DUNS SCOTUS ON POSSIBILITIES, POWERS, AND THE POSSIBLE

SCOTUS is a modal pluralist. Following Aristotle's lead in *Metaph.* Δ.12, Scotus recognizes three distinct and mutually irreducible kinds of modality (the names are mine): *possibility*, which is a feature of propositions or of the states of affairs they describe, fundamentally a semantic notion, a version of τὸ δυνατόν (1019^b22–33); *power*, an ability or capacity the subject possesses, whereby it may do something or something may be done to it, respectively; and *the possible*, a mode of being enjoyed by things that aren't actual but might be, such as Socrates's sister—the latter, namely power and the possible, being versions of δύναμις (1019^a15–$^b21$).[1] These different kinds of modality are independent but interconnected. For example, Scotus holds that if Socrates's having a sister is a possibility, then his sister is a possible being regardless of the powers things possess, though for her to become actual the relevant powers have to exist in the appropriate subjects and be capable of realization. Possibilities are therefore not 'objectifications' of powers, and the different kinds of modality do not dovetail as neatly as others have thought, even in the case of God.[2] Instead, Scotus offers an extended and artful account of each kind of modality, and, as befits the Subtle Doctor, details the nuances of their interrelations. If any mediæval analysis can validate Jacobi's contention that the study of modality is philosophically fruitful, it is Scotus's, as I shall argue here.

Now the claims about Scotus's theory of modality sketched in the preceding paragraph are neither obvious nor uncontroversial, as the recent secondary literature attests.[3] There is good reason for this. Scotus's most systematic treatment of the subject is presented in *In Metaph.* 9, which was mistakenly

[1] Scotus endorses Aristotle's claim that 'power' as used in mathematics—the sense in which, say, x^n is x to the nth power—is not literal but κατὰ μεταφοράν (1019^b33): *Ord.* 1 d. 20 q. unica n. 11, *Lect.* 1 d. 7 q. 1 n.31 and d. 20 q. unica n. 10, *In Metaph.* 9 qq. 1-2 n. 17. Hence 'mathematical potency' is no part of the analysis of modality proper, and I'll ignore it hereafter.

[2] See, for instance, the discussion of Aquinas on modality in Jacobi [1997] 459–461 and in Park [2001].

[3] See, for example, Knuutila [1993] and [1996]; Langston [1990]; Normore [1996]; Marrone [1998]; and van der Lecq [1998]. Research in the past decade has largely concentrated on Scotus's theory of 'synchronic possibility' and the separation of time and modality in his account of freedom, in particular as this provides a basis for a conception of possible worlds.

believed to be an early effort and thereby given little weight. We now know, however, that at least the bulk of *In Metaph.* 9 is a late and fully mature work.[4] By contrast, in works that have always been recognized as fully mature, especially the *Ordinatio* and *Lectura*, Scotus treats modality only in scattered brief remarks, a situation he makes worse by his fluid terminology. Yet Scotus presents one and the same doctrine, as described above, in all these texts; it is the foundation of his accounts of free choice (through the presence of a non-manifest power for the opposite of a given choice) and divine creation, among others.

The first order of business, then, is to examine Scotus's division of modality, that is, how Scotus takes the kinds of modality to be organized (§1), followed by a closer look at each kind: possibility (§2), power (§3), and the possible (§4).

1. The Division of Modality

Scotus tells us in *Lect.* 1 d. 20 q. unica n. 10 that 'potency' is an equivocal term (*potentia sumitur aequivoce*), a claim reinforced by his explicit statement that the different kinds of potency must be distinguished from one another (*Ord.* 1 d. 7 q. 1 n. 27 and *In Metaph.* 9 qq. 1-2 n. 14). Modality is only equivocal πρός ἕν (or 'analogously'), as we shall see; there is a fundamental unity underlying possibility, power, and the possible, a unity they retain despite their distinctness. Now according to Aristotle, "being is said in many ways," including the potential and the actual (*Metaph.* Δ.7 1017^a35–$^b10$ and E.2 1026^a33–$^b2$), or, as Scotus preferred to put it, potency and act make up a transcendental division of being (*Ord.* 1 d. 38 p. 2 and d. 39 qq. 1-5 n. 13). Furthermore, Scotus, developing a line of thought taken from Aristotle, holds that potency is essentially ordered to act: it is the nature of potency to be intelligible only in terms of some form of actuality, though the converse does not hold; act is prior to potency and can stand independently of it.[5] Hence Scotus's analysis of modality will ultimately have to link each form of potency with actualization in some fashion, as we shall see.

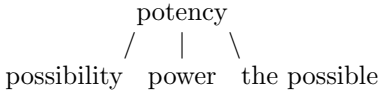
[4] Different parts of Scotus's text may have been written at different times: see §7 of the editors' Introduction to their recent critical edition of *In Metaph.* (*Opera philosophica* 3 (1997) xlii–xlvi), especially xliv. To their arguments, none of which are doctrinal in nature, I would further add that the tight organization of *In Metaph.* 9 qq. 1–13 and the analysis of the questions at issue speak not of innocence but experience. I shall assume in what follows that *In Metaph.* 9 deserves a hearing alongside the *Ordinatio* and *Lectura.*

[5] See the whole of *Metaph.* Θ.8. In Scotus's technical terms, potency and act are third-mode relations, in a sense to be spelled out at the start of §3.

Scotus describes how the different kinds of modality are to be distinguished in six passages: *Ord.* 1 d. 2 p. 2 qq. 1-4 n. 262, d. 7 q. 1 nn. 27–29, d. 20 q. unica nn. 11–12; *Lect.* 1 d. 7 q. 1 n. 31 and d. 20 q. unica n. 10; *In Metaph.* 9 qq. 1-2 nn. 14–16. On the face of it, not all these passages agree. Even allowing for shifts in terminology, there seem to be substantive differences in doctrine, *e. g.* whether the three kinds of modality are coordinate. Yet there is an underlying unity of doctrine here, despite appearances. I shall argue in what follows that Scotus offers but a single account of the division of modality.

Now Scotus begins his analysis with logical possibility.[6] Indeed, Scotus is always careful to mention logical possibility whenever he discusses modality, even if only for the same of completeness, as in *Ord.* 1 d. 20 q. unica n. 11 and *Lect.* 1 d. 20 q. unica n. 10. It is contrasted with what Scotus calls "the really possible" (*possibile reale*) in *Ord.* 1 d. 2 p. 2 qq. 1-4 n. 262, "real potency" (*potentia realis*) in *Ord.* 1 d. 7 q. 1 n. 29, and "real metaphysical potency" (*potentia realis metaphysica*) in *Lect.* 1 d. 20 q. unica n. 10; in contradistinction to the equivocal sense of logical possibility, the latter sense is "potency taken strictly" (*potentia proprie sumitur*), as he remarks in *Ord.* 1 d. 20 q. unica n. 12. Hence the primary initial division of modality distinguishes it into two kinds, namely logical and what I'll simply call 'non-logical' for the time being.

