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Durand of St.-Pourçain and John Buridan on Species: Direct Realism with and without Representation

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INTRODUCTION

As we now know, most, if not all, philosophers in the High Middle Ages were direct realists about perception: the direct (or immediate) object of perception is the external object and not some image or representation of it in the mind. Yet most, but not all, philosophers in the High Middle Ages also held, following Aristotle, that perception is a process wherein the percipient takes on the likeness of the external object. This likeness, called a *species*, is a representation (of some sort) by means of which we perceive the external object. But how can perception be at once direct (or immediate) and at the same time mediated by a *species*?

The usual answer to this question was that the *species* represents an external object to some percipient even though the *species* is not itself perceived by that percipient; in a slogan, the *species* is that by which and not that which I perceive. John Buridan defends this answer. On his view, the direct (or immediate) object of perception is some external object and not a representation of it, and this despite the fact that direct perception is still mediated by an unperceived representation, called a *species*. Call this position *direct realism with representation*.

That Buridan defends direct realism with representation is not, I think, controversial. For instance, in QDA 2.10, he writes,

(1) Sensible *species* are related to the act of sensing as a necessary condition for the act of sensing, for we experience that there is no act of sensing in us unless the organ has received from the external sensible [quality] a representation of it, which we call a sensible *species*.¹

1. n. 21. See also *ibid.*, 3.15, n. 13: “Voco autem hic speciem intelligibilem <illa> quae mediante sensu sit in organo phantasiae vel cogitativae, vel in intellectu, sine qua intellectus non potest primo intelligere res sensatas vel phantasiatas, sicut sensus exterior non potest sentire sine specie causata ab obiecto in organo illius sensus. . . [N]ecessesse est illam speciem esse praeiviam . . . et illa species non est repraesentatio nisi sensuum vel phantasiarum, cum sit causata ab eis, nulla intellectione praeiviam.” Unless otherwise indicated, all references to

And in QDA 2.17, he writes,

(2) I assume that we sense qualities that exist outside of us and in external bodies as their subject, e.g. the color existing in the wall, the cold of the stone, the taste of the wine.²

Finally, in QDA 2.17 he writes,

(3) This *species* existing in the outer sense is not sensed by that sense. . . .³

A passage found only in the Lokert edition sums up Buridan's view:

The *species* of color, having been multiplied through the air, is spoken of as a spiritual form because it cannot be sensed and yet it represents to sense a sensible form.⁴

Hence, Buridan maintains direct realism with representation: (1) direct perception is mediated by a representation (called a *species*); (2) all the same what we perceive are external objects and (3) not the representation. What is more controversial is: why?

Indeed, as is also well known, a generation before Buridan, direct realism with representation had experienced a kind of revolt, with William of Ockham at Oxford and Durand of St.-Pourçain at Paris two notable representatives of this movement. Ockham and Durand defend what I will call *direct realism without representation*. On this view, a *species* is not at all necessary as a representation during overtly direct forms of perception.

This article is divided into two parts. In the first part, I will look at some of the more interesting arguments Durand and to a lesser extent Ockham make against direct realism with representation. In the second part, I will look at Buridan's defense of the view. But before this, I want to make four preliminary points.

1. It is important to recognize two roles often associated with *species*, for a *species* might perform a causal role or it might perform a representational

and quotations of Buridan (both English and Latin) will be from the forthcoming critical edition and translation. On occasion, I have silently modified the English translation. All references to and quotations from William of Ockham are from the Franciscan Institute multi-volume critical edition. For other authors, I have indicated the edition in the first citation of the work. All translations of authors other than Buridan are my own. I have silently modified the Latin orthography and punctuation.

2. n. 9. See also *ibid.*, n. 23; *ibid.*, 2.16, n. 16, 21; *ibid.*, 2.18, n. 61; and *ibid.*, 3.2, n. 13.

3. n. 15. See also *ibid.*, 2.9, n. 10; *ibid.*, 2.16, n. 8, 17; *ibid.*, 2.17, n. 16, 22.

4. QDAL 2.22 (Lokert ed., ed. Patar 1991), p. 625: "... species coloris multiplicata per aerem dicitur forma spiritualis ex eo quod est insensibilis et tamen sensui repraesentat formam sensibilem."

role (or it might perform both). In its causal role, the *species* causes, or contributes to the causation of, a perceptive act. In its representational role, the *species* somehow fixes the content of an act of perception: as a representation of *Y* and not *Z* the *species* makes the act of perceiving a perceiving of *Y* and not *Z*. These roles are independent, and arguments against *species* were often divided into those against its causal role and those against its representational role.⁵ In what follows, I want to focus on the representational role of a *species*: direct realists with representation maintain that the *species* is necessary as a representation (of some sort) of the external object; direct realists without representation reject this thesis.

2. Second, as might be obvious by this point, my focus is on direct acts of perception. More precisely, I will be interested in the five external senses, their associated acts (sensitive acts: smellings, hearings, tastings and so on) and objects (sensible qualities: smells, sounds, tastes and so on).⁶ Hence, I will be interested in the so-called sensible *species* and not the intelligible *species*.⁷ When we engage in an act of sensory perception, do we need to suppose that a sensible *species* mediates as a kind of representation? Direct realists with representation think that we do; direct realists without think that we do not.

3. Third, the position I have characterized as direct realism without representation is, in fact, compatible with a kind of direct realism with representation, namely the view that, although there are no *species* that mediate as representations, one can all the same treat the cognitive act itself as a kind

5. See, for instance, Durandus de Sancto Porciano *Sent. A* 2.3.5 (ed. Retucci 2012), p. 162: “Per quid autem praesentetur sensibile sensui et intelligibile intellectui, utrum per speciem vel per aliquid aliud, non dicetur modo, quia alias per intentionem agetur de hoc, sed hoc tantum ex dictis habeatur quod species non requiritur ut eliciens actum per se, sed solum ut repraesentans obiectum, si tamen umquam requiritur.” Guillelmus de Ockham *Rep.* 2.12–13, OTh 5, p. 272: “Item species non ponitur nisi propter assimilationem vel propter causationem intellectionis, vel propter repraesentationem obiecti, vel propter determinationem potentiae, vel propter unionem moventis et moti.” One might maintain that the *species* performs its representational role by performing its causal role. I call this view the causal theory of representation, and I discuss it below in §1.2.3.

6. For medieval authors, the objects of sensitive acts are sensible qualities, and these are real features of (inhering in) material objects in the world. Hence, when I use the term ‘object’ in what follows, I will mean sensible qualities of external objects. Whether cognition of external objects themselves is direct or indirect is a complication I wish to bracket here. As well, I wish to bracket the so-called internal sensitive powers and their objects (the so-called common sensibles).

7. In QDA 3.15 Buridan argues — based on Ockham’s razor — that the better view is one which identifies the intelligible *species* with an act on the side of an inner sensitive power rather than with an added quality in the intellect, since such an act can discharge the roles associated with an intelligible *species* (as cause and representation).

of representation. This seems to have been the view defended by Ockham and Godfrey of Fontaines (but not Durand).⁸ Hence, I will when necessary characterize Durand’s view as hard direct realism without representation and Ockham’s and Godfrey’s views as soft direct realism without representation. What is important is that all three authors agree that direct perception does not involve a *species* conceived of as a representation in addition to the perceptive act.⁹

4. Finally, it will be important to recognize right off the bat that Durand (unlike Ockham but like Buridan) defends the *species*-theory of optics, according to which one has good — non-psychological — reasons to suppose that there are *species* in the ‘medium’ (e.g. the air or water and also the watery bit of the eye). However, as Durand puts it, there is

no *species* in the eye whose job it is to represent a color to sight so that it may be seen, for although color does impress its *species* upon the medium and the organ on account of the fact that both have the same diaphanous character, nevertheless such a *species* does not cause the act of seeing, nor does it represent a color to sight so that it may be seen.¹⁰

1 DURAND’S CRITICISM

I think it is best to view Durand’s criticism of representational *species* as falling into two main lines of attack. First, Durand seems to think that there is a kind of burden on the view to show *that* there are representational *species*. Why should we postulate representational *species* in the first place? Second, Durand raises several worries about *how* such *species* work. Even if we accept *species*, how does the *species* represent what it is supposed to represent?¹¹

8. For Ockham, see Claude Panaccio, *Ockham on Concepts* (Aldershot: Ashgate Press, 2004), p. 15–16 and §1.2.3 below. For Godfrey, see Peter Hartman, “Are Cognitive Habits in the Intellect? Durand of St.-Pourain and Prosper de Reggio Emilia on Cognitive Habits,” in *Medieval Theories of Cognitive Habits*, ed. M. Roques and N. Faucher, Historical-Analytical Studies on Nature, Mind and Action (Springer, Forthcoming).

