DUNS SCOTUS ON MENTAL CONTENT

SCOTUS'S Paris lectures embody some of his most mature thinking on the topics he addressed: later than the corresponding treatments found in his *Ordinatio*, they are on a par with his late works *De primo principio*, *Quodlibeta*, and parts of his *Quaestiones in Metaphysica*.[1] I shall examine what Scotus had to say in Paris about what we now call 'mental content': the feature of mental acts in virtue of which each has the character it does *qua* mental act. When I think about Socrates, the content of my thought is Socrates, which is what makes my act of thinking be about Socrates rather than about Plato; since Socrates may not exist when I happen to think of him, there must be some feature of the mental act that goes proxy for him in my act of thinking, and this feature is 'mental content' properly so-called.[2] Scotus offers some "startlingly new ideas about cognition,"[3] making a radical break with his predecessors and contemporaries, in his proposal that mental content is a (perhaps complex) internal constituent of an act of thinking. More succinctly, Scotus invents the notion of mental content.

I'll begin by looking at psychological theory at the time Scotus took up these issues in Paris (§1), turning thereafter to his account (§2) and its

[1] See Wolter [1996]. After he arrived in Paris in 1302, Scotus seems to have made further revisions to the text of his Oxford lectures on the *Sententiae*, with notes on how he would incorporate some of the new material he had developed in Paris; this is perhaps the *liber Scoti*, the new *Ordinatio* used by the scribe of Codex A, which is the basis for the Vatican Edition. Scotus never completed these revisions, instead working up new material found only in his Paris lectures. Some measure of the importance of this new material can be seen from the fact that Scotus personally examined and corrected the transcription of the first book of his Paris lectures, *Rep. par.* 1-A.

[2] This is not to hold, though it is compatible with holding, mental content to be the (intentional) object of thought or the item of which we are immediately aware in thinking. It merely asserts that there must be some feature of the mental act rather than of the world that makes the act have the character it does, that is, to be about what it is about. Mental content in the strict sense, then, is more fundamental than intentionality and may explain it.

[3] Contrary to Pasnau [2003] 285: "As in most matters, John Duns Scotus does not distinguish himself in cognitive theory by adopting a radically new perspective... Scotus is interesting, then, not because he offers any startlingly new ideas about cognition, but because he gives a careful and penetrating analysis of the field."

foundations (§3), closing with a look at Scotus's attempt to provide a solid metaphysical footing for his account (§4).

1. The Crisis in Aristotelian Psychology

The traditional Aristotelian account of psychology, widely adopted in the latter half of the thirteenth century, holds that cognition is properly understood as the form of the object coming to be in the (sensitive or intellective) soul of the thinker. What it is for Socrates to think of a cat is for Socrates to have the cat's form inhere in his intellective soul. This is literally the same form in the soul as in the cat, in the same way in which sealing-wax takes on identically the same form as found on the signet-ring: hence the name 'conformality' for this analysis of cognition.

It is a fundamental principle of Aristotelian metaphysics that the inherence of a form φ in the appropriate kind of matter makes that matter into something φ, namely the very thing or the kind of thing it is. Applied to psychology, this principle takes a twist. The presence of the form of a thing in a cognitive faculty doesn't turn it into the thing itself, other than metaphorically; when Socrates thinks of a cat he does not literally have a cat in his head. Instead, the presence of the form in the soul produces a sensing or a thinking of the thing, depending on whether the form is present in the sensitive or in the intellective soul respectively.[4] The twist is at least partially due to the fact that the soul isn't the appropriate matter for the form in question—since the intellective soul is not material at all, it is *a fortiori* not 'appropriate' matter—and so the form cannot organize the subject in which it inheres into something exemplifying the form, as it ordinarily would. Nevertheless, because it is the form it is, it somehow manages to impart to the soul the qualities it engenders in the external object. Different forms systematically engender different qualities; just as dogs and cats are not the same, thoughts of dogs and thoughts of cats are not the same. The upshot is that the mind successively becomes each of the things it thinks about, so that "the cognizer becomes what is cognized."[5]

[4] The precise details of the conformality account depend on substantive metaphysical theses that varied from thinker to thinker: whether there are individual forms or only non-individual forms that are (non-formally) individualized in individuals, for instance. But despite the differences in details, the analysis of cognition as the presence of a form in a cognitive faculty remains the foundation of Aristotelian psychological theory.

[5] Aristotle, *De an.* 3.4 430^a3–5; see also 3.7 431^a1 and 3.8 431^b20–29.

Since the intellect can think of (or become) many things, it is in potency to be thinking of (or being) those things. Two consequences follow. First, the intellect is passive or receptive of the forms it may take on, and, as such, it is known as the 'possible intellect' or 'material intellect.' The reception of the form of the object determinately actualizes the intellect, previously only potentially the same as the object, such that it is conformal with it, *i. e.* the intellect is actually identical with the object, formally speaking, and is a case of thinking of the object.

Second, since nothing is reduced from potency to act without an agent cause, and the intellect is only potentially the same as its object, in addition to the possible intellect there must also be an active principle whose activity determines the intellect to be thinking now of a cat, now of a dog. This active principle was traditionally identified as a feature internal to the intellect itself, the so-called 'agent intellect,' which somehow (*a*) actualized the possible intellect, and (*b*) did so by means of one determinate form rather than another. There were disagreements over the details with regard to (*a*), in particular whether the agent intellect was a total or only a partial cause of occurrent acts of thinking.[6] By contrast, there was broad consensus on the explanation of (*b*). For the conformality account was embedded in a much more comprehensive theory, for the most part meant to be a causal theory, of the reception of forms in the soul. According to this more comprehensive theory, the object's form is transmitted through the intervening medium to causally affect the sense-organs, thereby reducing the associated sense-faculty from potency to act as a sensing of the object; the deliverances of each of the senses is recombined by the inner sense, and, perhaps with some extra processing in the brain, a phantasm or sensible species of the object is produced in the sensitive soul.[7] To the extent that this physio-

[6] Traditional 'illumination' theories of cognition, for instance, maintain that the agent intellect is at best a partial cause, aided by God's activity or influence: the agent intellect is guided by the Divine Ideas, which are ideal patterns or archetypes in God's mind, *i. e.* exemplars (or exemplary forms) of mundane objects. The exemplar explains why the mundane object is what it is, and so 'illuminates' the mundane thing; the exemplar is the actually intelligible structure of the mundane object. Bonaventure, for example, takes the activity of the agent intellect to be the abstraction of an intelligible species from the sensible species, followed by a double impression on the possible intellect of the abstracted intelligible species (called the 'created exemplar') with the Divine Idea (called the 'uncreated exemplar') through God's efficacy to produce human understanding, which "co-intuits" the created and uncreated exemplars, though the latter only obscurely: see his *Quaestiones disputata de cognitionis humanae suprema ratione* q. 4. Cf. King [1994].