Scotus's remarks in *Ord.* 1 d. 7 q. 1 nn. 27-29 seem to suggest a different view, namely that the primary division of modality is a trifurcation rather than a bifurcation. After noting that he needs to draw some distinctions regarding modality to address the Father's ability to generate the Son in the Trinity, Scotus says in n. 27 that in one way potency is called 'logical' (possibility); in n. 28 that in another way it is "divided against act" (the possible); and in n. 29 he asserts that "thus there remains real potency, which is said to be 'the principle of doing or undergoing something'" (power). The question is whether we should take 'thus there remains' (*ergo relinquitur*) as introducing an alternative coordinate with the other two (introduced by *uno modo* and *alio modo*). If so, the three kinds of modality are all on the same level:

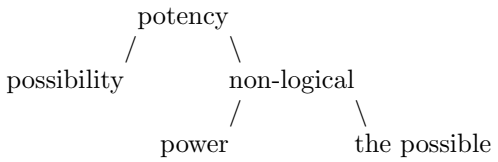


[6] Scotus typically speaks of logical potency (*potentia logica*). In *Ord.* 1 d. 2 p. 2 qq. 1-4 n. 262 and in *Lect.* 1 d. 20 q. unica n. 10 he talks about the logically possible (*possibile logicum* and *possibile logice* respectively), but he offers the same definition for the logically possible as for logical potency, namely a proposition whose terms are compossible, *i. e.* not incompatible with one another (see the discussion in §2). His shift in terminology doesn't indicate any change in doctrine.

On this interpretation, there need be no more similarity between the possible and power than between either and possibility.

The editors' separation of each alternative into a separate paragraph suggests this reading. But it is not forced upon us. Indeed, the strict counterposition of '*uno modo*' and '*alio modo*' speaks otherwise, since it would have been natural for Scotus to signal a third coordinate division with another '*alio modo*'. At face value, Scotus is claiming only that he can properly infer that once possibilities and the possible have been eliminated as reasonable candidates for the Father's ability to generate the Son, powers still remain—which is to say no more than that there are three kinds of modality, and, in particular, it is neutral with regard to how they are organized.

In themselves such considerations might seem overly nice, but taken with other testimony they should help defeat the impression that in *Ord.* 1 d. 7 q. 1 nn. 27-29 Scotus is proposing a level trifurcation of modality. His other remarks are unambiguous: non-logical potency is "twofold" (*Lect.* 1 d. 20 q. unica n. 10), comprising the possible on the one hand and power on the other.[7] In *Ord.* 1 d. 2 p. 2 qq. 1-4 n. 262 Scotus says that they are subspecies of "the really possible," as opposed to the logically possible,[8] and in *Lect.* 1 d. 20 q. unica n. 10 he says that they are the two forms of "real metaphysical potency," as distinct from logical or mathematical possibility. He is less specific in *Ord.* 1 d. 20 q. unica n. 12, there asserting only that potency "taken strictly" (as opposed to logical possibility again) is on the one hand the possible, and on the other power. Likewise, *In Metaph.* 9 qq. 1-2 n. 14 introduces each as a kind of potency, set apart from one another and jointly from logical possibility, which is not even mentioned until n. 16. The proper division of modality is therefore as follows:



[7] There is one exception to this blanket statement: in *Lect.* 1 d. 7 q. 1 n. 31 Scotus gives a twofold division of potency into possibility and power, never mentioning the possible. Yet the reason is not far to seek. Since Scotus is addressing the Father's ability to generate the Son, the possible isn't a plausible candidate, and so he simply omits it. (The corresponding discussion in *Ord.* 1 d. 7 q. 1 n. 28 dismisses the possible in a single brief sentence.) Hence his failure to mention it carries no weight.

[8] Scotus here says that "the really possible is what is taken from some potency in a thing, as though it were taken from a potency either (*a*) inhering in something, or (*b*) terminated at something as its terminus." The former is a description of power and the latter of the possible, as we'll see in §§3–4.

This division is compatible with Scotus's remarks about modality in *Ord.* 1 d. 20 q. unica n. 11 and *Lect.* 1 d. 20 q. unica n. 10, in which he sets logical possibility aside to concentrate on non-logical potency as a single alternative form of modality.

What does the unity of non-logical potency consist in? As noted, Scotus refers to non-logical potency as 'the really possible' and as 'real metaphysical potency.' But his use of 'real' in connection with modality is not as helpful as it should be, since Scotus is inconsistent: whereas in *Ord.* 1 d. 7 q. 1 n. 29 and *Lect.* 1 d. 7 q. 1 n. 31 he clearly identifies 'real' potency as power, in *Lect.* 1 d. 20 q. unica n. 10 he explicitly says that the possible is 'real' potency (although he terms the possible 'metaphysical potency' instead in *In Metaph.* 9 qq. 1-2 n. 16). Yet Scotus's terminology, fluid as it is, does suggest a key difference between logical and non-logical modality. While logical possibility is 'semantic' (in a sense to be clarified in §2), the possible and power are each concerned in some way with beings, the former with their actuality and the latter with their abilities and capacities.[9] Hence Scotus's use of the term 'metaphysical' in contradistinction to 'logical.' As Scotus puts it in *Ord.* 1 d. 2 p. 2 qq. 1-4 n. 262, "the really possible is what is taken from some potency in a thing." Thus the possible and power are concerned in some fashion with 'real' beings, with what it is for a being to be real—which is not to be confused with what can really be the case.