9. Buridan explicitly defends the claims that the sensible *species* is distinct from the act of sensory perception (QDA 2.10) and that the intellective act is distinct from the intelligible *species* (QDA 3.15).

10. *Sent. C* 2.3.6 (Venice 1571), n. 11, f. 139^{va} : “Et sic patet quod nulla species est in oculo ad repraesentandum visui colorem ut videatur, quamvis enim color imprimat in medio et in oculo suam speciem propter similem dispositionem diaphaneitatis quae est in eis, illa tamen nihil facit ad visionem, neque visui repraesentat colorem ut videatur.”

11. For a more detailed analysis of Durand’s criticism, see Peter Hartman, “Thomas Aquinas and Durand of St.-Pourain on Mental Representation,” *History of Philosophy*

1.1 WHY SHOULD WE POSTULATE REPRESENTATIONAL SPECIES?

One argument Durand raises against the idea that there are representational *species* is the following.

Everything through which a cognitive power is led to [a cognition of] something else as through a representation is cognized first. However, the *species* of a color in the eye is not cognized or seen by the eye first — in point of fact, it is not seen by it at all. Therefore, sight is not led to [a cognition of] something else through it as through a representation.¹²

Consider the statue of Hercules in the courtyard. In order for this statue to represent Hercules to Socrates, Socrates must look upon it first, for it is at least by looking at the statue that he *then* comes to think about Hercules. Durand seems to think that all representations work this way, from natural ones (smoke represents fire) to conventional ones (words) on up to very fancy ones like blueprints, weather maps, the pits on the surface of a CD-ROM and isomorphic inverted sets. No matter how a representation represents what it represents a representation must be cognized before one cognizes what is represented by it.¹³ Put another way, if X is a representation of Y to P , then, regardless of the story we tell in accounting for the ‘of’ relation, the story we tell in accounting for the ‘to’ relation will involve at least the fact that P somehow cognizes X . The rings on the stump of the tree represent the age of the tree, but in order for them to do so, I must look upon those rings first.¹⁴

Quarterly 30, no. 1 (2013).

12. *Sent. C* 2.3.6, n. 10₂, f. 139^{va}: “Omne illud per quod tamquam per repraesentativum potentia cognitiva fertur in alterum est primo cognitum; sed species coloris in oculo non est primo cognita seu visa ab ipso — immo nullo modo est visa ab eo; ergo per ipsam tamquam per repraesentativum visus non fertur in aliquid aliud.” For discussion of this argument, see Robert Pasnau, *Theories of Cognition in the Later Middle Ages* (Cambridge: Cambridge University Press, 1997), p. 16–17.

13. See *ibid.*: “Probatio maioris, quia quidquid se habet obiective ad potentiam cognitivam ut est cognitiva est ab ea cognoscibile seu cognitum; sed omne quod repraesentat aliquid potentiae cognitivae se habet ad eam obiective, supplet enim vicem rei quam repraesentat quae si secundum se praesens esset haberet se obiective ad potentiam cognitivam; ergo omne tale est cognoscibile vel cognitum, et cum ducat in cognitionem alterius est prius eo cognitum tempore vel natura.”

14. Indeed, I would submit that one of the more important ideas that Durand brings to the debate about representation in the Middle Ages is the idea that representation is a three-place and not a two-place relation. This feature has been overlooked in the numerous high-quality articles on the subject, where the focus is almost exclusively on the ‘of’ relation. See, for instance (and among many others) Peter King, “Rethinking

What I suspect Durand is up to with this argument is a kind of burden-of-proof argument. The direct realist with representation is committed to another class of representations — call them *special* as opposed to *ordinary* representations. A special representation, X , is capable of representing Y to P such that P thereby perceives Y even though P did not perceive X at all (much less beforehand). Now, we might well have our reasons for believing that there are such special representations. However, Durand’s point here is that special representations aren’t free. We must have and provide an argument in their defense. Hence, I call this *the burden-of-proof argument*: if Durand is right about our intuitions about ‘ordinary’ representations, then there is a burden to show *that* there are special representations.¹⁵

1.2 HOW DO SPECIES DO WHAT THEY DO?

Whereas Durand’s burden-of-proof argument focuses on the *why* question — why should we countenance special representations? — his second main line of attack focuses on a different question, a *how* question. Granted that there are such entities, can you please tell me how they work? Granted that the *species* of Y is not perceived at all, in virtue of what is the *species* of Y a representation of Y (as opposed to Z)? Put another way, granted that the ‘to’ relation is special, how can one account for the ‘of’ relation?¹⁶

Representation in the Middle Ages: A Vade-Mecum to Mediaeval Theories of Mental Representation,” in *Representation and Objects of Thought in Medieval Philosophy*, ed. Henrik Lagerlund (Aldershot: Ashgate, 2007), 81–100; Claude Panaccio, “Aquinas on Intellectual Representation,” in *Ancient and Medieval Theories of Intentionality*, ed. Dominik Perler (Leiden: E.J. Brill, 2001), 185–203; Claude Panaccio, “Mental Representation,” in *Cambridge History of Medieval Philosophy*, ed. Robert Pasnau, vol. 1 (Cambridge: Cambridge University Press, 2010), 346–56; Jeffrey Brower and Susan Brower-Toland, “Aquinas on Mental Representation: Concepts and Intentionality,” *The Philosophical Review* 117, no. 2 (2008): 193–243; Gyula Klima, “Tradition and Innovation in Medieval Theories of Mental Representation,” *Proceedings of the Society for Medieval Logic and Metaphysics* 4 (2004). This isn’t surprising, since it has also been overlooked in the contemporary debate. For some discussion on this point, see Uriah Kriegel, “Personal-Level Representation,” *Protosociology* 28 (2012): 77–114.

15. What is surprising to the student of medieval philosophy is that such reasons were rarely made explicit! Consider Thomas de Vio’s (Cajetan’s) surprise when, while commenting seriatim on the first book of Thomas Aquinas’s *Summa*, he reaches a. 3 of q. 84 — which asks whether we know through innate or acquired *species* (Leonine ed., f. 318^a): “Sed circa ordinem huius tituli statim oritur dubium, quia videtur diminutus progressus iste, et ommissa una quaestio valde difficilis, an scilicet anima intelligat per species. In hac enim quaestione sunt diversae opiniones, et hoc loco erat tractanda. Ante namque quam inquiratur an per species congenitas, influxas aut acquisitas, stabiliendum erat quod intelligit per species.”

16. These questions should not be confused with a nearby question, namely: In virtue of what does a *species* represent *at all*? This latter question is associated with what is

In this section, I will look at three answers that Durand considers. The first answer, which he thinks is the answer Thomas Aquinas gave to such questions, maintains that the *species* and what it represents bear a relation of what I will call formal sameness. Durand rejects this theory on the grounds that it is *inadequate*, for it entails that *species* cannot represent what they are supposed to represent, viz. mind-independent features of reality. The second theory maintains that the *species* represents whatever it represents as a kind of primitive fact of the matter. Durand rejects this position on the grounds that it is *mysterious*. Finally, a third answer Durand considers maintains that the *species* represents *Y* because it was caused by *Y*. Durand rejects this view on the grounds that it is *insufficient*, for not every effect is a mental representation of its cause.

1.2.1 THE FORMAL SAMENESS THEORY AND THE INADEQUACY OBJECTION

On Durand’s view, the fact that the *species* is a special and not an ordinary representation limits the sorts of answers that we can give to the question: In virtue of what does a *species* of *Y* represent *Y* and not *Z*? A representation that *is* perceived can represent in any number of different ways: a picture of a sheep can represent a real sheep and the word ‘sheep’ can represent a real sheep too, and that in virtue of which they do so — whatever story we tell here — is at least in part owing to the fact that we perceive them beforehand. We first look at the picture or hear the word and *then*, based on one or more of its features, come to have a cognition of a real sheep. However, an unperceived (i.e. special) representation just can’t represent like this. So how does it represent what it represents?

One of the first answers Durand considers is the following.

An item that is a mere [i.e. unperceived] means of cognition and not a cognized means does not lead one to have a cognition of some other item except because it is a perfect likeness (*ratione perfectae similitudinis*)... By contrast, a cognized means can lead one to have a cognition of some other item because of whatever relationship, e.g. as its cause or its effect, as like it (*simile*) or its opposite, or in whatever other way; but a *species* because of [perfect] likeness alone.¹⁷

sometimes called *the general problem of intentionality*, whereas our questions are associated with what is sometimes called *the specific problem of intentionality*. For discussion of this distinction, see **Pini:Forthcoming** King, “Rethinking Representation”; and Brower and Brower-Toland, “Aquinas on Mental Representation.”

