. Discussion of this sort of example persists even in late-scholastic debates about action. As Jake Tuttle (2016) shows, Suárez relies on just this sort of case in defense of his non-reductionist account of action.

²⁸ Here I rely on Russell Friedman’s critical edition of this text available at <http://www.peterauriol.net>.

“remove” or block the fire’s action without destroying either the fire or the wood’s burning, it follows that “the acting...is something really distinct” from both.

Ockham is, as I have suggested, aware of such putative counterexamples to reductionism about action.²⁹ But his own account provides him resources for handling them. Indeed, we have already glimpsed the outlines of his strategy for responding to such cases. When it comes to scenarios of the first sort, for example, that is, cases of causal redundancy, Ockham simply denies that such cases are logically possible. To see why, recall that Ockham explicitly considers a case of just this sort in passage 6 above. In that same context he makes clear that there is no possibility of causal redundancy or overdetermination. The principle on which he relies in making such a claim is contained in that same passage. As he says there, “every naturally producible effect, on the basis of its nature, determines for itself that it is efficiently produced by one cause and not by another.” Clearly, then, Ockham is committed to rejecting a key premise on which Auriol’s first case depends, namely, that distinct agents can produce numerically one and the same effect. In fact, Ockham is quite explicit in his rejection of this claim.³⁰ “It is impossible,” he insists, “for there be two total natural causes with respect to the very same effect”.³¹ And this is because, as we can now see, on Ockham’s view, every individual effect is such that by its very nature it is disposed to be produced by one *and only one* natural cause.³² Hence, in any scenario where an effect exists together with that agent which can produce it, it will be true—regardless of how many other agents of the same type are present—that the effect is causally dependent on just that agent.³³

Note, however, that Ockham’s contention that no effect can have two distinct total causes is restricted just to natural, or secondary causes. After all, God acts, along with every secondary cause in the production of any created effect and can, by Ockham’s own admission, act alone to bring about any created effect. Given this, the second of the Auriol’s two cases is perfectly possible from Ockham’s point of view. Even so, he would deny that such a scenario serves as a counterexample to his sufficiency thesis. For, here too he restricts this thesis to cases of natural causation. Thus, he often qualifies his position by claiming: “*when there is no miracle, these things are sufficient*” (*Quodl.* I, q.

²⁹ Indeed, Ockham considers a case almost identical to Auriol’s case 2 at *Quodl.* VII, q. 3. Here, however, Ockham appears to be responding to Chatton, not Auriol.

³⁰ Despite the fact that Ockham makes this claim in a couple of different contexts, opponents apparently charged him with inconsistency on this point. In fact, the two main contexts in which he explicitly asserts that there cannot be two total causes of numerically one effect he notes that this claim might appear to run counter to things he has said elsewhere. But, then, he also goes on to attempt to explain away this apparent inconsistency. See for example his remarks in *Rep.* IV, q. 12, OTh VII, 249-50. See also *Rep.* II, qq. 12-13, OTh V, 288-289. Marilyn Adams (1987, 759-765) traces Ockham’s various remarks about total causes throughout his entire corpus.

³¹ *Rep.* IV, q. 12, OTh VII, 250. A total cause is, roughly, the entity (or entities) the existence of which is (in appropriate circumstances) sufficient for the existence of the effect. For Ockham’s more careful definition see *Summula* II, c.3, OPh VI, 219.

³² As Ockham puts it elsewhere: “it is necessary that an effect determine for itself one and not another agent of the same nature so that it can be produced by the one and not the other” *Rep.* II, qq. 12-13, OTh 5, 288-289.

³³ Or, if an effect is such that more than one agent can produce it, this is only, Ockham insists, because “it could not be from just one of them alone; and, as a result, with respect to *that effect* these agents are partial causes even if with respect to some other effects they could be total causes” *Rep.* IV, q. 12, OTh VII, 250.

5, OTh IX, 33).³⁴ What is more, Ockham also thinks that Auriol and other non-reductionists draw the wrong conclusion from the supernatural cases. As we've seen, Auriol takes it that since it is possible (at least by divine power) for a given effect (in this case, the heat in the wood) to exist without actually being caused by any natural agent (here, the fire), it follows that it cannot be part of the essential nature of the effect to be causally dependent on any particular fire. Hence, in the case of the wood's heat, its causal dependence on the fire must be something distinct, or separable, from it. Ockham, however, draws a rather different conclusion. While he agrees that such cases do show that it is not essential to an effect that it is *actually* caused by a given natural agent, nonetheless, the proper conclusion to draw from this is that it is essential to an effect to be *disposed* to be so caused. Thus, to return to Auriol's example, even if the heat in the wood is such that it can miraculously exist without *actually* being caused by the fire, nonetheless, it is by nature "apt" to be caused by the fire. And, given the presence of such an aptitude, it follows that if this instance of heat exists *naturally* it will necessarily be caused by the fire.