Fortunately, Scotus doesn't leave the matter here; he returns to the question in *In Metaph.* 9 qq. 1-2 n. 14, where he asserts that neither power nor the possible is the primary sense of non-logical modality: "it's unclear to which of them the name 'potency' was first applied and thereupon transferred to the other." Power and the possible, although distinct, are related much the way the various senses of 'warm' are related: a coat is warm if it preserves body heat; a fire is warm if it can heat up someone nearby; and so on. Scotus explains that if we begin with the possible, then, since the possible depends for its actuality on something's being able to bring it into existence, "the name 'potency' can be appropriately transferred to the principle [*i. e.* the active power] as if to that by which the possible can exist—not 'by which' formally, but rather

[9] This is not quite the same as the distinction Scotus draws between subjective and objective potency, best known for Scotus's use of it in his discussion of prime matter in *In Metaph.* 7 q. 5 n. 17 and *Lect.* 2 d. 12 q. unica n. 30. As Scotus carefully notes in *In Metaph.* 9 qq. 1-2 n. 39 (alluding to his earlier remarks in n. 27), subjective and objective potency are varieties of the possible, not of power at all: the nonexistent can be in (objective) potency to exist and the existent in (subjective) potency to exist in a newly-qualified way, but these potencies make no reference to features whereby the item can exist, *i. e.* its powers. See further the discussion of *In Metaph.* 9 qq. 1-2 nn. 40–48 in §4.

causally." That is, if Socrates might have a sister, then Socrates's sister—who is a (merely) possible being—can exist only through the agency of some active power; possible beings are intimately related to the conditions of their actualization. On the other hand, if we begin with power, which is the principle of doing something or of undergoing something,[10] then the name 'potency' "can be transferred to signify generally a mode of being similar to that which the result of a principle's activity has in the principle." That is, if Socrates has the capacity to be bald, the nonexistent but possible being 'bald Socrates' is implicit in his passive power for baldness; powers are intimately related to the beings their actualizations would produce.[11]

Scotus holds that possibility, though different in kind from non-logical modality, is more closely related to the possible than to power. "In keeping with this potency strictly," he says of the possible, "the name 'potency' is adopted elsewhere[12] to signify... logical potency, as for instance in possible propositions" (*In Metaph.* 9 qq. 1-2 n. 16). Intuitively, the idea here is that logical possibilities are more closely related to possible beings—to the extent, say, that possible beings are the sorts of entities that populate possible propositions—than they are to the abilities or capacities things may possess.[13] To get more precise we'll have to take a closer look at logical possibility.

[10] Scotus takes this characterization from Aristotle, *Metaph.* Δ.15 1019^a15–20; see *Ord.* 1 d. 7 q. 1 n. 29, *Lect.* 1 d. 20 q. unica n. 10, *In Metaph.* 9 qq. 3-4 n. 4. Principles stand to causes as genus to species: causes are only one kind of principle (*Metaph.* Δ.1 1013^a17). Roughly, insofar as principles are taken as metaphysical constituents of beings, a 'principle' is the source of some feature or property the thing possesses. Form and matter are principles of a material substance in this sense, and so too are potency and act. Just as causes have effects, principles engender results of their activity, yet unlike a causal effect, the result of principiative activity need not be some thing that is distinct: it may be the principiating activity itself, as in the case of potencies generally called 'operations' (potencies whose acts are internal to and perfective of the agent: see *Quod.* 13.47).

[11] Powers require possible beings, but, Scotus argues, the converse does not hold: see §4. Note that Scotus's argument does not require that there be a corresponding potency, just that the presence of one allows the transference to occur. The parallel passage at *In Metaph.* 9 qq. 3-4 n. 23 likewise speaks of the existence of the logically possible (*modus essendi*), and in any even is an attempt to clarify Aristotle's, not Scotus's, view (n. 24).

[12] For 'adopted elsewhere' Scotus writes '*transumitur*.' Now '*sumitur*' is his usual way of expressing that a term may be 'taken' in different ways (as in *e. g. Ord.* 1 d. 7 q. 1 n. 30); the force of adding '*trans-*' is to emphasize that the new sense is derived from the original sense.

[13] Scotus says that the possible, in one sense, covers everything that doesn't include a contradiction, and hence is coextensive with 'being' as a whole (*In Metaph.* 9 qq. 1-2 n. 21); in the retrospective summary of his analysis, he says that "the possible, as it is coextensive with 'being,' seems sufficiently close to that of 'possible' taken logically" (*In Metaph.* 9 q. 13 n. 10).

2. Possibilities

Scotus defines logical possibility in several passages; one of his more exact formulations is given in *In Metaph.* 9 qq. 1-2 n. 18, where he says that it is "a certain type of composition made by the intellect, caused from the relationship between the terms of that composition, namely because they are not incompatible." Two elements of this definition call for further comment. First, logical possibility or potency is a feature of propositions. For Scotus, as for most mediæval philosophers, a proposition is composed of its terms, or more generally of its 'extremes' (the elements on the far sides of the copula); an intellect combines them in the act of thinking, and produces a composition that is the primary bearer of truth or falsity—a point derived from Aristotle, who is also responsible for the systematically ambiguous treatment of propositions as sentences (acts of thinking) or as the statements sentences express (what is thought in an act of thinking).[14] Whenever the issue is up for discussion, Scotus carefully says that such compositions are made (*factae*) or formulated (*formatae*) by the intellect, even in his briefest remarks,[15] but his emphasis is on the composite nature of the proposition, not its transient existence as a mental quality, and he freely describes features of statements rather than sentences: in *Ord.* 1 d. 2 p. 2 qq. 1-4 n. 262, for example, Scotus describes "the proposition that God exists" as possible, referring to a content (one expressed by a sentence without a modal operator). Like many philosophers, Scotus is rather careless about the distinction, and in practice acts as though propositions are mind-independent contents.

The second element of the definition of logical possibility spells out which types of composition should be called possible, namely propositions whose terms are not incompatible (*non repugnant*). He offers four versions of this second criterion:

(1) The terms or extremes of the proposition are not incompatible (*Ord.* 1 d. 7 q. 1 n. 27, *Lect.* 1 d. 7 q. unica32, *In Metaph.* 9 qq. 1-2 n. 18).
(2) The terms or extremes are compossible (*Lect.* 1 d. 20 q. unica n. 10), that

[14] Aristotle describes propositions as composites capable of truth and falsity in *De int.* 1 16^a9–18, reiterating the point in *De an.* Γ.6 430^a27–29 and 430^b5, as well as in *Metaph.* E.4 1027^b25–30 and K.8 1065^a21–23. His more extended discussion in *Metaph.* Θ.10 mentions this only by the way, in 1051^b2–6 and 1052^a1–2, focusing instead on how things in the world make propositions true or false (see also Δ.29 1024^b17–25 and the discussion of future contingents in *De int.* 9). See Nuchelmans [1973] for a general historical treatment.

[15] This is in fact the only feature of logical possibility Scotus deems worthy of mention in *Ord.* 1 d. 20 q. unica n. 11; likewise in *Ord.* 1 d. 38 p. 2 and d. 39 qq. 1-5 n. 16 (418.16–17 of the apograph).

is, they are "possible in such a way that they aren't incompatible with one another but can be united" (*Lect.* 1 d. 39 qq. 1-5 n. 49).