[7] Psychology on this score is not merely consonant with metaphysics, but continuous

logical account of sensation could be verified through experience, the more plausible the conformality account, since it relied on the same fundamental principles: the form, present in a cognitive faculty through the activity of some agent cause, produces in that faculty a determinate cognition of the object.

The only remaining task is to connect the physiological and the intellective accounts. Here too there was consensus. First, the agent intellect takes the (individual) phantasm and abstracts from it something (more) universal, called the intelligible species. That is to say, the agent intellect takes the particular phantasm and processes it so that it is fit for the intellect's use. This is a transition from being potentially intelligible to actually intelligible, though not yet to being actually understood. Second, the agent intellect, perhaps with divine assistance, impresses the intelligible species on the possible intellect, so that what was merely intelligible—what was able to be understood—then becomes actually understood. Thus does abstract thought come about in the intellect.

By the close of the thirteenth century this traditional aristotelian account of psychology had come under attack, with much of the critical fire directed at the connection between the physiological account of sensory cognition (still widely accepted) on the one hand, and intellectual cognition on the other hand. In particular, the function of the agent intellect and the need for intelligible species were the subject of much debate, and philosophers such as Peter John Olivi and Godfrey of Fontaines argued that the intelligible species was theoretically superfluous. But the philosopher whose criticisms were most deeply felt within the Franciscan Order, and by Scotus himself, was Henry of Ghent.

According to Henry, the agent intellect retains the sensible species in memory as something less fixed and definite, and thereby less particular; Henry calls them 'universal phantasms' for this reason—not because they present the essence, but because they do not definitely present an individual. Once such universal phantasms are present in memory, the exemplar directly actualizes the possible intellect. There is no call for an intelligible species; the exemplar rather than the agent intellect acts on the possible intellect, by means of God's agency.[8] (Henry even calls God a kind of "second agent intellect.") Of course, Henry did not merely present an alternative; he

with natural philosophy. For the broader theory of the reception of forms in the soul see any of the recent surveys of mediaeval cognitive psychology: Tachau [1988], Spruit [1994], Pasnau [1997].

[8] Henry of Ghent, *Summae quaestionum ordinariarum* art. 1 q. 2, modified and amplified in art. 58 q. 2; *Quodl.* 5.14, 8.12, and 9.15. Henry called the process of rendering

paired it with a strong negative case against the traditional account, hammering away at its deficiencies, especially with regard to its explanation of intellectual activity. The traditional account of cognitive psychology can therefore be simplified, Henry concludes, resulting finally in a theory that severely restricts the activity of the agent intellect and dispenses with the intelligible species altogether.[9]

At the turn of the fourteenth century, then, Scotus was confronted with a crisis in psychological theory. On the one hand, the traditional account of sensory cognition was widely accepted, which seemed to underwrite its account of intellective cognition as well. On the other hand, some philosophers, most notably Henry of Ghent, had made a powerful case against the key elements of the theory's explanation of thinking.

2. Scotus's Way Out

Scotus's response to the crisis was characteristically direct. In his Paris lectures, he devotes an entire question to the intelligible species, namely *Rep. par.* 1-A d. 3 q. 4: "Whether in the intellective part taken strictly there is memory having an intelligible species that is really distinct from and prior to the act of understanding" (*Utrum in parte intellectiua proprie sumpta sit memoria habens speciem intelligibilem realiter distinctam ab actu intelligendi et praeuiam actui intellectus*).[10] Scotus focusses almost exclu-

the clear and lively sensible species into the vague and indefinite universal phantasm 'abstraction.' Henry's theories underwent a marked evolution during the course of his career. The account presented here is largely drawn from Henry's writings composed after 1279, when he rejected the intelligible species. See the more detailed account of Henry's development in Marrone [1985].

[9] Henry's philosophical development tends toward this final simplification, though not as directly as suggested here. Even in his mature phase represented by *Quodl.* 9.15, for instance, Henry distinguished the possible intellect as material (receptive of the exemplar) and the possible intellect as speculative (able to reflect on its actualization and so gain deeper insight into the exemplar). Cf. Marrone [1985] 136–137.

[10] Here and throughout I give the text of *Rep. par.* 1-A d. 3 q. 4 transcribed from the two Oxford manuscrips: Merton College Library, Coxe lat. 59 ff. 35^v–37^v and Balliol College lat. 205 ff. 34^v–36^v. For earlier parallels see Duns Scotus, *In De an.* q. 17, "Whether in our intellect there are intelligible species naturally prior to the act of understanding" (*Utrum in intellectu nostro sint species intelligibiles priores naturaliter actu intelligendi*); *Lect.* 1 d. 3 p. 3 q. 1, "Whether in the intellective part there strictly is memory having an intelligible species of the object prior to the act of understanding the object" (*Utrum in parte intellectiua sit proprie memoria habens speciem intelligibilem obiecti priorem actu intelligendi obiectum*); *Ord.* 1 d. 3 p. 3 q. 1, "Whether in the intellective part taken strictly there is memory having an intelligible species to

sively on Henry of Ghent's arguments and objections. He defends much of the traditional account, but in the course of his discussion he elaborates a new paradigm to replace the core of that account.

Scotus draws his third principal argument against the need to postulate intelligible species from Henry of Ghent, which he pithily restates as follows (*Rep. par.* 1-A d. 3 q. 4):[11]

> If there were an intelligible species in the intellect, it would inform it as an accident informs its subject; the intellect would thus bear its object as a real attribute, and so not as an intentional attribute; it then follows that understanding is not "the movement of a thing towards the soul" (*De an.* 3.4 429^a13–15).