What Ockham says about the relation of effects to their natural causes, in light of the supernatural cases of causation, is interestingly similar to what medievals often say about the relation of accidents to their substance, in light of the doctrine of the Eucharist. For what the doctrine of Eucharist reveals about the nature of accidents is analogous to what Ockham thinks the supernatural cases of causation tell us about the nature of effects. In the case of accidents, what the theological case of the Eucharist shows is that *actual* inherence in a subject is not essential to the nature of any given accident. But, it does not follow from this that dependence on an individual subject is *no part* of the nature of accidents. Quite the contrary, the conclusion that scholastics standardly draw is that accidents are essentially such that by nature they are *apt* or *disposed* to depend on their subject. As a result, when they exist naturally, they are necessarily inherent in their subject. This is roughly what Ockham thinks the supernatural cases of causation teach us about the nature of an effect's dependence on its natural cause. Even if *actual* dependence on a given natural agent is no part of the essence of an effect, what is essential to it is a *disposition to depend* on that agent. And this is precisely why he thinks that a miraculously produced effect is, nevertheless, counterfactually causally dependent on its particular natural cause. After all, the disposition to be produced by that agent remains even when the effect exists (supernaturally) without being produced by it.

Thus, in defending and developing his reductionism about action Ockham is willing to concede to his non-reductionist opponent that a causal connection—that is, a certain sort of dependence—must exist between an effect and the agent that in fact causes it; but he denies that this dependence is something extrinsic to or separable from the effect itself. For Ockham, causal dependence is, as it were, built into the nature of the effect—it is an intrinsic, dispositional feature of it. Given this, it should be clear that Ockham's reductionism about action entails that efficient causation is, at least in the natural order,

³⁴ Although Ockham doesn't say this expressly in his discussion at *Quodl.* VII, q. 3 (where the sufficiency argument quoted in passage 9 occurs) he does, in that context, refer his reader to previous quodlibets in which he responds to supernatural counterexamples to the same sort of sufficiency argument—notably, *Quodl.* I, q. 5 and *Quodl.* VI, q. 12. In these latter two discussions, he does make clear that such arguments are restricted to cases in which God is not working a miracle.

an internal relation.³⁵ That is to say, on his view, all predications of action or of causal dependence are made true by intrinsic features of the *relata* of causal interactions. Now, in one respect, this result is not surprising since Ockham, like any Aristotelian—whether a reductionist or non-reductionist about action—holds that causal relations in general are necessitated by the reciprocal active and passive powers or dispositions intrinsic to a given causal agent and its patient. Thus, both Ockham and his opponents will agree that the existence of a given agent and patient (together with their respective powers and in adequate proximity) is sufficient for the production of an effect in that patient. What is distinctive about Ockham’s position, however, is that he adds to this basic picture a rather surprising claim about the intrinsic nature *of the effect produced*. Indeed, it is precisely because he takes the effect to be essentially such that it is naturally disposed to be produced by a particular agent (in a particular patient) that he sees no need to appeal to anything further to explain action.³⁶ In short, it is precisely his commitment to such a natural disposition that underlies his reductionism about efficient causation.

The implications of Ockham’s analysis of efficient causation for the externalist interpretation should, by now, be fairly clear. The fact that Ockham appeals to causation as determining the content of an intuitive state cannot, by itself, be viewed as any kind of evidence for thinking that such states are individuated by factors external to them or to their subject. On the contrary, when this appeal is understood in the context of Ockham’s views about causation, it suggests just the opposite. For in this context, to say that an intuitive state’s content is causally determined by its object is just to say that that state is naturally apt to be caused by that object. And since such a natural aptitude is part of the nature of the state in question, and can exist even when the state’s object does not exist (much less produce it), it is clear that its content is determined by factors internal, rather than external, to that state itself. In any case, in light of the foregoing, it should be clear that it simply is not true to say, as so many commentators have, that Ockham’s appeal to causality in determining the intentionality of intuitive states entails that their intentionality is not an internal feature of them.

4 Conclusion

It is not at all difficult to appreciate the initial motivation for the externalist interpretation of Ockham’s theory of intuitive cognition. Ockham’s distinctive and insistent reliance on causality to explain the singular content of intuitive states, together with the very suggestive thought experiment about angelic mind reading makes the externalist interpretation nearly irresistible. Indeed, it is this *prima facie* appeal that, I suspect, explains why so many have failed to appreciate the seriousness of the challenge posed by Ockham’s countenancing the possibility that God could cause intuition of a non-existent object. The appeal of the externalist interpretation together with Ockham’s reliance on

³⁵ For a contemporary defense of such a view see Heil (2016).

³⁶ Interestingly, Ockham takes it to be an implication of his position (one that he willingly embraces) that numerically one and the same effect can re-occur multiple times. For example, say a fire acts on a given bit of matter to produce heat in it. Then suppose the matter is removed from the fire, allowing the heat to dissipate completely. Ockham holds that were that same matter brought into proximity to the same fire, the same effect—that is, *the very heat that existed before*—would be produced again (resurrected, as it were). See *QP* q. 31, *Oph* VI, 473-476.

counterfactual causal dependence to explain the content of such intuitive cognitions, led many commentators to proceed as if there were ample dialectical space for an externalist gloss on intuition of non-existents.