(3) The terms of the proposition do not include a contradiction (*Ord.* 1 d. 2 p. 2 qq. 1-4 n. 262).

(4) The proposition is such that its contrary is not impossible (*Lect.* 1 d. 7 q. unica n. 31).

Scotus takes (1)–(4) to be equivalent, but (1) is fundamental, as his remarks prove. First, he explicates (2) by (1), so that compossibility is a matter of non-incompatibility, thereby avoiding circularity in his account; he uses both formulations indifferently in *Lect.* 1 d. 7 q. unica n. 33. If the terms are not incompatible, furthermore, they can be united by (2), and hence the resulting proposition is not impossible, *i. e.* its terms do not include a contradiction, as (3) asserts.[16] Finally, Scotus immediately offers a version of (1) in *Lect.* 1 d. 7 q. unica n. 32 as an explication of (4) in n. 31 (which he takes from Aristotle in *Metaph.* Δ.12 1019^b27–30). Thus incompatibility is the fundamental notion at work in Scotus's account of logical possibility. It is not circular—or not viciously so—since incompatibility is a different kind of modality from logical possibility, one that is grounded on properties of terms rather than things.

The upshot is that logical possibility is fundamentally a semantic notion (having to do with meaning and truth) rather than an ontological one (having to do with being and its categories). Scotus draws this conclusion explicitly in *Lect.* 1 d. 7 q. unica n. 33: "[logical] potency doesn't say what something is nor what it's related to (*nec dicit quid nec ad aliquid*), but merely the non-incompatibility and compossibility of terms." That is, logical possibility doesn't refer to anything in the world, be it substance or relation; it deals with semantic properties, not metaphysical ones. Now this is somewhat disingenuous of Scotus. While correct to point out that logical possibility is a feature of propositions, surely it isn't the semantic relation of non-incompatibility that makes things possible; semantic relations should reflect or be grounded on metaphysical facts about what really is possible. Full clarification of this point, however, will have to wait until §4, when we look into the possible. Putting off the relation between possibility and the possible, then, what about the relation between possibility and power?

Scotus holds that possibilities neither depend on nor are reducible to powers, and that they may obtain even in the absence of the relevant power to bring the

[16] Scotus links compossibility, non-incompatibility, and modal truth in *Lect.* 1 d. 7 q. unica n. 33: "When there is such compossibility [of terms], there is truth in the modal proposition; when there is not such a non-incompatibility of terms, there is falsehood in the modal proposition."

possibility about.[17] For logical possibility, "the non-incompatibility of terms alone is sufficient" (*Ord.* 1 d. 7 q. 1 n. 27), "even if there isn't any 'possibility' in reality (*Lect.* 1 d. 39 qq. 1-5 n. 49); "although typically some real potency in a thing corresponds to it, this doesn't belong *per se* to the account of this kind of potency" (*In Metaph.* 9 qq. 1-2 n. 18; see also n. 33). Scotus underlines the independence of possibility from power in *Lect.* 1 d. 7 q. unica n. 32: "this potency requires no reality other than that the extremes not be incompatible; the fact that there is a real potency in one extreme or the other may happen, but isn't requisite for [logical] potency—and, accordingly, it only requires that the terms of the composition not be incompatible." To ensure that his plain meaning here not be taken otherwise,[18] Scotus offers an example to clarify his position. His most detailed statement of it is found in *Ord.* 1 d. 7 q. 1 n. 27:

> Suppose that before the creation of the world not only had the world not existed but, *per incompossibile*, God had not existed but were to have begun to exist from himself, and then had been able to create the world. If there had been an intellect prior to the world that formulated "The world will exist," this would have been possible, since the terms would not be incompatible. Yet this is not due to some principle in the possible thing or active [power] corresponding to it. Nor was "The world will exist" now possible, formally speaking, by God's potency, but instead by the potency which was the non-incompatibility of its terms, since these terms would not be incompatible even if a potency active in respect of this possible [proposition] were not[19] to accompany that non-incompatibility.

Scotus here talks about the modal quality of a future-tense assertoric proposition (likewise in *In Metaph.* 9 qq. 1-2 n. 18), but this isn't essential; he recasts

[17] Scotus takes himself to be following Aristotle on this score: ταῦτα μὲν οὖν δυνατὰ οὐ κατὰ δύναμιν (*Metaph.* Δ.15 1019^b34–35), referring to his earlier discussion of the senses of τὸ δυνατόν (1019^b31–33). Whether this is the correct reading of Aristotle is open to question; see Jacobi [1997] 455–459.

[18] Some nevertheless do take it otherwise, *e. g.* Normore [1996]: "I think that Scotus... is very much an adherent of the idea that to assert a possibility is to attribute a power to something" (161). Normore seems to be motivated, at least in part, by the desire—misguided, on my reading—to show that Scotus is a "modal monist" (*ibid.*). See also van der Lecq [1998] 93–94. Granted, after describing an instance of free choice in *Lect.* 1 d. 39 qq. 1-5 n. 51, Scotus does assert "to this logical possibility there corresponds a real potency," which might be thought to hold generally—an error made in van der Lecq [1998] 97—but this is just a condition on free choice: it must be possible for an alternative or its opposite to occur, and the will must have a power for each, as Scotus emphasizes in n. 54; see the discussion of free choice in §3.

[19] Adding *non* with Σ, for sense.

the example using "The world can exist" (and "The world is possible") in *Lect.* 1 d. 7 q. unica n. 32 and d. 39 qq. 1-5 n. 49. Before the world exists, of course, there is no actual subject for the passive potency 'able to to be created.' If we further suppose that God does not exist, a supposition impossible in itself (and certainly not compossible with the existence and presence of a created intellect), then, in addition to there being no passive power, there would be no active power capable of bringing the world into being. Yet "The world will exist" is possible, *i. e.* possibly true, if God were later to come into being and then be able to create the world. Note the precise form of this claim. Scotus does not say that God will in fact create the world, for that would leave his example open to misinterpretation; he only insists here that God be able to create the world, not that God does so. What is the force of this claim?