Henry's objection is this. The intelligible species is meant to be the vehicle by means of which the (abstracted universal) form of the object, previously sensed, comes to be present in the intellect. But the way in which a form is present in the intellect is to inhere in it, that is, for the intellect to be a subject for the form. (Scotus speaks here of 'attributes' rather than accidents or inherence to underline the peculiar way forms are in the intellect.) The presence of the form in the intellect is therefore just like the presence of any real attribute in its subject, the way, for example, whiteness is present in a material body, thereby making the body in which it is present white. But if so, the intelligible species, like whiteness, can then only make its subject have the features it engenders, and so *not* to be 'intentionally directed' at something else—any more than the presence of whiteness in a white body somehow makes that white body to be 'about' whiteness.[12] In short, the intelligible species can't do the job it was designed for.

There are two obvious replies to Henry's objection. The first maintains that there is something special about the *subject* in which the form is

the act of understanding" (*Utrum in parte intellectiua proprie sumpta sit memoria habens speciem intelligibilem priorem naturaliter actu intelligendi*).

[11] *Praeterea, si esset species intelligibilis in intellectu, informaret eum sicut accidens subiectum suum; ergo intellectus patietur ab obiecto passione reali; non ergo passione intentionali, et sic sequitur quod intelligere non est motus rei ad animam.* The argument is taken from Henry of Ghent, *Quodl.* 5.14 175F. Scotus raises it practically verbatim in *Ord.* 1 d. 3 p. 3 q. 1 n. 336 (Vat. III 203), and again, though couched in different terms, in *Lect.* 1 d. 3 p. 3 q. 1 n. 254 (Vat. XVI 327).

[12] In *Ord.* 1 d. 3 p. 3 q. 1 n. 336, Scotus concludes his statement of the objection by adding that then "every understanding will be an absolute action of the intellect, like a form obtaining in it, not having any outside terminus": *omnis intellectio erit actio eius absoluta, sicut forma stans in se, non habens aliquem terminum extra* (Vat. III 203). Hence an act of thinking would not be 'directed' at anything, and so not have intentionality at all.

present; the second, that there is something special about the *way* in which the form is present in its subject. Yet a moment's reflection shows that neither of these replies will do.

According to the first reply, it is the mind itself, not the form, that makes the presence of the form be intentionally directed at the object. Yet this merely names the difficulty rather than explaining it. What is it about the mind such that forms present in it are intentionally directed at their objects?

According to the second reply, the work is done by the form's special mode of presence in the intellect; after all, we know that the form is not in the intellect the way it is in the external object. Yet this too provides no explanation; the 'intentional' mode of presence remains completely mysterious.

Since neither of these two obvious ways of replying to Henry's objection will do, Scotus takes another way out, one not obvious at all: breaking with tradition, he rejects simple conformality as a way of understanding thought. Instead, Scotus proposes an analysis of thinking wherein there are at least two distinct components (*Rep. par.* 1-A d. 3 q. 4):[13]

> I reply that the intellect bears a second attribute the way an organic potency or organic sense does: at first in receiving the species, though it isn't real as an intentional attribute; and once this has taken place, there follows a cognizable or intentional attribute through which the intellect bears the object in the species intentionally, and hence understanding really is a "movement toward the soul," since it derives from the object as it is in the species. Thus the first attribute is in the intellect, the second derives from the object as it shines forth once again (*relucet*) in the species.

The reception of the intelligible species involves (*a*) a real attribute, present in the intellect as in a subject; (*b*) an 'intentional attribute,' derived from the object, following on the real attribute. Now (*a*) is modelled on the metaphysical inherence of an accident in the soul as its (quasi-) substance. That is to say, (*a*) describes the respect in which the intellect receives the

[13] *Dico quod intellectus patietur secunda passione, sicut potentia organica uel sensus organicus: primo realiter recipiendo speciem, licet non sit realis sicut passio materiae; et, hac praemissa, sequitur passio cognoscibilis siue intentionalis qua patitur ab obiecto in specie intentionaliter, et ideo intelligere est motus ad animam, quia ab obiecto ut in specie. Prima ergo passio est in intellectu, secunda est ab obiecto ut in specie relucente.* Cf. *Lect.* 1 d. 3 p. 3 q. 1 n. 298 (Vat. XVI 345); *Ord.* 1 d. 3 p. 3 q. 1 nn. 386–387 (Vat. III 235).

intelligible species as something only episodically present in the soul as its subject, namely as something that exists 'subjectively' in the soul. But (b) is different. First, it is not present in the soul subjectively, as (a) is. Although it is derived from the object, it depends on (a). Second, Scotus later asserts that the mind can make an "intentional production" such as (b) "only if there is some form that has been really produced [in the mind] by a real production *in* which there is the object of the intentional production," as described here.[14] Third, (b) is the vehicle for the object's presence in the intellect, derived from its evident presence in the intelligible species (where it "shines forth once again"), which clearly specifies the character of the act of thinking. These three features of (b), namely its dependence on (a), its existence 'in' it, and its presentation of the object, license us to speak of (b) as the *mental content* of the thought (a).[15]

Scotus does speak of the intentional object as being borne in the species rather than in the occurrent thought. That is because he can talk of either equally well: the act of thinking inherits all its characteristics, including its content, from the intelligible species; hence a full description of the intelligible species just is an explication of the content of an act of thinking. Scotus can draw the distinction as needed, but for the most part treats talk of the intelligible species and of the occurrent act of thought as completely interchangeable, and I'll follow his practice in this regard.

Now Scotus elucidates the sense in which the object is 'in' the intelligible species, and thence the act of understanding, in replying to the second principal argument, which runs as follows: The presence of the object causes the existence of the species in the cognitive power, not the other way around; hence the object in the species isn't present in the cognitive power as a cause, but rather as something that is itself caused.[16] Scotus's response is

[14] *Rep. par.* 1-A d. 27 q. 2 (Merton 59 fol. 127^r = Balliol 205 fol. 113^r): *Sed nulla productio intentionalis est esse obiectum, nisi prius sit aliqua forma producta realiter aliqua productione reali in qua est obiectum productionis intentionalis; de hoc dictum est supra in isto libro d. 3.* In the corresponding passage in *Ord.* 1 d. 27 qq. 1–3 n. 54, Scotus tells us that the object has intentional being *in* the real attribute: *istae actiones et passiones intentionales non conueniunt obiecto nisi propter aliquam actionem uel passionem realem, quae conueniunt ei in quo obiectum habet esse intentionale* (Vat. VI 86).