17. *Sent. A* 2.3.5, p. 166–7: “Illud quod est solum ratio cognoscendi et non proprie

In other words, owing to the fact that it is unperceived, that in virtue of which a *species* represents whatever it represents is the fact that it is a ‘perfect likeness’ of what it represents: if X is a perfect likeness of Y , then X can represent Y to P and P can thereby grasp Y even if P did not grasp X .

What does it mean to say that X is a ‘perfect likeness’ of Y ? For Durand, the relationship here is a metaphysical one: X is a perfect of likeness of Y if (at least) both X and Y are particular forms belonging to the same (natural) kind.¹⁸ The accidental form of whiteness in one sheep is a perfect likeness of the accidental form of whiteness in another sheep; so too the substantial form of one sheep is a perfect likeness of the substantial form of another sheep. Hence, I call this *the theory of formal sameness*: X is a perfect likeness of Y if (at least) X is formally the same as Y .¹⁹

Now, it isn’t totally obvious how the *species*’ being a perfect likeness is medium cognitum non ducit in cognitionem alterius nisi ratione perfectae similitudinis. . . Medium autem cognitum potest ducere in alterius cognitionem ratione cuiuscumque habitudinis, scilicet ut causa vel ut effectus, ut simile vel ut oppositum et qualitercumque aliter, sed species ratione so<p. 167>lius similitudinis. . .” See also *Sent. A* 4.49.2 (ed. Jeschke), p. 307: “Alio modo repraesentatur res per medium cognitum et alio modo per medium quod est solum ratio cognoscendi, quia medium cognitum potest ducere in cognitionem alterius ratione cuiuscumque habitudinis, sive ut simile sive ut contrarium sive ut causa sive ut effectus vel qualitercumque aliter; sed medium quod est solum ratio cognoscendi non ducit in cognitionem alterius, ut videtur, nisi ratione similitudinis, unde et similitudo dicitur per quamdam expressionem.” (In the case of bk. 4, d. 49, q. 2, all three versions of Durand’s commentary are more or less the same. Hence, unless otherwise indicated, quotes taken from this *quaestio* will be keyed to the page numbers in T. Jeschke’s critical edition of the ‘A’ redaction.)

18. *Sent. A* 2.3.5, p. 165–6: “Item species non potest esse solum ratio cognoscendi, quia omnis talis species aliquid repraesentans et forma per ip<p 166>sam immediate repraesentata sunt eiusdem rationis secundum speciem, licet differant in modo essendi.” See also *ibid.*, p. 167: “. . . perfecta autem similitudo non est differentium secundum speciem”; *Sent. A* 4.49.2, p. 307: “Similitudo autem non est diferentium secundum speciem”; *ibid.*, p. 305: “Species repraesentans et essentia per ipsam immediate repraesentata sunt eiusdem rationis secundum speciem, licet differant in modo essendi”; *Sent. C* 2.3.6, n. 17, f. 139^{vb}: “Species repraesentans rem aliquam et res cuius est species sunt eiusdem rationis specificae, licet differant in modo essendi”; *Sent. A* 2.16.1, BERLIN, *Staatsbibliothek, Ms. Magdeburg* 91, f. 102^{va} (= *Sent. C* 2.16.1, n. 4, f. 159^{ra}): “. . . imago dicat perfectam repraesentationem eius cuius est imago . . . participando eamdem (*C* reads: in idem) speciem, sicut filius simillimus patri dicitur imago patris”; *ibid.*, f. 102^{vb} (= *C* n. 6, f. 159^{rb}): “. . . participando eamdem naturam secundum speciem. . .”; *Sent. C* 1.3.2.1, n. 8, f. 23^{va}: “. . . participando eamdem naturam secundum speciem, sicut filius simillimus patri dicitur imago patris”; *Sent. C* 1.48.1, n. 4, f. 122^{vb}: “. . . participando eamdem naturam specificam. . .”; *ibid.*, n. 7, f. 122^{vb}: “. . . secundum participationem eiusdem formae specificae inhaerentis vel non inhaerentis. . .” I would like to thank Fiorella Retucci for providing me with a copy of the Magdeburg manuscript.

19. Of course, formal sameness is symmetrical whereas representation is not, and so we

supposed to grant it the privileged ability to represent even though it is not itself perceived, and Durand never spells out the connection here. However, it seems to me that Durand considers the theory of formal sameness at least in part for the sake of argument, for Durand seems to think that this was the theory that Aquinas in particular and *species* theorists more generally defended. So let's grant the assumption too, for the sake of argument.²⁰

The problem with the theory of formal sameness, as Durand goes on to drive home, is that the intelligible *species* at least cannot be formally the same as what it is supposed to represent, for the intelligible *species* is an accident and, moreover, it is an incorporeal accident, and an accident can't be formally the same as a substance and an incorporeal accident can't be formally the same as a corporeal accident. But a *species* is supposed to represent substances and corporeal accidents. Hence, the *species* is inadequate, incapable of doing what it is supposed to do.²¹

must assume that there is some account that makes it that the *species* of *Y* represents *Y* whereas *Y* does not represent the *species*, even though both are formally the same.

20. (1) As support for his interpretation of Aquinas, Durand appeals to Aquinas's argument in *Sent.* 4.49.2, which aims at the conclusion that no *species* is involved in the beatific vision. Durand writes (*Sent. A* 4.49.2, p. 312): "Et istam rationem assignat frater Thomas 4o libro distinctione 49a, ubi expresse dicit quod similitudo secundum speciem requiritur inter repraesentans et repraesentatum, quamvis non sit idem modus essendi utrobique. Et per totam deductionem illius rationis in qua fundat positionem suam apparet quod ipse intendit de identitate specifica in essendo et non in repraesentando, alioquin ratio sua non valeret festucam. Dicit enim quod propter hoc divina essentia non potest repraesentari per speciem, quia omnis similitudo creata differt ab essentia divina secundum genus et non convenit <ei> nisi secundum analogiam. Si enim intelligat de differentia rei, habetur propositum; si vero de differentia rationis, petit principium, quia potest dici quod quantumcumque species differat secundum genus in essendo, convenit tamen secundum speciem in repraesentando, quia representat perfecte divinam essentiam quantum perfecte videtur ab intellectu creato." Cf. Thomas de Aquino *Sent.* 4.49.2, a. 1 (Leonine ed.), p. 483. It is worth noting that many Thomists disagreed with Durand's interpretation. See, in particular, my discussion below in §1.2.2 of John Capreolus who also cites this passage. For discussion of Aquinas's formal sameness thesis, see (among others) Brower and Brower-Toland, "Aquinas on Mental Representation," Klima, "Tradition and Innovation in Medieval Theories of Mental Representation," and Panaccio, "Aquinas on Intellectual Representation." (2) According to Durand's (admittedly controversial) understanding of the *species*-theory of optics, the *species in medio* of a given color is formally the same as that color. See *Sent. A* 4.49.2, p. 306–7; *Sent. C* 2.3.6, n. 18–19, f. 139^{vb}; *Sent. A* 2.3.5, p. 166.

21. (1) Substances: *Sent. C* 2.3.6, n. 17, f. 139^{va}: "Sed nulla species existens in intellectu angeli cum sit accidens potest esse eiusdem rationis specificae cum substantiis rerum tam spiritualium quam corporalium quas angelus intelligit. Ergo saltem angelus non intelligit per species substantias spirituales vel corporales. Minor de se patet, quia substantia et accidens non possunt esse eiusdem rationis specificae cum differant genere." *Sent. A* 1.19.3 (ed. von Perger 2004), p. 182: "... omne, quod est subiective in intellectu, est acci-

1.2.2 THE PRIMITIVIST THEORY AND THE MYSTERY OBJECTION

In light of such difficulties with the formal sameness thesis it is little wonder that proponents of representational *species* tended to abandon it. For instance, Hervaeus Natalis, Durand’s erstwhile teacher, in his response to Durand’s attack, tells us that the likeness that obtains between the *species* and what it represents is not a matter of formal sameness (*similitudo in esse*) but something a little weaker: representational sameness (*similitudo secundum esse repraesentativum*).²² John Capreolus makes much the same point when he takes up Durand’s arguments in his *Defensiones*, and he reads this theory back into Aquinas, citing several passages from the Angelic Doctor, including this very famous one, from *De veritate*:

A likeness obtaining between two things can be understood in two ways. In one way, as an agreement in nature, and this sort of likeness isn’t required between cognizer and cognized. . . In another way, as representation, and this sort of likeness is required between cognizer and cognized.²³

Such a position has also been advocated in the more recent literature on

dens; res autem exterior est quandoque substantia materialis; inter haec autem non potest esse similitudo vel conformitas in essendo, cum sint diversorum generum.” (2) Corporeal Accidents: *Sent. C* 2.3.6, n. 20, f 139^{vb} : “Et per eandem rationem non intelligit accidentia rerum corporalium per speciem, quia in angelo, qui est substantia mere spiritualis, non potest esse aliquod accidens eiusdem rationis cum accidentibus corporalibus.” *Sent. C* 1.19.2.5 (ed. von Perger 2004), p. 218: “. . . omne, quod est subiective in intellectu, est accidens; res autem exterior est quandoque substantia materialis, vel, si sit accidens, est accidens corporeum; inter haec autem non potest esse similitudo vel conformitas in essendo, cum sit diversorum generum.” What of sensible *species*? Since a sensible *species* might be taken to be an accidental corporeal form, it at least in principle could represent what it is supposed to represent, viz. accidental corporeal forms. However, there are a number of problems with endorsing the formal sameness thesis even at the level of sensation. For one thing, we’d be committed to a kind of disjunctive analysis of the representationality involved in representational *species*, for intelligible *species*, as we just saw, cannot represent in virtue of being formally the same as what they represent. Buridan, in any case, rejects the formal sameness thesis, as we will see below in §2.1.

22. *Quodl.*3.8 (ed. Koch 1935), p. 67–68.

23. DV 2.3 (Leonine ed.) ad 9: “. . . quod similitudo aliquorum duorum ad invicem potest dupliciter attendi. Uno modo secundum convenientiam in natura; et talis similitudo non requiritur inter cognoscens et cognitum. . . Alio modo quantum ad repraesentationem; et haec similitudo requiritur cognoscentis ad cognitum.” Capreolus quotes this passage in *Defensiones* bk. 2, d. 3, a. 2 (ed. Paban and Pègues 1902), vol. 3, p. 304^a. Capreolus does recognize (*ibid.*, p. 304^a) that Aquinas does seem to say in, e.g. *Sent.*4492, a. 1 (see footnote 20 above) that the *species* is formally the same as what it represents, a view Capreolus tells us that Albert the Great endorsed. However, he seems to think that the texts as a whole support the representational likeness theory.

Aquinas’s theory of intentionality. Jeffrey Brower and Susan Brower-Toland, for instance, argue that the fact that the *species* of *Y* represents *Y* (and not *Z*) is unanalysable in terms of something more familiar, e.g. in terms of pictorial likeness or formal sameness. Representation, on this view, is a primitive, and so one might call this view *the primitivist theory*.²⁴

Durand also considers the primitivist theory. In trying to make sense of it, he writes,

If the representing *species* is said to be the same in kind (*eiusdem naturae specificae*) with the thing represented as a matter of representation (*in repraesentando*), then . . . this means that one item represents and another item is represented.²⁵

Durand tells us that such a theory is ‘absurd’. Why? Here we might take our cue from a marginal addition in one of the manuscripts: this answer is “not an answer” (*non est responsio*).²⁶ Why does a *species* representing *Y* represent *Y* and not *Z*? To say that this is because the *species* represents *Y* and *Y* is represented by the *species* is, well, not an answer at all! But Durand, at least, wants an answer to this question. He writes,

Representation, since it is the relation of the representing thing to that which is represented, has some foundation in virtue of which ‘represents’ is true of the representing thing.²⁷

What I would submit Durand is driving at here is the charge that the representationality involved in special representations is totally mysterious: all

24. Brower and Brower-Toland, “Aquinas on Mental Representation.” Brower and Brower-Toland, in fact, are motivated by the failure of the formal sameness thesis in light of precisely the sort of objection that Durand raised against it, which they call *the quiddity objection*.

25. *Sent. A* 4.49.2, p. 310–1: “Quod autem tertio additur — quod sufficit quod species repraesentans sit eiusdem naturae specificae cum re repraesentata in repraesentando et non in essendo — frivolum est et sola fuga difficultatis quoad hominem. Si enim species repraesentans dicitur esse eiusdem speciei cum re repraesentata in repraesentando, . . . <p. 311> . . . intelligitur quod unum repraesentat et aliud repraesentatur.”

26. NAPLES, *Biblioteca Nazionale ‘Vittorio Emanuele III’ XIII A 17*, f. 143^{vb} (addition in italics): “Quod autem tertio additur — quod sufficit quod species repraesentans sit eiusdem naturae specificae cum re repraesentata in repraesentando et non in essendo — *non est responsio sed solum* frivolum est et (FOR: etiam) sola fuga difficultatis quoad hominem.” I would like to thank Thomas Jeschke for providing me with a scan of this folio.

27. *Sent. A* 4.49.2, p. 311: “Item repraesentatio, cum sit rei repraesentantis habitudo ad illud quod repraesentatur, habet aliquod fundamentum ratione cuius convenit sibi ‘repraesentare’, et illud non potest esse nisi natura speciei, non quatenus est effectus rei absolute, quia multis effectibus non convenit sic ‘repraesentare’.”

that the primitivist has done is stipulated that X represents Y (and not Z) as a brute, primitive fact of the matter, with no further explanation.

The mystery objection, of course, is not a knock-down argument, for as we will see below there are reasons to suspect that the direct realist without representation is also committed to her own mystery. Even so, it is worth bearing in mind that mystery of this sort is a cost in maintaining direct realism with representation.

1.2.3 THE CAUSAL THEORY OF REPRESENTATION AND THE INSUFFICIENCY OBJECTION

In addressing the primitivist position, Durand, in fact, points at a third theory available to the proponent of *species*, which I will call the causal theory of representation. According to this theory, the fact that the *species* of Y represents Y (and not Z) has nothing to do with its intrinsic features or nature, but it is rather entirely a matter of certain facts extrinsic to the *species*. To be precise, a *species* of Y represents Y (and not Z) because it was caused by Y and not Z . We might recognize this as a view associated with Ockham — although for Ockham it is not the *species* which does the representing here but the cognitive act itself. (Hence, Ockham maintains what I called above soft direct realism without representation.)

Durand rejects the causal theory of representational *species* too. According to Durand, it has cast its net too wide, for not every effect is a mental representation of its cause. The sunburn on my skin is the effect of the sun, but it is not a mental representation of the sun. Something more must be added to the causal theory of representation. This isn't to say that something more can't be added. But it is to say that something more must be added, and once more Durand doesn't think his opponents have offered us that.²⁸

28. *Sent. A* 4.49.2, p. 311: "... quia causa repraesentat effectum et e converso etiam in aequivocis et in multis aliis quantumcumque genere vel specie differentibus, quae tamen propter repraesentationem non dicuntur unius speciei cum eo quod repraesentant." See also *Sent. A* 2.3.5, p. 167: "Repraesentat enim non quia effectus rei, quia sic omnis effectus esset species." Ockham at least hitches the causal theory up with linguistic-role functionalism, thus yielding a rather compelling theory. For discussion, see Panaccio, *Ockham on Concepts* and King, "Rethinking Representation." For discussion in the contemporary debate, see Robert Cummins, *Meaning and Mental Representation* (Cambridge, MA: MIT Press, 1989).

1.2.4 TAKING STOCK

Let's take stock. The burden-of-proof argument is this. *Species* are special representations (as opposed to ordinary ones) precisely because they are not perceived during the direct perception of what they represent (external objects); but since special (unperceived) representations are special, one must provide an argument in their defense. Durand's second line of attack focuses on the question: In virtue of what does a *species* of *Y* represent *Y* (and not *Z*)? Since the *species* is not perceived, accounting for how it represents lands us with theories that are either inadequate, mysterious, or insufficient.