Scotus clarifies his intent in *In Metaph.* 9 qq. 1-2 n. 18. He tells us there that the world's existence is logically possible "even if there had then been no passive potency for the existence of the world, nor even active potency (postulating this *per impossibile*), as long as without contradiction there could still be able to be an active potency for this (*dum tamen sine contradictione posset fore potentia ad hoc activa*)." The force of this last proviso is to underline that logical possibility is independent of the actual existence of an active power capable of realizing it, though not of the possibile or counterfactual existence of such an active power.[20] In short, for a proposition to be logically possible it must be the sort of thing that *could* obtain, though it need not be able to obtain (much less actually obtain). Given such an attenuated link to actuality, Scotus thus concludes that possibility is simply independent ("formally speaking") of power, even of God's omnipotence.[21]

3. Powers

Whereas Scotus's account of logical possibility has to be cobbled together from scattered passages, he devotes the bulk of *In Metaph.* 9 to an *ex professo* treatment of power: only the first two questions, devoted to the possible, are not part of this analysis.[22] In this section I'll concentrate on the 'metaphysical'

[20] I take this point from Mondadori [1999]. Presumably the same reasoning applies to passive powers, namely that there must be able to be a passive power capable of existence, at least counterfactually, in order for a logical possibility to obtain. See the discussion in §4.

[21] Scotus makes the same point explicitly in *Ord.* 1 d. 36 q. unica n. 61: "Logical possibility, taken absolutely, could obtain on its own account even under the impossible assumption that God's omnipotence were not to look to it (*possibilitas logica, absolute—ratione sui—posset stare, licet per impossibile nulla omnipotentia eam respiceret*)."

[22] *In Metaph.* 9 qq. 3–13 deals with powers explicitly. There is a false ending to Scotus's discussion in q. 13 nn. 10–14, where Scotus gives a summary of his analysis; in q. 11 n. 7,

properties of power, rather than its 'physical' properties (those concerned with matter, change, and causation).[23]

When we turn to the non-logical modalities, the way in which "potency is ordered to act" (as noted at the start of §1) in each case has to be carefully examined. Powers are, in an obvious way, related to their actualization. But what kind of 'relation' is it? Scotus adopts, with qualifications, Aristotle's list of three modes of relations:[24] (*i*) first-mode relations are numerical relations founded on Quantity, whether they are determinate or not, including what Scotus calls 'proportional' relations (commensurable and incommensurable), as well as equivalence relations; (*ii*) second-mode relations are between the active and the passive, founded on one of the absolute categories; (*iii*) third-mode relations are of "the measurable to the measure," which may be founded on any category. We'll look more closely at second-mode relatives shortly, but notice that third-mode relatives involve potency (the measurable) and act (the measure). Contrary to appearances, the relation of potency to act—even of powers and their actualizations—is in general an instance of third-mode rather than second-mode relations. Some further detail is thus called for.

Three features set third-mode relations apart from first-mode relations and second-mode relations. First, as Aristotle remarks, in the case of third-mode relations the normal ordering of a relation is inverted: something is relationally characterized as 'the knowable', for example, due to the fact that there can be knowledge with regard to it, not conversely. Second, third-mode relations do not entail the real existence of the corresponding co-relations: something may well be knowable without anyone knowing it (the 'non-mutuality' condition). Third, as traditionally conceived, the non-mutuality condition suggests that third-mode relations serve as a model of how independent and dependent items are related: the knower is dependent on the knowable for his knowledge, but the knowable is what it is independently of there being any actual knowledge.

The second and third features of third-mode relations, namely the non-mutuality condition and the dependence condition, are traditionally taken to

though, he explains how qq. 14–15 (on self-motion and freedom of the will respectively) in fact continue his discussion by exploring the two main divisions of active potency, namely 'rational' and 'irrational.'

[23] See for example *In Metaph.* 9 qq. 3-4 nn. 29–30, where Scotus gives 'physical' definitions of the divisions of active and passive potency, in constrast to the 'metaphysical' definitions of n. 31, discussed below. See further King [1994] 252–259.

[24] Aristotle, *Metaph.* Δ.15 1020^b26–32. Scotus discusses each in *In Metaph.* 5 qq. 12–13. He finds the list clearly incomplete, since there is no obvious way to classify spatial relations, temporal relations, semantic relations, and several others; hence the three modes are not the species of Relation themselves but rather at most paradigmatic of the genuine species (*In Metaph.* 5 q. 11 nn. 57–59).

define third-mode relations. Yet Scotus holds that this is not the case, and that the traditional reading depends on an improper conflation of mutuality (which is a matter of co-relation) and dependence. Rather, Scotus maintains, the dependence that characterizes at least some third-mode relations is of two distinct types (*In Metaph.* 5 q. 11 n.60). There is dependence in perfection, which I take to be something of the following sort: knowledge must 'measure up' to the knowable, in the sense that knowledge is judged to be such in virtue of its accuracy in mirroring the knowable. Second, there is existential dependence: knowledge cannot exist without the knowable, but not conversely. As for non-mutuality, Scotus argues that third-mode relations are mutual, but their relata differ as regards act and potency, unlike the case of first-mode relations and second-mode relations (*In Metaph.* 5 qq. 12-14 nn. 100–104). The 'non-mutuality' thesis appears to be only a confused way of getting at the potency-act difference. Of course, Scotus does not mean to undermine the genuine dependencies that such relations involve. Mutuality is a matter of the corresponding co-relation (the correlative). This, after all, must somehow be present in order to serve as a denomination for the independent element: the knowable is only knowable *qua* the potential relation it may stand in to a knower. Nor does mutuality entail mutual dependence.

The upshot is that third-mode relations exemplify the sense in which potency is ordered to act: the latter is (existentially) independent of the former, although they are mutually related. Putting aside the technicalities, then, Scotus holds that ascriptions of potency are fundamentally relational; what might be is intimately linked to what is, in some sense. To apply this general maxim to the case of power, however, we first have to understand something more of power and its kinds.

The feature that sets power apart from the other kinds of modality is that powers may be either *active* or *passive*, roughly equivalent to the modern distinction between abilities and capacities. As noted in §1, Scotus adopts Aristotle's characterization of 'power' as the principle of doing something (active) or of undergoing something (passive); it is thus a real constituent of the being who possesses it. Scotus further distinguishes the power from its exercise or actualization and from the result of its actualization.[25] For example, an engineer has the active power to build a house; the exercise of this power is the process of building; the end result is the house that has been built. Alternatively, the end result need not be anything distinct; the exercise of the passive power of vision consists in seeing and nothing more: Aristotle, *Metaph.* Θ.8 $1050^a 24$–27.

[25] The general distinction is between a principle, its principiative activity, and the *principiatum*, that is, the result of its activity: *In Metaph.* 9 qq. 3-4 n. 19. See also Jacobi [1997] 464.