The aim of this chapter, however, has been to show that, properly understood, the supernatural cases are decisive. Ockham's appeal to the counterfactual dependence of an intuitive state on its natural cause is motivated by his views about the nature of causal dependence in general. And, as we have now seen, Ockham holds that such dependence is grounded in certain essential dispositional features of the effect—features that would remain even when its natural or *de facto* cause does not exist, or at least does not produce it. It is precisely these dispositional features of the effect that the supernatural cases highlight. Even when a given effect—an intuitive cognition, say—is produced by God acting alone, it will by nature be such that it is counterfactually causally dependent on its natural cause. Properly understood, therefore, what the supernatural cases show is that the externalist interpretation of Ockham's theory of intuitive cognition is inconsistent with his own account of efficient causation.

Now if, as my argument entails, it is features internal to a given intuitive state that determine its intentionality, one might wonder what is to be said about the cases of angelic mind reading. Indeed, if my argument is correct, it might seem all the more puzzling that Ockham insists that Gabriel cannot, just by looking at Michael's intuitive states, determine what individuals Michael is thinking about. The case for the externalist interpretation cannot, of course, be made solely on the basis of Ockham's various remarks about angelic mind-reading, but still such remarks have seemed to many to provide compelling *ancillary* evidence for this interpretation. By way of conclusion, therefore, I want to gesture briefly at what I take the significance of such cases to be.

As with the cases of supernaturally caused intuitive states, it is important to situate the angelic mind-reading cases vis-à-vis Ockham's broader views about causation and, more specifically, his views about the nature of our knowledge of individual causal connections. When it comes to questions about how we arrive such knowledge, Ockham is adamant that it cannot be had directly via intuitive cognition of an individual effect, or even of the effect and its cause together. In fact, while Ockham allows that it is possible to have intuitive cognition of individuals as related in certain ways (or, more precisely, to have intuitive cognitions that give rise to evident judgments that they are so related), he steadfastly resists the idea that we can, via intuitive cognition, cognize individuals *as causally related*. Thus, even in cases where we intuitively cognize both of the *relata* of given instance of actual efficient causation—say, smoke and a nearby fire—we cannot evidently judge, *just on the basis of intuitive cognition*, that the one is the cause of the other.³⁷ It's not that Ockham is a skeptic when it comes our ability to know or recognize such connections; rather, it's just that he thinks such knowledge is always inferential in nature. On his view, we can only know that this fire causes this smoke on the basis of repeated observations of correlations between smoke and fire; given knowledge of such general correlations, we are then (and only then) in a position to judge about this smoke being caused by this fire.

³⁷ Indeed, Ockham insists, “even though there is a maximal, essential ordering and dependence between a cause and its effect, still a non-propositional cognitive grasp of the one does not include non-propositional grasp of the other thing.” *Ord. Prol.*, q. 9, OTh I, 241.

It is, I submit, Ockham's stance on the discursive or indirect nature of our knowledge of causal connections that motivates his claims about angelic mind-reading. Thus, even if Gabriel intuitively cognizes Michael's intuitive states, Gabriel can no more determine the objects of Michael's states than I can determine that this smoke is caused by this fire just via intuitive cognition of the smoke (or even of the smoke and fire together). Of course, Michael can, on Ockham's view, come to know the objects of Gabriel's thoughts; but such knowledge will require more than mere intuitive cognition of Gabriel's states, since it—like any knowledge of individual causal connections—will be discursive in nature. Indeed, this is precisely the justification that Ockham himself offers in nearly every case in which he discusses the angelic mind-reading cases.³⁸ Consider, for example, what he says here:

[10] He [the one angel] can know the object [of the other angel's thought]...*through reasoning*, in the way that a cause is known through its effect. For just as one who sees smoke without a fire reasons that such smoke was caused by a fire (since at other times he has seen smoke caused in the presence of fire) and so knows through the effect that fire is the cause, so too an angel who sees-such-and-such a cognition of an object in another angel knows that that cognition is caused by such-and-such an object, because at other times in the presence of the object he has seen that an exactly similar cognition is caused in himself or another (*Quodl.* I, q. 6, OTh IX, 40).

What this and other such passages make clear, then, is that the basic motivation for Ockham's claims about angelic mind reading is epistemic in nature. The fact that angel Gabriel cannot determine the object of Michael's mental states just by intuitively cognizing them does not entail that object of such states is not determined by their intrinsic nature; rather it entails only that angels, like humans, cannot acquire knowledge of individual causal connections merely on the basis of intuitively cognizing one or the other (or even both) of their *relata*.³⁹ While it may be surprising to discover that Ockham thinks angelic knowledge of causal relations is limited in much the same way that our own, human knowledge of them is, there can be little doubt that this is precisely the implication Ockham intends us to draw from the angelic mind reading cases.⁴⁰

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³⁸ Cf. *Rep.* II, q. 15, OTh V, 379.

³⁹ I'm not the only one to notice this sort of connection between Ockham's discussion of angelic mind reading and his broader theory of about the scope and limits of creaturely knowledge of causal connections. See Adams (1979, 29ff).

⁴⁰ Many thanks to Jeff Brower for helpful comments on earlier drafts of this chapter.

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