2 BURIDAN'S DEFENSE

2.1 THE PRESENCE PRINCIPLE AND BURIDAN'S ACCOUNT OF HOW A SPECIES REPRESENTS

Part of Buridan's defense of representational *species*, I want to argue now, is based on the following principle, which I will call *the presence principle*: nothing that is in or next to (i.e. present to) a sensitive organ is sensed. In QDA 2.17, Buridan characterizes the presence principle as follows:

... a sensible thing existing in the sense organ or immediately next to it is not sensed...²⁹

Buridan thinks that the presence principle finds its support in experience, and he adduces a number of cases (several for each sense modality) in its support. He writes,

And this seems to be clear from experience; for there is heat in any of our members which nevertheless we do not sense, and there is intense heat in the heart and the heart does not sense it, and there is coldness in the brain and the brain does not sense it, and

29. n. 8. See also *ibid.*, n. 15: "Et hoc videtur primo esse de intentione Aristotelis dicentis quod sensibile positum supra sensum in organo sensus non sentitur"; *ibid.*, n. 6: "... quia sensibile positum supra sensum non facit sensationem, ut dicitur saepe in secundo huius"; *ibid.*, 2.18, n. 61: "... quia sensibile positum super sensum non facit sensationem, ut saepe dicit Aristoteles"; *ibid.*, 2.16, n. 7: "Nam sicut dicitur secundo huius sensibile positum supra sensum non sentitur"; QDAL 2.24 (Lokert ed.), p. 634: "Alia conclusio <est> quod sensibile (FOR: sensibilie) positum immediate supra sensum, scilicet in organo sensitivo, non facit sensationem. Et hoc probatur per inductionem experimentalem." In Aristotle, see *De an.* 2.7 419^a12–14.

the tongue has a taste as do other parts of flesh, and it does not sense this taste.³⁰

(In Lokert's edition, the last example is presented in a slightly more alarming manner: "Although your tongue has a taste and a dog eating it does indeed sense that taste, nevertheless you do not sense that taste since it is really there.")³¹

One thing that Buridan thinks follows from the presence principle is this: a sensible quality that is in or next to a sensitive organ impedes rather than facilitates the sensation of that sensible quality. Hence, were we committed to *species*, then the *species* of a given sensible quality cannot be itself a member of the same (natural) kind as that sensible quality; that is, it cannot be formally the same as that sensible quality, for if it were it would impede rather than facilitate our sensitive perception of that sensible quality.³² Consider, Buridan invites us, the phenomenon of halitosis:

Again, if your friend were to eat garlic and you were not, you will strongly sense the smell of the garlic he is eating. But if you also eat it, enough to allow the odorous fumes to reach your olfactory organ, then you will no longer sense the smell of the garlic your friend is eating, nor those you have eaten. And this is because, in your organ, there is already a smell similar to the external smell you sensed before. Therefore, the reception of a quality similar to the external one does not make for its perception, but rather impedes it.³³

Buridan uses the presence principle as support for a premise in the following neat argument which we might view as a kind of response to Durand's worries associated with the question: In virtue of what does the *species* of *Y* represent *Y* and not *Z*?

30. *ibid.* His complete discussion of the principle occurs in QDA 2.21, which asks whether a sensible placed on sense is sensed, where he also defends the supplemental claim that what is in the medium next to sense is also not sensed.

31. QDAL 2.22 (Lokert ed.), p. 622: "Quod tu potest videre, quoniam licet lingua sit sapida et canis comedens eam bene sentiret saporem, tamen tu non sentis illum saporem eo quod est ibi realiter."

32. Why can't the *species* be the same in (natural) kind as the quality in the external thing differing from it only in terms of degree? As far as I can tell Buridan doesn't consider this idea. I would like to thank Gyula Klima for drawing my attention to this possibility in conversation and an unpublished lecture note (Gyula Klima, "Intentions, Species, Sensations: What Can We Learn from John Buridan (ca. 1300–1362) about Sensory Awareness?," *11th Annual Hawaii International Conference on Arts and Humanities, Honolulu, HI*).

33. QDA 2.17, n. 13. See also *ibid.*, 2.21, n. 14.

- N1** We sense external qualities, i.e. “qualities that exist outside of us in external bodies as their subject, such as the color that exists in the wall, the coldness of a stone, or the taste of wine.”³⁴ ([N1], then, is Buridan’s admission that he is a direct realist of some sort about perception, for we do not perceive representations of reality but reality itself.)
- N2** When we sense an external quality, we receive a representation of it from it. ([N2], which I will return to below, is supported by the following argument from change: “Since sense doesn’t change the object, if the object doesn’t change sense, then there would be no reason why it is sensed when present to sense and not before.”)³⁵
- N3** This representation is not numerically identical with the external quality. (Support: the principle of the non-migration of accidents.)³⁶
- N4** This representation is not qualitatively/formally the same as the external quality. (Support: the presence principle.)³⁷
- N5** Therefore, the representation is qualitatively and numerically different from the external quality. (By [N3] and [N4].)

34. QDA 2.17, n. 9. For the Latin, see above footnote 2.

35. *ibid.*, n. 10: “Tertio suppono quod ista qualitas exterior non sentiretur a nobis nisi imprimeret in sensu nostro vel organo sensitivo aliquod repraesentativum ipsius, quia, cum illud obiectum nihil recipiat a sensu, si etiam nil imprimeret sensui, nulla esset ratio quare sentiretur quando praesentatur sensui et non ante. Et hoc etiam omnes concedunt et ad hoc perspectivi ponunt experientias de visu.” NB: I have replaced ‘subiectum’ with ‘obiectum nihil’, following MS V. This proposed change should be incorporated into the critical edition by the time this goes to press.

36. *ibid.*, n. 11: “Quarto manifestum est quod illae qualitates exteriores non recipiuntur in sensu sive in organo sensus, quia accidens non transit de subiecto in subiectum et quia apparent remanere extra in subiectis suis.”

37. *ibid.*, n. 12: “Quinto etiam, illae qualitates exteriores non imprimunt in sensibus nostris alias qualitates sibi omnino consimiles et eiusdem speciei specialissimae per quas sentiantur. Illud est manifestum per experientiam, si bene attendimus. Quia, si tu intras balneum, tu statim sentis acute caliditatem aquae et iudicas eam bene intensam. Et verum est quod, cum per tempus remaneas in isto balneo, caliditas aquae generat intra corpore tuo aliquam aliam caliditatem sibi similem et eiusdem speciei, sicut faceret in alio corpore. Sed tunc tu non amplius sentis istam caliditatem aquae nisi sentias eam multum remisse quam prius sentiebas intense. Igitur caliditas ista, generata in te, similis caliditati aquae, non facit ad sentiendum caliditatem aquae, sed potius obest et impedit, propter quod bene dicebat Aristoteles quod non sentimus similiter calidum et similiter frigidum.” See also the passage quoted above about halitosis (*ibid.*, n. 13). Buridan discusses the bath case again in *ibid.*, 2.21, n. 17. He discusses heat in detail in *ibid.*, 2.18, n. 61–75.

Hence, Buridan can conclude that the sort of similarity involved in special representation is, in fact, a kind of dissimilarity. He writes,

[I]t follows that, for sensing an external quality, another quality has to be impressed in the sense organ whereby the external quality is sensed and that [this quality] is of a dissimilar nature and species from the external quality that is sensed. . . . And this quality impressed in the organ in this way is usually called the *species* of the external sensible quality, because it is representative of this [external quality], by which the soul is naturally capable of cognizing it. And this *species* is called a “likeness” of the external quality, not because it is the same in [natural] kind (*eiusdem rationis*) or of the same specific nature as that quality but because it is in fact dissimilar to it both in essence and in power.³⁸

We might call such a view *the theory of representational dissimilarity*.³⁹

Now, the theory of representational dissimilarity clearly avoids the inadequacy objection: an (incorporeal accidental) *species* can represent a substance or a corporeal accident since *species* are not the same in kind with what they represent. Nor is the theory of representational dissimilarity a causal theory of representation, for that in virtue of which the *species* of *Y* represents *Y* (and not *Z*) has something to do with its intrinsic nature at least.⁴⁰ But does it avoid the mystery objection? I don’t think so. On Buridan’s view, a *species* does not represent what it represents owing to the fact that it is formally the same as what it represents, for the *species* is not similar but dissimilar. However, this still leaves it mysterious as to how the *species* represents what it represents. We have once more been left with a mystery as to what representation amounts to, for we know what it is not (it is not formal sameness) but we do not know much about what it is.

38. *ibid.*, n. 14.

39. Buridan also adduces a similar argument in the local case of touch and our perception of tangible qualities in *ibid.*, 2.18, n. 61: “Ultimo dicendum est de speciebus qualitatum per se tangibilium, puta caliditatis et frigiditatis, humiditatis et siccitatis. Et primo dico concedendum esse quod illarum qualitatum sunt species repraesentativae earum, quae sunt alterius rationis et naturae ab illis qualitibus, ita quod species caliditatis non sit caliditas, nec species frigiditatis frigiditas, sicut nec species coloris color, quia aliter tu non sentires caliditatem extra te existentem. Oportet enim ad sentiendum illum calorem quod in organo sensus perveniat calor similis per quem senties illum aut species dissimilis naturae et rationis. Sed non calor similis rationis et naturae, quia sensibile positum super sensum non facit sensationem, ut saepe dicit Aristoteles. Ideo non sentimus similiter calidum et similiter frigidum, ut dicit Aristoteles.”