Since potency is ordered to act, it might well be thought that the division of power into active and passive, along with the threefold distinction of the power, its exercise, and the result it produces, is sufficient for a complete analysis: like any ability or capacity, powers are clearly related to and defined by the results of their corresponding exercise. (This is a corollary of the general claim that potency, as a transcendental division of being, is a third-mode relation.) Hence it seems as though any further division of powers is simply a matter of generically classifying their objects, that is, the types of results of their actualizations.

However, Scotus rejects this line of thought, holding that there is a fundamental distinction yet to be drawn. For powers are not only related to their results as their actualizations, but they may also be related to other powers as their actualizations. That is, active and passive powers are made for each other, and are able to combine to produce a joint result.

Scotus argues for this point in *In Metaph.* 9 qq. 3-4 n. 25 by considering Aristotle's two examples of active powers as second-mode relations in *Metaph.* Δ.15 1021^a15–25: (*i*) the relation between "what is able to heat" and "what becomes hot"; (*ii*) the relation between the craftsman and his product, or the father and his son. On Scotus's reading of this passage, these examples sharply differ. The relation of craftsman to product, or father to son, in (*ii*) is a straightforward case in which the subject of an active power is related directly to the result of that power's exercise. But (*i*), Scotus maintains, has a different logical structure. What is able to heat is not immediately related to what becomes hot in this manner. Rather, what is able to heat is only *mediately* related to something hot; the active power to heat something is, strictly speaking, directed at its object's passive power to be heated. It is only through the successful pairing of some agent's active power to heat with a patient's passive power to be heated that the end result—an actually hot object—is jointly produced as their mutual effect. Hence an active power may be directed at a given external object as the result of its exercise, as in (*ii*), or alternatively at a 'matching' passive power, in combination with which the result is jointly produced, as in (*i*).

As with active powers, so too with passive powers: in *In Metaph.* 9 qq. 3-4 n. 26 Scotus draws the parallel conclusion. The case matching (*i*) for passive powers is clear; even the same example will serve, if we pay attention not to the agent's active power to heat but to the patient's passive power to be heated, which in combination with the active power jointly produces their result. The match to (*ii*) is less clear. Passive powers by their nature require a cause of their actualization, which, at first glance, might seem to always put them under (*i*): the passive power of vision is actualized by the external object acting on

the sense-organ, which thus seems to be the active principle combining with the passive power of vision to produce the result, namely the seeing of the external object. Yet Scotus argues that this is not always the case. Consider a concrete object that is a composite of form and matter. The matter—which, for Scotus, has some kind of being on its own,[26] and is not mere nonbeing—has the passive power to the composite as a whole, which is the result of its actualization: "the entire 'this-something' is in potency to exist" (n. 26). We can speak of the tree's passive power to be a canoe, say, and the canoe itself as the result or product of the actualization of this passive power, regardless of the source of the passive power's actualization.

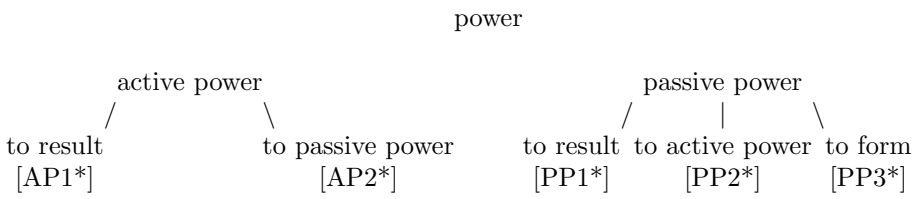
The argument in the preceding paragraph gives a symmetric account of active and passive powers. But the last example suggests that they are not always so. For consider matter not in relation to the composite as a whole, but only in relation to the form. Now the substantial form of a composite substance is not any sort of potency, even an active potency; it is instead an act. Substantial forms need not be potential before being actual: the substantial form is itself an actuality, and although it may be the actuality of the matter, it need not be.[27] (There are immaterial forms, that is, forms that do not require matter for their existence.) Hence matter and substantial form are intrinsic principles of a composite substance that jointly produce the composite, although not as paired powers, but rather as potency and act respectively.

Taking into account all the subtleties, then, the correct division of power for

[26] See Scotus's arguments for the reality of prime matter in *Op. Ox.* 2 d. 12 qq. 1-2, *Lect.* 2 d. 12 q. unica, and *In Metaph.* 7 q. 5.

[27] See Aristotle, *Metaph.* E.6 $1045^a 23$–25, and Scotus's discussion in *In Metaph.* 8 q. 4 nn. 10–13; matter is essentially ordered to form, thereby creating a unity (nn. 31–33). Active potencies are rooted in substantial forms, according to *In Metaph.* 9 q. 7 nn. 5–10, which is just to say that the kinds of things you can do depends on the kind of thing you are.

Scotus is:[28]



Scotus describes this division of power in 'physical' terms in *In Metaph.* 9 qq. 3-4 nn. 29–30, that is, pertaining to matter, change, and causation; active potency is "doubly equivocal" whereas passive potency is "triply equivocal." But in n. 31 he says that "a strictly metaphysical definition" of the different kinds of power can be given "by leaving out whatever restricts it to naturalness and putting in more generally what is relevant for the metaphysician," and this metaphysical definition of each kind of power is as follows (the asterisks denote the 'metaphysically altered' sense of each):

> Active power, metaphysically speaking, is [AP1*] the principle of doing what can be done; [AP2*] the principle of actuating what can be actuated. Passive power, on the other hand, is [PP1*] the principle in virtue of which something can be enmattered;[29] [PPP2*] the principle of being passively actuated by an active act; and [PPP3*] the principle that is able to be actuated or informed by an act or by an actual principle.

Thus active power may be related to the result its exercise produces, as the craftsman to his product ([AP1*]); it may be related to a passive power that can be actuated, the converse of [PP2*], as the ability to heat something is related to the capacity to be heated ([AP2*]). Passive power may be related to the result of its exercise as the ground of the existence of its result, much as matter to the composite ([PP1*]); it may be related to an active power that actualizes it—not as the active power is related to its result, as in [AP1], but rather as

[28] *In Metaph.* 9 q. 11 n. 4 summarizes the analysis given here, extending it for active potency in nn. 7–18 as follows: (*i*) productive and perfective; (*ii*) rational and irrational; (*iii*) univocal and equivocal; (*iv*) total or partial cause. The same analysis is outlined in the discussion of self-motion, *In Metaph.* 9 q. 14 nn. 84–86. A 'physical' version of it is explored for matter in *In Metaph.* 9 q. 12. *In Metaph.* 9 qq. 12–13 rejects the further traditional divisions of passive potency (into natural *vs.* obediential on the one hand and 'that in which' *vs.* 'that out of which' on the other), although Scotus does try to recast the latter in his own terms: *In Metaph.* 9 q. 13 nn.3–5.