[15] Scotus conflates the first two of these features in *Lect.* 1 d. 3 p. 3 q. 1 n. 298, where he reasons that "an intentional attribute must presuppose a real attribute, for otherwise it would be founded in nothing": *oportet ut passio intentionalis praesupponat passionem realem, aliter enim fundaretur in nihilo* (Vat. XVI 345).

[16] *Rep. par.* 1-A d. 3 q. 4: *Praesentia obiecti respectu potentiae causa est speciei in po-*

to distinguish two ways in which something can be present (*Rep. par.* 1-A d. 3 q. 4):[17]

> We declare that there is an ambiguity in 'presentness': (*i*) the presentness of the real object to the potency, that is, what is active to what is passive; (*ii*) the presentness of the cognizable object, and this doesn't require the real presence of the object, but does indeed require something in which the object shines forth once again. Therefore, I say that (*i*) the real presence of the object is the real cause of the species, and (*ii*) the object is present in it. Accordingly, in (*i*) the object is an efficient cause, whereas in (*ii*) there is the formal presence of the species, for the species has the kind of nature such that the object is cognizably present in it—not effectively or really, but instead in the manner in which it shines forth once again.

The real object is the agent cause, which, when present, triggers the cognitive power's ability to receive the species. The agent cause therefore has presentness in sense (*i*), which thus must be part of the causal account of cognition integrating psychology with natural philosophy. But presentness in sense (*ii*) is a matter of the object being "cognizably present" in the species, that is, the object being contained in the intelligible species as its sole and evident content. This is not real presence, since the object is not really in the intelligible species (the species of a cat does not include the real cat); nor is the object in the intelligible species as a cause present in its effect (as we can 'see' the cat from the shape of the indentation on the pillow). Instead, Scotus tells us, the object is present "in the manner in which it shines forth once again." What does he mean by this dark saying?

tentia, et non e conuerso; ergo non per speciem ut per causam obiectum est praesens potentiae. The argument is taken from Henry of Ghent, *Quodl.* 5.14 174Z. Scotus also mentions it in *In De an.* q. 17 n. 2, *Lect.* 1 d. 3 p. 3 q. 1 n. 250 (Vat. XVI 325–326), and *Ord.* 1 d. 3 p. 3 q. 1 n. 334 (Vat. III 202).

[17] *Dicendum quod aequiuocatio est de praesentialitate: quaedam enim est praesentialitas realis obiecti et potentiae, siue actiui et passiui; et alia est praesentialitas obiecti cognoscibilis, et haec non requirit praesentiam realem obiecti, sed bene requirit aliquid in quod relucet obiectum. Dico ergo quod praesentia realis obiecti est causa realis speciei, et in illa est obiectum praesens; unde in prima praesentia obiectum est causa efficiens, sed in secunda praesentia est speciei praesentia formalis: species enim est talis naturae quod in ea est praesens obiectum cognoscibiliter, non effectiue uel realiter sed per modum relucentis.* There is an earlier version of this reply in *Ord.* 1 d. 3 p. 3 q. 1 n. 382 (Vat. III 232–233). See also *Lect.* 1 d. 3 p. 3 q. 1 n. 294 (Vat. XVI 342–343), which uses instants of nature in his answer; and *In De an.* q. 17 n. 17. The notion of 'presentness' is discussed in Biard [2001].

In part this is a logical precondition on thought. In order to think about a cat, the intellect must be in potency, either essential or accidental, to be thinking of a cat, and this in turn requires the object (the cat) to be available to the intellect prior to the occurrent thought so that it can determinately actualize the intellect.[18] (The cat, of course, is present by its form, so that we may speak either of the object or of the form indifferently: see §3.) But there is more to it than that. Scotus is making the point that in order to be cognized at all, we need not the object as such but rather the object *qua* cognizable, towards which we direct our mental act—in short, we need the object to be 'cognizably' present, to be the *mental* content of our act of thinking, whether the real object be present or not.[19] Furthermore, mental content is *transparent* in the sense that it is immediately evident what the content of a given act of thought is; the thinker is not, and cannot be, unclear about what he is thinking about. This is the point of Scotus's insistence that the object "shines forth once again" as the mental content of the act of thought: 'once again' because it is the cognizable rather than the real presence of the object; and it 'shines forth' because the object transparently discloses itself in the act of thinking. It could hardly do less, since it gives the mental act the character it has.[20]

[18] This line of reasoning is a key feature in Scotus's defense of the intelligible species in *Rep. par.* 1-A d. 3 q. 4. He offers it twice. The first time it shows up as the initial principal argument: *Intellectus quandoque est in potentia essentiali ante addiscere, quandoque est in potentia accidentali ante addiscere, II De anima et III et VIII Physicorum; ergo aliter se habet quando est in potentia accidentali quam ante, quando est in potentia essentiali. Obiectum autem non se habet aliter sed eodem modo. Si ergo intellectus se habet aliter ut est in potentia accidentali, ergo est mutatus; sed omnis mutatio terminatur ad aliquam formam; ergo aliqua forma praecedit actum intellectionis, et illam uoco speciem.* Cf. *In De an.* q. 17 n. 6; *Lect.* 1 d. 3 p. 3 q. 1 n. 255 (Vat. XVI 327); *Ord.* 1 d. 3 p. 3 q. 1 n. 339 and the *textus interpolatus* there (Vat. III 204–205). The second time Scotus endorses it as his own reason for postulating the intelligible species: *Intellectus potest habere obiectum actuale < per se >* sibi praesens prius natualiter quam intelligat; ergo habet speciem obiecti in intellectu et non in phantasmate priusquam intelligat. Antecedens** patet, quia sicut obiectum, ita per se condicio obiecti intellectus, cuius est uniuersalitas, praecedit actum intellectus* [* *perfectione* mss.; ** *Consequens* Merton]. Cf. *In De an.* q. 17 n. 7; *Lect.* 1 d. 3 p. 3 q. 1 n. 267 (Vat. XVI 332); *Ord.* 1 d. 3 p. 3 q. 1 nn. 349–350 (Vat. III 210–211).