40. See especially Buridan’s discussion of the *species*’ role in representing common sensibles in *ibid.*, 2.12–13. See also *ibid.*, 2.18, n. 22.

However, as mentioned, this might just be a cost that Buridan is willing to accept. If we have an answer to the burden-of-proof argument — that is, an argument *that* there are special representations — then we might accept the mystery involved in special representation on the simple grounds that we have good reason for supposing that during direct perception there are special representations which do not represent in the way ordinary representations represent — even if we can't say much more about how they do this.

2.2 BURIDAN'S ANSWERS TO THE BURDEN-OF-PROOF ARGUMENT

So, does Buridan provide us with anything like an answer in connection with the burden-of-proof argument? Does Buridan give us an argument *that* there are representational *species* during overtly direct acts of perception? Surprisingly, he does not seem to have been very worried here. While we can forgive Aquinas for assuming representational *species* — on the grounds that nobody had come to question that assumption⁴¹ — there's probably no good excuse for Buridan, operating as he is in the immediate wake of Durand and Ockham.

One might suspect that [N2] in the above neat argument — “when we sense an external quality, we receive a representation of it from it” — is what Buridan thinks does the heavy lifting in answer to the burden. Unfortunately, [N2] has no support, for all that the argument from change that Buridan adduces on its behalf supports is the idea that something on the side of the percipient must change. But the result of this change need not be a representation; it might — as with Ockham and Durand — be the sensory cognitive act itself; or it might be the *species* conceived of as a mere causal intermediary: the object causes a *species* which then causes the act. Something more must be said to land Buridan with [N2].⁴²

The situation doesn't get much better if we move backwards in the *QQ. De an.* to the point where Buridan first introduces the sensible *species*.⁴³ In QDA 2.9, which asks whether sense is passive, Buridan's sole argument — as far as I can tell — in defense of visible *species* appeals to the fact that the organ associated with sight is diaphanous much like the medium.⁴⁴ (In

41. See Cajetan's surprise, above footnote 15.

42. Earlier, Buridan had evoked a similar argument, complete with, it seems to me, the same flaws. See QDA 2.10, n. 21 (quoted above footnote 1).

43. Strictly, Buridan's first mention of sensible *species* occurs at the very end of QDA 1.4 (n. 23). However, he does not defend the representational role of the *species* here. In bk. 1, Buridan mentions the *species* in passing just one other time, namely in QDA 1.6, n. 9–10 in the context of the formation of universal concepts.

44. n. 18: “Pono igitur tertiam conclusionem quod anima non agit ad producendam speciem sensibilem in organo sensus exterioris, ut in oculo vel aure. Et haec conclusio sic

QDA 2.18, he extends the argument to all our organs: each has some physical feature in virtue of which it takes on *species*.)⁴⁵ But remember: Durand too had accepted that the organ of sight also receives visible *species* owing to its diaphanous nature. However — to repeat — the mere fact that we receive visible *species* does not entail that such *species* function as representations during overtly direct acts of perception.⁴⁶

That said there are two better answers to the ‘why’ question. The first is one that I think Buridan would have given, although I can’t find him explicitly giving it. The second is one that Buridan does give in QDA 2.16, tucked into his discussion of sound.⁴⁷

persuadetur, quia consimiliter videtur fieri lumen vel species coloris in medio vel in organo, scilicet ratione diaphaneitatis; nec plus exigitur hic quam illic. Sed omnes communiter concedunt quod lumen vel etiam species coloris fiunt in medio, scilicet in aere a lucido et a colore, active, et quod aer in hoc se habet solum passive, non sit quod aer vel forma substantialis eius aliquid coagat. Igitur similiter de lumine, quod est species lucis, et de specie coloris in organo sensitivo.” See also *ibid.*, 2.18, n. 16.

45. n. 28. See also *ibid.*, n. 14.

46. See the quoted texts above in footnote 10 and below footnote 51. See also *Sent. C* 2.3.6, n. 14, f. 139^{va} : “Est tamen advertendum quod licet in nulla potentia sensitiva vel intellectiva sit species ad repraesentandum ei suum obiectum, tamen in spiritibus corporeis non sentientibus remanent quandoque species seu impressiones sensibiles abeuntibus sensibilibus. . .”; *ibid.*, n. 15, f. 139^{vb} : “In ipsis autem organis sensuum interiorum si fiant species vel huiusmodi impressiones nullo modo percipiuntur ab eis nec aliae res per ipsas quia non se habent ad potentias cognitivas obiective sicut impressio quam aliquis videt in oculo alieno non percipitur ab oculo in quo est nec mediante ipsa percipit ille oculus rem cuius est species”; *ibid.*, n. 10, f. 139^{rb} –^{va} : “Istae autem species originaliter videntur introductae fuisse propter sensum visus et sensibilia illius sensus. Color enim videtur facere speciem suam in medio et in organo sicut sensibiliter apparet in reflectione quae est in speculo. Nisi enim istud fuisset forsitan numquam fuisset facta mentio de speciebus requisitis ad cognitionem. Sed quia quidam credunt quod species coloris in oculo repraesentat visui colorem cuius est species, ideo ponunt tam in intellectu nostro quam angelico quasdam species ad repraesentandum res ut cognoscantur tam a nobis quam ab angelis.”

47. There is at least a third argument that Buridan explicitly makes. This occurs in his discussion of the *species* or *radii* of heat in *ibid.*, 2.18, n. 61–75. If we do not countenance *species* of heat (and cold) then we would be unable to explain a whole host of physical phenomena, such as the formation of clouds (among others). See, e.g., n. 63: “Quod autem ponendo radios vel species caliditatis distinctas a caliditate possunt convenienter assignari causae talium effectuum declaratur, quia dicemus quod radii caliditatis licet non sint formaliter calidi nec caliditas, tamen habent naturam calefaciendi multo plus et fortius quam lumen”; *ibid.*, n. 64: “Et in hoc non posset dari causa et modus rationalis nisi per radios sive species caliditatis vel frigiditatis quae tamen manifeste datur ponendo huiusmodi radios et species; igitur haec ponenda sunt”; *ibid.*, n. 65: “Unde non apparet unde talis caliditas generetur in profundis terrae in hieme et frigiditas in aestate nisi ponatur actio per radios caliditatis et frigiditatis sicut dicitur prius.” However, such considerations do not entail that there are psychological *species* of heat.

2.2.1 THE PRESENCE OBJECTION

The presence objection, as I will be calling the first line of defense, is at best implicit in Buridan. (Hence, we might characterize it as an argument Buridan would have given — perhaps should depending on whether or not you are convinced by it.) Recall the presence principle, according to which what is in or next to (i.e. present to) a sensitive organ is not sensed, a thesis Buridan, as we just saw, supports by appeal to empirical data. Now, Durand and other direct realists without representation live by the mantra that all that is needed for sensory cognition (at least) is the mere presence of a sensible item to a sensitive item.⁴⁸ Durand, for instance, writes,

When a sense object is present in itself (*secundum se praesentia*) to a sense, it is cognized by that sense. For instance, a colored or bright object that is in itself present (*praesentialiter obiiciuntur*) to sight is at once seen, for the one is visive and the other visible. Hence, when they are present to each other (*eis approximatis*) at once a vision occurs.⁴⁹

48. Durand does maintain that a representation of the object is involved in indirect forms of cognition (e.g. memory and inferential reasoning).