[29] The text reads *ex aliquo potest materiari*; if the variant *mutari* in HM be preferred, the translation would be 'in virtue of which something can be changed'—arguably better and the basis of the reading in King [1994] 255 n. 45.

the active power is a real principle (an "active act") whose actualization is to actuate a passive principle, as in [AP2*], as the capacity to be heated is linked with the ability to heat something ([PP2*]); it may be related to a form ("an act or actual principle"), as matter and form together produce the composite as a unity ([PP3*]). Thus [AP1] and [PP1] are each ways in which a power is immediately related to the result of its exercise, whereas [AP2*] and [PP2*] are correlatives, each mediately related through the other in their respective exercise to their mutual result. [PP3*], as noted, has no correlate sense for active power.

Scotus concludes from his analysis that powers have two essential characteristics: (*a*) being present in some subject, and (*b*) being the foundation of a (potential) relation to their exercise. He writes that "nothing belongs to the account of 'power' besides (*a*) some absolute essence, (*b*) in which its immediate relationship to the result of its exercise is grounded in such a way that no relationship precedes in act the production of its result through which it is somehow determined to produce it" (*In Metaph.* 9 q. 5 n. 13). Powers are properties, or stem from properties, and like properties they must be present in subjects. Likewise, what it is to be a power is bound up, no matter how tenuously, with its exercise or actualization. More precisely, what makes a feature of a subject a 'power' has to do with its being realizable under some set of conditions, *i. e.* its potential relation to being exercised.[30] Scotus declares that "the primary correlative to active power is what is possible" (*Ord.* 1 d. 20 q. unica n. 24).[31] Powers must be for the (logically) possible. Scotus is careful to point out that free choice, too, presupposes the possibility of what is chosen (*Lect.* 1 d. 39 qq. 1-5 n. 49). Now this requirement should not be overstated; we have seen in §2 that logical possibility demands only that a given state of affairs be counterfactually possible, not that it be capable of actual existence in the given circumstances. A moment's reflection will show that Scotus is correct. I may have powers that are never actualized, but it makes no sense—it's literally unintelligible—to speak of a power that *couldn't* be actualized, one that under no counterfactual circumstances might be realized. There are no grounds to think there is such an unrealizable power (as opposed to a merely unrealized

[30] *In Metaph.* 9 q. 5 asks whether powers essentially include some relationship, to which Scotus, specifically referring to the analysis of power given above, replies that "the relation brought in by the name 'power' is simultaneous in nature with the actual relation of the result of its exercise in act, and the potential [relation] in potency" (n. 12).

[31] Scotus immediately notes that he means something more restrictive than mere logical possibility, but, since his motive is to rule out calling necessary beings 'possible,' we can put the point aside here.

power) in the first place.[32] There are no powers to do the impossible. Hence powers presuppose possibilities, though not conversely.

Powers, no matter what kind, also obtain along with their exercise: "a principle is no less real when it is actually producing its result than when it isn't but can do so... thus it's clear that potency *qua* principle of its own account isn't opposed to act" (*In Metaph.* 9 qq. 1-2 n. 15).[33] Powers thus aren't 'used up' when actualized. Socrates has the active power to walk, which he retains even while he is actually walking, *i. e.* while actualizing his active power. He likewise retains his passive power of vision while actually seeing something.

Since powers are defined in relation to their exercise, a given power is always a power-to-φ, where φ is a general type of action or object.[34] From this we might infer that all powers are for only one kind of thing, namely the kind of thing through which the power in question is defined. Yet as plausible as this conclusion is, Scotus holds it to be mistaken. There is another division of active power, a "primary differentia" (*Quod.* 16.42), into *irrational* (or 'natural') and *rational* (or 'free'). Irrational powers are those for which the conclusion holds. Rational or free powers, by contrast, are capable of producing opposites of their nature (though not, of course, simultaneously): a rational power is at once a power-to-φ and a power-to-$\bar{\varphi}$ (where φ and $\bar{\varphi}$ are oppposites).[35]

The last several considerations about the nature of powers—that they presuppose possibilities; that they exist as powers even when being exercised; that some powers are for opposites—are the foundation for Scotus's account of the free choice of the will.[36] The will, Scotus maintains, is a rational power, suited by its nature to produce opposites; no further explanation of why it should

[32] Anachronistically: x has the power-to-φ only if there is a possible world in which x φs, whether it be accessible from the actual world or not. Powers can be 'closer to' or 'farther from' their actualization, depending on the circumstances; Aristotle's distinction between first and second potencies is meant to capture this intuition.

[33] A similar point can be made regarding abilities and capacities: their exercise isn't thought to block their ascription. Of course, if the result of a power's exercise is an independent product, such as the builder's house, the product can exist without the power.

[34] More generally, a power is defined in relation to its 'primary object': the most general nonrelational feature, or set of features, in virtue of which its *per se* object counts as its *per se* object (*Ord.* 1 d. 3 p. 1 q. 3 n. 187). Scotus's definition is inspired by Aristotle's discussion of 'commensurate subjects' in *Post. an.* 1.4 73^b32–74^a3; see *Ord.* 1 d. 3 p. 1 qq. 1-2 n. 49.

[35] See *In Metaph.* 9 q. 15 nn. 22–23. Scotus takes this distinction to be given by Aristotle in *Metaph.* Θ.2 1046^a36–$^b2$ (*In Metaph.* 9 q. 6 n. 7); he also takes it to be implicit in *Phys.* B.5-6 197^a32–$^b13$ (*In Metaph.* 9 q. 15 n. 23).