[19] See Perler [1994], Perler [1996], and Pasnau [2003]. As Scotus puts it later in *Rep. par.* 1-A d. 36 qq. 1–4 n. 34: "The basis for understanding the object is really different from the object," *ratio intelligendi differt realiter ab obiecto* (text given in Noone [1998] 407.22–23).

[20] From the transparency of mental content Scotus deduces that each object in the mind

Scotus's idea—to distinguish acts of thinking from their content—is new and startling. There is no room for it on the traditional account of Aristotelian psychology, which takes both the occurrence of an act of thinking and the content of that act to be given by one and the same thing, namely the form's presence or inherence in the soul. For Scotus, while thinking initially appears to be ontologically simple, it turns out to be really composite, consisting in a form that is present in the soul subjectively in combination with another form that is present only intentionally, existing in and depending on the first form; the second form is identifiable as the object of the thought, at least to the extent that forms are identifiable with the objects of which they are the (essential) forms.[21] The intelligible species is the vehicle for these forms to exist in the intellect. More precisely, the intelligible species 'contains' the object, and, when impressed on the possible intellect,[22] results in the actualization of both forms required in the intel-

can have only a single representative character. This carries the weight of his argument in *Rep. par.* 1-A d. 3 q. 4 against Henry of Ghent's theory of cognition, since it is a key feature of Henry's account that one and the same mental item, for Henry the phantasm, can have distinct representative characters in distinct acts of thinking—*e. g.* the phantasm of Felix the Cat can at one time represent the particular cat Felix, at another time represent felinity. Scotus argues as follows: *Eadem species et eiusdem rationis, non est per se repraesentatiua obiecti sub oppositis rationibus repraesentabilis; ratio singularis et ratio uniuersalis sunt oppositae rationes in cognoscibili et repraesentabili; igitur nulla eadem species et unius rationis potest esse repraesentatiua alicuius obiecti sub uniuersalis et singularis. Species in phantasmate repraesentat obiectum singulare sub ratione singularis, ergo non potest repraesentare sub ratione uniuersalis idem obiectum. Maior probatur, quia species sub illa ratione qua repraesentat obiectum, mensuratur ab obiecto. Sed idem non potest mensurari duabus mensuris oppositis, nec e conuerso; tunc enim idem bis diceretur, secundum Philosophum V Metaphysicae. Igitur eadem species non potest repraesentare duo obiecta opposita, nec idem obiectum sub oppositis rationibus obiectiuis.* Cf. *In De an.* q. 17 n. 8; *Lect.* 1 d. 3 p. 3 q. 1 n. 268 (Vat. XVI 332); *Ord.* 1 d. 3 p. 3 q. 1 n. 352 (Vat. III 212 especially the *textus interpolatus*).

[21] A delicate point is how the object exists in and through the act of thinking, since that seems to make it an accident of an accident, something proscribed by Aristotelian metaphysics. Scotus does not say, but one suggestion might be that the two forms are a kind of composite entity with one part dependent on the other, but not conversely—not unlike the way human beings are traditionally understood as composites of body and soul, where the body depends on the soul for its continued existence, but the soul can survive the body's dissolution.

[22] There are two joint co-causes responsible for impressing the intelligible species on the possible intellect: (*i*) the object, either in itself or as present in the intelligible species; (*ii*) the intellect itself, perhaps only the agent intellect or perhaps the intellect as a whole. Although they are joint causes they are not of equal rank, for Scotus maintains

lect for thinking. But the fine points aside, it is clearly an articulation of the notion of mental content. When Socrates thinks of a cat he does so in virtue of an act of thinking whose content is the form of the cat, or, loosely speaking, a concept whose content is the cat. Such concepts or mental acts can thus be sorted by their contents as well as (formally) by the mental acts that include them.[23] At the price of doubling the number of forms, then, Scotus can offer a theory of intellective cognition that claims to make good on the notion of mental content, avoiding the difficulties raised by Henry of Ghent.[24]

3. The Being of Objective Being

It is awkward to refer to mental content as 'the secondary dependent attribute present in the intellect *via* the primary real attribute, conveyed by the intelligible species.' Scotus therefore coins a new vocabulary. Since the real attribute characterizing the intellect is present in it as a subject, or 'subjectively,' Scotus declares the intentional attribute that characterizes the intellect, by contrast, to be present *objectively* (as described in §2)—which is to say that it, or more generally the form or object it contains, has 'intentional being' (*esse intentionale*) or 'objective being' (*esse obiectiuum*) in the mind.[25] The last term is especially well-chosen, since it contrasts

that the causality of (*i*) is essentially ordered to that of (*ii*): *Rep. par.* 1-A d. 3 q. 6 (cf. *Ord.* 1 d. 3 p. 3 q. 2).

[23] Duns Scotus, *Quodl.* 15.30: "The [intelligible] species also seems to be classified according to the object, not as an intrinsic formal principle but instead as an extrinsic principle": *Videtur etiam sortiri speciem ab obiecto, licet non sicut a principio formali intrinseco, tamen sicut a per se principio extrinseco* (text given in Alluntis [1968] 552). Scotus here uses '*sortiri*' as the deponent verb 'to sort or classify' rather than in its classical sense 'to select by lot.')

[24] Scotus's account might be taken as a sophisticated variant of the second obvious reply to Henry, described previously, in that according to Scotus the form of the object is present in a special way, namely in the dependent secondary attribute. But the burden of Scotus's ontological multiplication of forms is precisely to give structure and content to the way in which the form can be present in the mind, unlike the second obvious reply. See further the discussion at the end of §4.