49. *Sent. C* 2.3.6, n. 21: “. . . sicut ergo sensibilia secundum se praesentia sensui cognoscuntur per sensum, puta omnia colorata, et omnia lucentia, quae secundum se praesentialiter obiiciuntur visivi statim videntur, quia unum est visivum, et aliud visibile, propter quod eis approximatis statim sequitur visio. . .” So too with the intellect and its object (*ibid.*, n. 21): “. . . sicut etiam praesentato intellectui nostro aliquo obiecto per actum sensitivae partis fit intellectio. . .” See also *Sent. A* 4.49.2, p. 319: “Ubi cumque natura et virtus potentiae se extendunt ad obiectum, praesentato obiecto per se et immediate et excluso omni impedimento aenigma causante, necessario sequitur cognitio clara et manifesta qualis est possibilis inter talem potentiam et obiectum secundum quemcumque modum.” (Durand seems to be drawing from Giles of Rome, *Quodl.* 3.14 (Leuven 1646), f. 175^{ra}–^b.) See also *Sent. A* 2.3.8, p. 191 (= *Sent. C* 2.3.8, n. 6 (misprinted as n. 9), f. 141^{ra}): “. . . quia unumquodque per hoc intelligitur quia praesens est intellectui”; *Sent. A* 2.4.1, p. 196 (= *Sent. C* 2.4.1, n. 4, f. 141^{va}): “. . . ut saepe dictum est per hoc fit intellectus in actu secundo quod sit ei praesens intelligibile. . .” So too with angels: *Sent. C* 2.3.7, n. 16, f. 140^{va}: “Singularia autem quae dependent solum ex causis naturalibus si sint praesentia cognoscuntur infallibiliter ab angelo; nec est alia causa quaerenda nisi quia sunt ei praesentia sicut non est quaerenda causa quare visus percipit colorem sibi praesentem et auditus sonum.” See also *Sent. A* 2.3.8, p. 192 (= *Sent. C* 2.3.8, n. 7, f. 141^{rb}): “. . . cum intelligere fiat in nobis per hoc quod intelligibile sit praesens intellectui et similiter in angelo. . .” Ockham’s version: *Rep.* 2.12–13, OTh 5, p. 268: “Prima est quod ad cognitionem intuitivam habendam non oportet aliquid ponere praeter intellectum et rem cognitam, et nullam speciem penitus. . . Assumptum probatur: quia posito activo sufficienti et passivo et ipsis approximatis, potest poni effectus sine omni alio. Intellectu autem agens cum obiecto sunt agentia sufficientia respectu illius cognitionis; possibilis est patiens sufficiens; igitur etc”; *ibid.*, p. 269: “Nunc autem sine omni specie ad praesentiam obiecti cum intellectu sequitur actus intelligendi ita bene sicut cum illa specie; igitur etc”; *ibid.*, p. 276:

Call this thesis *the sufficiency principle*: the presence of a cognizable object to a cognitive power is sufficient for cognition.

But here's the problem. If the presence principle is true — which it seems to be based on empirical evidence — then Durand cannot be using the term 'present' in the above mantra in its literal sense, for items that are literally present to (i.e. in or next to) sensitive organs are not sensed! Durand, then, seems to be using the term 'present' in a non-literal (i.e. special) sense. Hence, it would seem that our direct realist without representation is committed to something special as well, except this time it is a special mode of presentation and not a special mode of representation. We have pushed down the bump at one end of the rug, only to find it pop back up at the other end.

Look at it this way. Why is the color on the wall in this room present to me whereas the color on the wall in the other room not? The direct realist without representation seems to owe us an answer to this question. By contrast, the direct realist with representation (Buridan) has an easy answer: the color on the wall in this room is present to me (in the special sense) because its *species* is present to me (in the literal sense). But that's just another way of saying that the *species* represents the distal color.

So, Durand is on a hook. But how sharp is this hook? Here are some reasons for thinking it isn't that sharp.

1. First of all, one might think that while special presence is special it is less special than special representation. Of course, special presence isn't literal presence (i.e. spatial closeness or overlap), but it is all the same something that we seem to have an intuitive idea about before we engage in philosophical reflection: the color on the wall in this room is present to me whereas the color on the wall in that other room is not. By contrast, special representation is a theoretical postulate, and so it is not something with which we would come to the table prior to philosophical reflection.

2. Special presence is something that we seem to be able to articulate in a more positive way than special representation, for special presence can be spelled out as a list of conditions — tangible sensible qualities are present when they are in spatial contact with my flesh; visible ones when they are at a certain distance with no opaque obstacles intervening; etc. Special representation, by contrast, can't even be articulated in any positive sense — at least if we are primitivists on the matter. As we saw, Buridan (and others) characterize it in terms of what it is not: it is not a matter of qualitative (or formal) sameness and it is not ordinary representation (of the sort involving statues, words and so on).

“Sed posita ipsa re praesente et intellectu angelico sive nostro sine omni alio praevio — sive habitu sive specie — potest intellectus illam rem intuitive cognoscere.”

3. A third consideration — at least one available to Ockham — is parsimony. Why should we go with the theory that commits us to both mystery and an added entity as opposed to the theory that commits us to just mystery?⁵⁰

4. Finally — and this is an option that Ockham can't pursue but Durand can — Durand can appeal to *species* (the non-cognitive ones countenanced by our going physical theories) to explain when it is that *Y* is present in the special sense: *Y* is present to Socrates when the *species*, ultimately caused by *Y*, has been received in the right organ of Socrates' body (at least). In other words, *Y* is present in the special sense when the *species* of *Y* is present in the ordinary sense. However, we need not go on and claim that the received *species* performs a kind of representational role, at least not during direct acts of perception. That is, we need not claim that the *species* makes *Y* present. Rather, its reception is one among several necessary conditions (e.g. the right lighting conditions, a functioning set of eyes, etc.) under which *Y* is said to be present.⁵¹

2.2.2 ARGUMENT FROM HALLUCINATION

Buridan's second argument in defense of the thesis *that* there are representational *species* might best be viewed as a peculiar twist on the classic argument from hallucination. He argues from the fact that sometimes we perceive sensible qualities that do not exist to the conclusion that we perceive all sensible qualities (even those that do exist) via *species* as (special) representations. It is a twist on the argument from hallucination in two senses. First, Buridan does not conclude that what we perceive are representations and not external sensible qualities, for, as we've seen, Buridan defends direct realism and rejects representationalism. Second, the 'sometimes' case that Buridan has

50. Durand can't opt for this option, since he still accepts *species* and only rejects the idea that they might perform a representational role.

51. This seems to be Durand's point in his discussion of the role of *species* in (of all places) his *Questions on Freedom of Choice*. He writes (QLA q. 3 (ed. Stella 1962), p. 494): "Alio modo potest dici . . . <species> solum facit ad eam <sc. visionem> ut existens quidam radius seu forma radialis manens in habitudine directae irradiationis quae fit ab obiecto et quasi continuans oculum cum obiecto. Et ideo in ea non est attendendum quantum sit perfectio vel imperfectio, cum sensus non utatur ea nec ut re nec ut imagine quia nullo modo est cognita. Sed solum quod ipsa est quidam radius coniungens oculum cum obiecto quo existente qualiscumque ipsa sit in se dummodo omnia adiuncta, scilicet lumen, distantia et huiusmodi, sint paria sequitur aequaliter apprehensio." See also *Sent. A* 2.3.5, p. 170: "Res autem distans, ut color parietis, efficitur praesens visui per illud quod causat in organo quod, cum sit accidens, est in eo ut in subiecto. Quod enim sit praesens visui, necessarium est ad visionem; quod autem sit in eo ut in subiecto, accidit visioni."

in mind is not a case of hallucination at all, but rather a peculiar instance of veridical perception of a sensible quality that no longer exists.

In QDA 2.16 — which concerns sound — Buridan writes,

Again I infer another corollary, namely that a sound is heard when it no longer exists, for its *species* is multiplied over time, and not in an instant (as is the case with illumination). Therefore, when you see from afar the laundresses on the Seine beating their clothes, you will see the second blow before you hear the first. For the same reason, you see the lightning before you hear the thunder. But the sound that is in the air speedily moved and divided by the blow of the laundresses — or even the air itself — does not travel to you, because you are very far away, and, before it would reach you, that air has already settled and does not sound. Therefore, it is not heard anymore by someone close by, and yet we have said that he who is far away does not hear the *species* of sound reaching him, but the real sound, which has already died out and of which this *species* is a representation.⁵²

And he quips, “It is remarkable (*Mirum*), for I principally understand something that does not exist but has been destroyed.”⁵³

The context in which Buridan makes these remarks concerns the question whether Socrates and Plato hear the same sound (say, the sound that the blows of the laundresses make). Buridan defends the affirmative: it is the very same distal sound that both Socrates and Plato hear, much as it is the very same distal color that both Socrates and Plato see. However, unlike with the case of color and vision, the external sensible quality (the sound) no longer exists at the moment when Socrates and Plato hear it. All the same, the hearing of the sound, like the seeing of a color, is a direct perception — as opposed to an indirect act of cognition as when one infers that a sound occurred based on something other than that sound.⁵⁴

Now, this surprising fact — that we directly perceive a sensible quality that does not exist — is a very important fact for which a correct theory of perception must account. How can the direct realist without representation

52. n. 20–21.

53. *ibid.*, n. 22.