[25] Scotus seems to have been the first to use this turn of phrase. It also shows up at roughly the same time in the *De intellectu et specie* of Hervæus Natalis: see the text given in Stella [1959] 162–164. However, the best date for this treatise is sometime in the first decade of the fourteenth century, probably in the latter half, which would likely put it after Scotus's Paris lectures. (Scotus and Hervæus began lecturing on the *Sententiae* at Paris in the same year.) Hervæus's other references to objective being are found in quodlibetal disputations that can be securely dated to 1307–1310: see his

with the 'subjective being' of ordinary attributes but is closely linked to the 'object' that is thought about. Further, it suggests and perhaps even encourages a slide between the mental item and the real item. Indeed, in *Rep. par.* 1-A d. 36 qq. 1–4 n. 58, for example, Scotus describes the mental content of an act of thinking by talking about the object that is thought of:[26]

> The house in the mind of the architect is objectively in the species of the house. Furthermore, the species of the external house is in the soul, since in no other way can the external house be present to the soul itself, for "the stone is not in the soul but rather its species" (*De an.* 3.8 431^b28-432^a1). Hence the external house comes to be from the house as it is objectively in its species in the soul. Therefore, the house objectively in the soul according to which the external house comes to be is the idea of [the external house], since it is the house that is understood.

The talk of an external house naturally suggests that we think of the mental content of the idea as an 'internal house,' so that Scotus's theory now licenses us to speak of a thing as 'existing' in the thought of it. The external house has real being whereas the 'internal house' has only the being that is associated with being cognized (*esse cognitum*). But that brings us face-to-face with the question: What is the being of objective being? Or in contemporary terms: What is the ontological status of mental content?

One answer can be ruled out immediately. As we have seen, Scotus is clear that the 'internal house,' whatever it may prove to be, is completely different from the external house. Mental content is an intrinsic component of mental acts, and therefore categorically different from nonmental items. Hence the objective being of the house is not a feature or property of the external house, that is, it is not a feature of the only house there is. Thus it is not, for instance, a new mode of being that the real house might have. Nor is it an oblique way of talking about the real house, an extrinsic

Quodl. 3.1 (fol. 68^{rb}). In each case Hervæus is writing about debates that had taken place earlier in Paris. It is plausible to think that Scotus was the direct or indirect source of those debates; Scotus, after all, had a philosophical basis for introducing the new terminology.

[26] *Domus enim in mente artificis est obiectiue in specie domus; species autem domus extra est in anima, quia aliter non potest domus extra esse praesens ipsi animae, quia lapis non est in anima sed in species eius. Et ideo a domo ut est obiectiue in sua specie in anima fit domus extra. Ergo domus obiectiue in anima secundum quam fit domus extra est idea eius, quia domus intellecta* (text given in Noone [1998] 419.25–420.5). Everyone in the Aristotelian tradition, including Aristotle, would on occasion talk this way; Scotus takes it literally and has a theory to back it up.

denomination of it, since if it were, objective being would not be an internal component of the act of thought. In fact, there is a quick and dirty argument to the conclusion that objective being cannot be tied in any fashion to the being of the real item, since we can think of the real item (and so have the appropriate mental content) even after it has been destroyed. But what then is objective being?

Scotus addresses this question in *Rep. par.* 1-A d. 3 q. 4 in the context of his second positive argument for postulating intelligible species. He applies the metaphysical axiom "A real action must have a real terminus" (*Omnis actionis realis oportet aliquid dare terminum realem*) to the case of the agent intellect, arguing that it must have an intelligble species to serve as the other terminus in its activity of bringing about thought. However, someone might object that the universal object *qua* universal in the phantasm might serve as the real terminus, thereby avoiding the need for the intelligible species. Scotus replies:[27]

> The 'universal object *qua* universal' has only diminished being (*esse deminutum*), namely as being cognized, the way Hercules in the statue has only diminished being, namely what is represented in an image... Therefore, since the terminus of a real action is not an object having diminished being, as being cognized or being represented, but instead something real, it follows that the real action of the agent intellect is terminated at a real form, in existence, by means of which it formally represents the universal as universal. This real form is accompanied by an intentional terminus, namely the universal object *qua* being represented, which it has in the [intelligible] species.

Scotus's response to the question at issue should be no surprise. The real form that is the terminus of the agent intellect's real action is the form existing subjectively in the mind, which is not to be confused with the object existing objectively in the mind. Whether this reply would convince

[27] *'Uniuersale obiectum sub ratione uniuersalis' non habet nisi esse deminutum, ut esse cognitum (quemadmodum Hercules in statua non habet esse nisi deminutum, quia repraesentatum in imagine); sed si aliquod esse reale habet, hoc est in quantum est in aliquo ut repraesentante ipsum sub illa ratione, ita scilicet quod intellectus agens facit aliquid repraesentatiuum uniuersalis de eo quod fuit repraesentatiuum singularis. Ergo cum terminus actionis realis non sit obiectum habens esse deminutum ut esse cognitum uel repraesentatum, sed aliquid reale, sequitur quod realis actio intellectus agentis terminatur ad realem formam, in exsistentia, qua formaliter repraesentat uniuersale ut uniuersale, quam formam realem concomitatur terminus intentionalis, ut obiectum uniuersale secundum esse repraesentatiuum quod habet in specie.* Cf. Vat. III App. A 363; *In De an.* q. 17 n. 13.

Henry of Ghent is a point we can set aside, since we aren't interested in Scotus's argument for its own sake but rather for what it can tell us about the ontological status of mental content.

Scotus's solution seems to turn on the newly-introduced notion of *diminished being*. He mentions two varieties of diminished being: cognized being and represented being, which are the kinds of being had by items insofar as they are cognized or represented. Thus dimimished being is the kind of being Hercules has in his statue.[28] That is to say, diminished being is the sort of being that Hercules-as-represented has. Of course, a representation of Hercules need not be 'mental' (statues are not mental), though a cognition of Hercules must be. Therefore, 'diminished being' can apply to mental and nonmental items.

Now the very terminology of 'diminished being' suggests that Scotus is talking about a kind of *being*, albeit one that picks out a lesser ontological status: frogs and bats have one status, pictures of frogs and thoughts of bats another; God presumably has the greatest ontological status of all. On this score, mental contents are entities, if second-rate entities. They have less being than other things. Nevertheless, they are not nothing, for if they were nothing they could hardly determine the character of mental acts. Hence diminished being applies to any ontological status that is somehow 'less' than the status enjoyed by the ordinary things of this world.[29] Scotus's notion of diminished being is a way of distinguishing ontological levels.

Scotus describes *esse deminutum* in this ontological fashion in his earlier writings. For example, when he discusses the nature of the Divine Ideas in *Ord.* 1 d. 36 q. un. n. 45 (Vat. VI 288), Scotus explains the relation between diminished being and ordinary being as being a version of the relationship of being *secundum quid* to being *simpliciter*, likening it to Aristotle's case

[28] Scotus's way of putting his point might suggest that we are dealing with some property of the real Hercules, but this would be a misunderstanding. Dimiinished being is no more a property of the real Hercules than the objective being of the 'internal' house a property of the real (external) house.

[29] Alternatively, diminished being is perhaps relative to the ontological status something is 'supposed' to have. On this view, there need not be a single ontological level where are *entia deminuta* are to be found. Instead, anything shifted downwards from its proper level will count as a diminution. For example, Hercules is a thing, but a representation-of-Hercules is something less than Hercules, though still a thing in its own right. Likewise human beings are an 'image' of God, who therefore has lesser being in humans, although humans are on a higher ontological level than mere representations of Hercules. Whether we construe diminished being as absolute or as relative will affect the proper translation of *esse deminutum*, of course. Cf. Maurer [1950].

of the Ethiopian who is white in respect of his teeth but black overall; diminished being is perfectly well an instance of being, just as the Ethiopian's teeth are genuinely white, but it is not the full story with respect to its subject.[30] If we follow out the analogy, diminished being is the sort of being something has in respect of being cognized or represented, not in virtue of what it is absolutely; it is a kind of 'partial' being, the way whiteness only partially applies to the Ethiopian. Moreover, if we ask where this lesser ontological level is located, Scotus seems to have an answer: it is produced and sustained by the Divine Mind in its thought.[31] Since the real world is also produced by the action of Divine thought, there is no reason not to explain lesser kinds of being the same way.

By the time he came to Paris, however, Scotus no longer endorsed this ontological interpretation of diminished being. His discussion of the Divine Ideas in *Rep. par.* 1-A d. 36 qq. 1–4 has been elaborated into a more careful, articulated, and sophisticated treatment of the issues than found in the *Lectura* or the *Ordinatio*—and he drops the explanation of diminished being as being *secundum quid* as compared to being *simpliciter*. In fact, he drops all mention of diminished being. He speaks freely of objective being, but no longer finds it productive to explain it in terms of diminished being. He clearly retained the notion of diminished being, however, since he makes use of it in his second positive argument for postulating intelligible species given in *Rep. par.* 1-A d. 3 q. 4, as noted previously. If he had it, why didn't he use it?

I think Scotus became dissatisfied not with the notion of diminished being but with his explanation of it. In particular, he seemed to find that it misled people, that they didn't understand what he was driving at by appealing to diminished being in the first place. Consider again his analogy with the Ethiopian white in respect of his teeth. A salient feature of the analogy—the feature with which I believe Scotus became dissatisfied—is that it makes diminished being a kind of *being* in the first place. Hercules-as-represented is an entity; it just isn't much of one. But when Scotus returns to the subject in his Paris lectures, he gets rid of anything that suggests the ontological reading of diminished being. Instead, he offers a starkly explicit denial in *Rep. par.* 1-A d. 36 qq. 1–4 n. 54: "A stone in

[30] Cf. *ibidem* n. 34. Note that Scotus doesn't offer this explanation in the corresponding passage of his earlier Oxford lectures, namely *Lect.* 1 d. 36 q. un. n. 26 (Vat. XVII 468–469).

[31] See *Ord.* 1 d. 36 q. un. n. 28. This is the reading favored in Perler [1994] 80: "The intelligible being constitutes a 'third realm' of being located in God's intellect."

cognized being is in reality nothing at all" (*lapis in esse cognito tantum nihil est secundum rem*).[32]

If we return to Scotus's argument for the intelligible species with this in mind, an alternative interpretation of diminished being naturally suggests itself. In his response on behalf of the intelligible species, after giving the example of Hercules, Scotus goes on to contrast diminished being with the sort of being possessed by "something real." Items with diminished being, Scotus suggests, must "accompany" (*concomitatur*) something real, 'in' which they are to be found. On the ontological interpretation of diminished being, these claims would be read as asserting the existence of something which, although existing, has a lesser ontological status than the real thing it depends on for its existence. But his remarks can be read another way. Scotus might mean that items with diminished being have *no being at all* in their own right. They are instead completely dependent, having being only in and through something else, namely the real item they accompany. But what has no ontological status of its own, yet 'exists' in dependence on another?

The answer: something that *supervenes* on a given (real) item. Scotus tells us that diminished being is the sort of being Hercules-as-represented has in the statue.[33] But Hercules-as-represented is nothing other than the statue, that is, bronze shaped in a particular way; in its own right it really is nothing at all. Now this point takes some delicate handling. The shape of the statue is a form, and it thereby has the ontological status Scotus accords to forms belonging to composite substances. Of course, the shape of the statue is (closely similar to) the shape possessed by Hercules in his lifetime, which is how the statue can represent Hercules. But Hercules-as-represented is *not* the shape, and self-evidently not the bronze, but instead

[32] Text given in Noone [1998] 418.16–17. Scotus also seems to no longer suggest that human cognition is indebted to God's production of the Divine Ideas in intelligible being *qua* intelligible, although this claim is less certain since Scotus also maintained that God has Ideas and that human cognition 'aspires' toward Divine knowledge, at least in the sense that God's act of thinking of things is necessarily perfect in ways in which our cognitive acts could only hope to be. Hence the suggestion that mental content is a third realm sustained by God is tempered, if not jettisoned, in the Paris lectures.

[33] This is something Scotus retains from his earlier writings. In *Ord.* 1 d. 36 q. un. n. 45, right before introducing the analogy of the Ethiopian white in respect of his teeth, Scotus describes diminished being by talking about a statue of Caesar. Indeed, Scotus takes statues to be paradigm cases for semantic signification (another form of intentionality) as early his questions on Aristotle's *De interpretatione*.

is *the bronze's being so shaped*, which is neither the form nor the matter nor the composite, though supervening on them—an appropriately subtle view for the Subtle Doctor.