54. Buridan returns to the topic of sound in QDA 2.18, n. 47–59. It is interesting to note that whereas Oresme agrees with Buridan on the issue of sound (QDA 2.19, ed. Patar 1995) — and even raises the above case as a case of the cognition of a non-existent (QDA 3.19, ed. Patar 1995) — Patar’s Anonymous (i.e. the author of the texts B. Patar edits as Buridan’s *redactio prima*) rejects Buridan’s theory of sound (QDAP 2.19, ed. Patar 1991).

account for the fact that I hear a sound that does not exist when I am hearing it?⁵⁵

The direct realist without representation seems to be in a very difficult position to explain such cases. She might be able to explain away, for instance, after-images, flaming sticks, and even hallucinations, for such cases can be analysed either as cases of indirect cognition or in terms of a quality that the sense object left behind in the percipient which then comes to be the direct object of perception. However, the direct realist without representation doesn't seem to be in a position to explain how it is that I can directly perceive a sound that no longer exists.⁵⁶

Indeed, both Ockham and Durand seem committed to the denial of the idea that a non-existent is the natural object of a direct act of perception. For instance, Ockham, in his attack on Peter Auriol's theory of cognition, notes that Auriol is committed to the thesis that we can have intuitive cognition of non-existents naturally, that is, even without the intervention of a supernatural agent.⁵⁷ But Auriol is just wrong here, or so says Ockham: the

55. Buridan thinks that the argument generalizes to all the sense modalities, for he thinks that there is a temporal gap between the existence of a sensible quality and our sensitive perception of it. Sometimes, as with light and colors, this gap is not very large so as to be practically imperceptible. Odors: QDA 2.18, n. 60 and *ibid.*, 2.17. Tangible qualities: *ibid.*, 2.18, n. 61–77. (See esp. n. 77: “Unde si scintilla ignis cadat supra manum, non statim sentitur quia non statim perveniunt species sensibiles ad nostrum sensitivum.”) Colors and light: *ibid.*, 2.18, n. 35–46. With the latter, he admits that he is going against the grain. (Hence, in the passage quoted above about sound, he tells us that light travels at an instant, although this should be taken for the sake of contrast.) See, e.g., n. 46: “Et ista quae sic dixi non intendo determinare sed disputare solum, ut in aliis detur occasio studendi et inveniendi demonstrative veritatem.” As far as I can tell, he does not discuss a case of taste in this context.

56. See Guillelmus de Ockham *Ord.*1.27.3, OTh 4, esp. p. 248–50 and *Rep.*3.3, OTh 6, esp. p. 110: “Ex istis apparet quod est in oculo aliquis actus sensitivus qui non habet aliud obiectum nisi illud derelictum et impressum quod est obiectum illius actus, quia si ille actus apparitionis est verus actus, habet aliquod verum obiectum.” On the problem of hallucination (and illusion) in medieval debates, see Pasnau, *Theories of Cognition*, ch. 5 and Dominik Perler, *Zweifel und Gewissheit: Skeptische Debatten im Mittelalter* (Frankfurt am Main: Klostermann, 2006).

57. *Rep.*3.3, OTh 6, p. 110–1: “Et hoc ponunt exemplum qui dicunt <sc. Aureolus> quod cognitio intuitiva potest esse respectu non existentis naturaliter, quia ista apparitio est cognitio intuitiva, quia visus nullam cognitionem habet nisi intuitivam et ista apparitio habet pro obiecto sensibile extra quod potest non existere existente ista apparitione.” See also *Rep.*2.12–13, OTh 5, p. 284–5: “Per eum <sc. Aureolum> sensus potest intuitive cognoscere rem absentem et non existentem”; *ibid.*, p. 286: “Ipse <sc. Aureolus> dicit quod notitia intuitiva potest esse naturaliter respectu non existentis — dico sensitiva.” *Ord.*1.27.3, OTh 4, p. 238–9, 241–2, 244. In Auriol, see *Sent.*, Prol., sec. 2, a. 3, n. 106, 110–111 (ed. Buytaert 1952), p. 204–205: “Secunda vero conditio <sc. in modo quo transit ocularis notitia super obiectum et illae quatuor deficiunt in modo quo imagi-

intuitive cognition of a non-existent is a supernatural possibility but not a natural one. Durand (perhaps with Auriol in mind) takes this a step further: it is not even a supernatural possibility. He writes,

On the surface, this seems rather remarkable. On this view, God can bring it about that the eye might see a color even if the color isn't really present to the eye — indeed, it might not even exist at all in the universe. . . . Hence, it would be possible, on this view, that the eye might see a color even though it doesn't exist, and the ear hear a sound even though it doesn't exist, and taste taste a taste even though it doesn't exist, touch feel some heat even though it doesn't exist, smell a smell even though it doesn't exist. All of this seems impossible to many people.⁵⁸

nari cognitio transit super eum> est praesentialitas: imaginatio namque quantumcumque transeat super praesentialitatem rei, imaginando scilicet quod nunc est eclipsis praesens in tanta quantitate et cum omnibus circumstantiis, tamen ipsam imaginatur ut quoddam absens quantum ad modum tenendi, ut quasi modo absenti feratur super praesens. Ocularis autem notitia fertur super praesens modo praesentiali, immo et super absens modo praesentiali, sicut patet in ludificatis et in cunctis experienciis superius inductis, quamvis enim obiecta sint absentia, si visio sit in oculo, feretur super ea modo praesentiali, ut patet. . . <p. 205, n. 110> Transferendo itaque ista ad intellectum, ibi sunt isti duo modi cognitionis, primus videlicet qui directe apparere facit rei praesentialitatem actualitatem et existentiam; immo non est aliud illa cognitio nisi quaedam praesentialis et actuativa apparitio et directa existentia rei, et iste modus est intuitivus. Secundus vero qui non directe nec ex se nec praesentialiter nec actuative facit res apparere, et hic est abstractivus. <n. 111> Ex praedictis itaque colligitur in quo differunt abstractiva et intuitiva notitia et quae est ratio utriusque. Sunt namque duo modi apparitionis: formalis, cum intellectio non sit aliud quam quaedam formalis apparitio qua res apparent obiective; sed una apparitione apparent res praesentialiter et actualiter et existenter in rerum natura sive sit sive non sit, et hoc est intuitio; alia vero sive res sit sive non sit non apparet res praesentialiter et actuative et existenter in rerum natura sed quasi modo imaginario et absente. Unde magis proprie posset dici ista notitia imaginari quam abstractiva.” Auriol, it is worth emphasizing, uses the argument from *apparitio* not as a defense of *species* but as a defense of his peculiar theory of intentional being. For discussion of Auriol's position, see Katherine Tachau, *Vision and Certitude in the Age of Ockham: Optics, Epistemology and the Foundation of Semantics 1250–1345* (Leiden: E.J. Brill, 1988), ch. 4; D. Denery, *Seeing and Being Seen in the Later Medieval World. Optics, Theology, and Religious Life* (Cambridge: Cambridge University Press, 2005), ch. 4; D. Denery, “The Appearance of Reality: Peter Aureol and the Experience of Perceptual Error,” *Franciscan Studies* 55 (1998): 17–52; Jol Biard, “Intention et prsence: la notion de *praesentialitas* au XIVe sicle,” in Perler, *Ancient and Medieval Theories of Intentionality*, 270–7; and the introduction to Rega Wood, “Adam Wodeham on Sensory Illusions. With an Edition of *Lectura Secunda*, Prologus, Quaestio 3,” *Traditio* 38 (1982): 213–52.

58. *Sent. C* Prologus, q. 3, n. 14, f. 7^{vb} : “Istud autem prima facie videtur mirabile satis, quia secundum hoc deus posset facere quod oculus videret colorem qui non esset ei praesens realiter — immo qui omnino non esset in rerum natura — ex quo actus potentiae

Buridan's point, however, is that it isn't just possible thanks to God's divine omnipotence but it is also naturally possible.⁵⁹ Indeed, it happens every time we espy from afar those women on the banks of the Seine. The direct realist without representation doesn't seem to have an account here. And this hook looks rather sharp.

non requirit aliquam realem existentiam obiecti quando obiectum non movet ad actum, quod utique esset si deus suppleret vicem obiecti in movendo. Posset igitur secundum hoc dici quod oculus videret colorem qui non est; et auditus audiret sonum qui non est; et gustus gustaret saporem qui non est; tactus sentiret calorem qui non est; odoratus odorem qui non est. Quod videtur multis impossibile.”

59. Iohannes Buridanus QDA 2.16, n. 24: “Nec obstat quod communiter dicitur, scilicet quod sensus exterior nihil apprehendit in absentia sensibilis exterioris. Hoc enim non est verum simpliciter et de virtute seimonis, sed conceditur ad talem sensus quod sensus exterior non sentit longo tempore post, quia non longo tempore servat speciem sensibilis vel sensationem post eius absentiam, sicut facit phantasia.” See also *ibid.*, 2.18, n. 40.

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