Diminished being, then, despite the misleading implications of its name, is not really a type of being at all. Likewise, objective being—the being had by the object of thought—is a form of diminished being, and hence not really a being. That is, it is not a being in its own right; it has no independent ontological standing. It 'exists' only in and through the real item on which it supervenes, just as the bronze's being so shaped exists only in and through the shaped bronze that is the statue, though it cannot be identified with the statue.[34]

4. The Metaphysics of Cognitive Psychology

The 'supervenience' reading of diminished being given above fits well with the changes Scotus made in his Paris lectures from his earlier writings. It also provides a clear model of how two attributes can be present in one and the same thing, one subjectively and the other objectively. Yet as an explanation of mental content it seems to leave a fundamental question unanswered, and indeed unaddressed. How does mental content get hooked up with an act of thought, or, more loosely, why does a given concept have the content it does? The statue of Hercules has Hercules-as-represented for its intentional content because, we might say, the bronze of the statue has this shape rather than than another, and this shape is (closely similar to) the shape Hercules had during his life. But there seems to be nothing concrete we can point to as the 'matter' of the mental content to play the role in thought analogous to that played by the bronze of the statue.[35] Instead, we

[34] In contemporary terminology, Scotus's view is that the intentional attribute supervenes on, but is not reducible to, the real attribute on which it all depends. Now there is a Pickwickian sense in which one could maintain that the supervening item does 'exist,' in that it is always and only present when the real item on which it supervenes exists, but this sense clearly doesn't attribute further ontological status to the supervenient item and so poses no threat.

[35] This is related to, but different from, the question of what kind of distinction holds between the subjective and objective forms in the mind: a real distinction, a distinction of reason, a formal distinction, a modal distinction, or something else? Scotus doesn't address this question, but clearly it is neither a real distinction (since the objective form is not a real thing) nor a distinction of reason (since this would threaten regress). Nor does it fit the paradigm Scotus proposes for the modal distinction, in which there is a single nature that 'varies' through each of the modes (like shades of a given color). That leaves us with the formal distinction. In his later works Scotus is concerned to

seem to be left with the brute fact that an act of thinking has the content it does. So, it might be objected, Scotus in the end leaves mental content a mystery.

On Scotus's behalf we might reply that this is just to ask what makes one form different from another, which is an unanswerable question. Each form is what it is and nothing else. If the difference between unobservable mental contents seems more mysterious than the difference between observable geometrical shapes, that is due to our psychological limitations in thinking of the immaterial rather than anything special about mental content. In short, we could brazen it out.

Yet I believe Scotus felt the force of the objection and tried to address it. There are two indications that Scotus was starting to give a more technical analysis of mental content at the time of his death.

First, in discussing the nature of the Divine Ideas in *Rep. par.* 1-A d. 36 qq. 1–4, Scotus restructures his earlier discussions of the material to concentrate on Aristotelian third-mode relations, that is, what Aristotle calls relations of the measurable to the measure (*Met.* 5.15 1020^b26–32). His single-minded focus on whether the third-mode relations involved in cognition—in this case divine cognition—are real relations or relations of reason shows us his method at work, where he tries to replace his earlier psychological accounts with technical metaphysical apparatus. The centerpiece of his analysis is the creation of ideas in the Divine Mind, for which he gives an analysis of how mental content is constructed, in terms of four instants of nature. Admittedly, it is God who so constructs mental content, but it is at least a beginning on how mental content can be constituted, at least in part, by the number, kind, and character of the relations it involves.

The second indication comes from Scotus's Parisian quodlibetal disputation. In *Quodl.* 13, Scotus raises the question whether cognitive and affective acts are essentially absolute or essentially relative. He replies that such acts involve both absolute and relational components, the latter providing the grounds whereby a mental act is directed towards something, both in general (thereby explaining intentionality) and in particular (thereby explaining why an act has the mental content it does). Most famously he applies his analysis to intuitive and abstractive cognition, and his explanation is again couched in the technical apparatus of the metaphysics of relations (*Quodl.* 13.27–47).

deny that the formal distinction carries any ontological baggage, and, if we allow one term of a formal distinction to be a real thing, then perhaps that is the best answer we can supply on Scotus's behalf, although it does seem to be a case of *obscurum per obscurius*.

The details of Scotus's account of the Divine Ideas on the one hand, or of intuitive and abstractive cognition on the other, need not detain us here. What does matter is that Scotus, at the time of his death, was beginning to recast problems in cognitive psychology by making use of the metaphysics of relations to further explicate the notion of mental content. If his untimely death had not prevented him, there is every reason to believe he would have continued to explore the nature of mental content in a radically new way, by embedding it squarely in metaphysics.

Scotus's efforts were not unrecognized, but he was, at best, only partly successful. Upon his death, his students in both England and France recognized the centrality of mental content to Scotus's thought, and set to work to finish what they took him to have left unfinished in the theory.[36] For instance William of Alnwick—who as Scotus's secretary knew his thought as well as anyone and better than most—argues in his *Quaestiones disputatae de esse intelligibile* q. 1 that the intelligible being of an object just is the act of intellect representing it, along the lines of Scotus's mature thinking, although he does not avail himself of the theory of relations.[37]

Whether Scotus's students, or for that matter Scotus himself, succeeded in producing a defensible theory of mental content is a question for another time. But we may still admire the revolution Scotus wrought in the philosophy of mind as well as his attempt to penetrate the cognitive and metaphysical depths of mental content.[38]

[36] For a description of how the early Scotists tried to carry on in their Master's footsteps, see Tachau [1988], Spruit [1994], and Perler [2001].

[37] For Alnwick's views see Ledoux [1937].

[38] I'd like to thank Tim Noone for providing me with his working version of the forthcoming critical edition of Scotus's *In De anima* q. 17. I would also like to thank Michael Stansfield and Penelope Bulloch, the archivists of Merton College (Oxford) and Balliol College (Oxford) respectively, for allowing me the examine the Reinbold manuscripts of Duns Scotus they have in their charge.

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