[36] Scotus analyzes free choice in the will in *Lect.* 1 d. 39 qq. 1-5 nn. 47–52 (parallel to the apograph discussion of *Ord.* 1 d. 38 p. 2 and d. 39 qq. 1-5 nn. 15–16); *Rep.* IA dd.39-41 qq. 1-3 (as yet unpublished); *Op. Ox.* 2 d. 5 q. 2; *Op. Ox.* 4 d. 49 q. 10 n. 10; and *In*

produce a given result rather than its opposite is possible: what it means to say that the will is a rational power just is that it is capable of its nature of generating opposite results: it has a "superabundant sufficiency" to do so (*In Metaph.* 9 q. 15 n. 31), which Scotus explicitly recognizes as a description rather than an explanation of the phenomenon (*ibid.* n. 29). Hence the will has at once a power-to-φ and a power-to-$\bar{\varphi}$. Scotus's account of free choice is infamous because he holds that at the very instant when the will is exercising its power-to-φ, the power-to-$\bar{\varphi}$ at that instant obtains along with it: it is a "non-manifest power for the opposite" (*Ord.* 1 d. 38 p. 2 and d. 39 qq. 1-5 n. 16). More exactly, Scotus maintains that the will has simultaneously the power-to-φ-at-t (which obtains along with its current actualization) and in addition the power-to-$\bar{\varphi}$-at-t (which obtains even though it cannot be actualized), which, he claims, is the very essence of free choice (*ibidem.* and *Lect.* 1 d. 39 qq. 1-5 n. 50). The point at issue, of course, is why we should think that there is any such non-manifest power as Scotus claims, *i. e.* the power-to-$\bar{\varphi}$-at-t, expecially in the absence of any powerful reason for thinking so.[37]

Scotus's reason for thinking so is based on a substantive claim about freedom in combination with his views about active powers. Being free, for Scotus, means that one could have done, or could do, otherwise than one does (*Lect.* 1 d. 39 qq. 1-5 n. 52: *non libere vult nisi quia potest nolle*). To speak of what some agent chooses to do is, of course, to ascribe an active power to that agent. (Human agents, that is; henceforth I drop the reminder.) Hence to say that x freely φs at t is to say *inter alia* that x has the power-to-φ, and furthermore the power-to-φ-at-t, which obtains at t along with its actualization. Likewise, to speak of what some agent can do, or could do, is to ascribe an active power to that agent. Now x could do otherwise, and so must have an active power-to-$\bar{\varphi}$; since the claim is that x freely chooses at t, x must furthermore have the power-to-$\bar{\varphi}$-at-t, since without this there would be no power to ground the claim that the agent could have done otherwise. As we have seen, this means that there must be the logical possibility of the power-to-$\bar{\varphi}$-at-t being actualized. But that requirement is satisfied by the counterfactual circumstance in which the agent does not exercise the power-to-φ-at-t, instead exercising the power-to-$\bar{\varphi}$-at-t.

Metaph. 9 q. 15 nn. 20–34. His account applies to the human and the divine will, though he is careful to note that the distinction between rational and irrational powers isn't the same as that between contingent and necessary action (*Quod.* 16.34). The question has been raised whether Scotus invented or merely adopted the theory (see Dumont [1995], Lewis [1996], and Marrone [1996]); it's enough for our purposes here that he held it.

[37] See MacDonald [1995] 172–174. It has long been noted that Scotus does not so much argue for as sketch out his position on this point. Yet that is because he takes it to follow directly from much deeper claims about active powers, as we'll see.

This cannot obtain, but it could obtain, and that is sufficient for the ascription of the power to be intelligible. Whether Scotus's initial intuition about freedom is correct I won't venture to say, but the rest of his reasoning seems to follow strictly from his account of power.

4. The Possible

The third and final form of modality Scotus countenances is the possible, the "potency as opposed to act" of *In Metaph.* 9: what is not actual and neither impossible nor necessary—the *merely* possible, as we might say.[38] The possible seems implicated in both kinds of modality already canvassed: possibilities often seem to involve possible yet nonactual beings in the states of affairs they present; powers, abilities and capacities related to possible beings, such as the possible house that is somehow part of the builder's power to build a house.[39] Here we'll concentrate on two questions about the possible, namely (*i*) what it is to be a possible being, and (*ii*) what the ontological status of the possible is.

Scotus adopts a simplifying assumption when he turns to (*i*): he treats possible beings (along with 'impossible beings') as objects of God's thought, so that the candidates for the possible are already 'given' in some sense through God's conception of them. Now God can as well conceive "in eternity" a human as a chimæra, so the question of what sets them apart naturally arises. Scotus's reply is that the difference between the possible and the impossible is a brute metaphysical fact, incapable of further explanation (*Ord.* 1 d. 36 q. nn. 60–62):[40]

> The feature *not being something* is present to man in eternity, and likewise to the chimæra, but the affirmation of *being something* is not incompatible with man (the negation is instead only present as the

[38] See Santogrossi [1993], Boler [1996], and Marrone [1998] for recent attempts to come to grips with Scotus's account of the possible. This modality seems absent from Jacobi [1997].

[39] Possibilities and the possible will be covered below. Concerning the link between power and the possible, Scotus writes: "It seems necessary to postulate something possible corresponding to any given active power, since there is no active power in respect of what is not possible in itself. . . and this is not merely a logical potency, since that could exist of itself without an active power" (*In Metaph.* 9 qq. 1-2 n. 33). Active powers, at least, are linked to the possible beings that are their results.

[40] Scotus makes the same claim in *Lect.* 1 d. 36 q. unica n. 32: "There isn't any explanation of this, just as there isn't an explanation why whiteness is incompatible with blackness, other than because it is whiteness." See also *Ord.* 1 d. 43 q. unica n. 5 and *Lect.* 1 d. 43 q. unica n. 12. The modern account of possible beings as beings that are actual in some nonactual possible world seems no improvement over Scotus's refusal to provide a theory.

> negation of a cause bringing it into existence[41]), whereas this affirmation is incompatible with the chimæra, since there is no cause that could cause *being something* in it. And why it is not incompatible with man and it is incompatible with chimæra? Because the former is the former and the latter the latter. And this holds no matter what intellect conceives them...

The incompatibility or non-incompatibility of actuality with something is what makes it impossible or possible, and this in turn depends on what the 'something' is, its essence or formal features; it is an intrinsic and not a relational feature of the thing itself: "Any incompatibility whatsoever belongs to the extremes due to its own formal and *per se* essential account, putting everything else aside, positive or negative, in respect of each extreme as related to anything further" (*Ord.* 1 d. 43 q. unica n. 5). Hence the only 'reason' that a man is a possible being and a chimæra is not is that each one is what it is, regardless of its relation to anything else.[42]

In drawing out the consequences of his claim that the possibility of a possible being is a primitive nonrelational feature of that being, Scotus links the possible to logical possibility (*Ord.* 1 d. 36 q. nn. 61–62):[43]

> Nor should it be supposed here that *being something* is not incompatible with man because man is a being in potency. Instead, the converse holds. Since it is not incompatible with man, man is then possible by logical potency (and because it is incompatible with chimæra the latter is then impossible by the opposed impossibility)—and objective possibility follows on this [logical] possibility. Of course, this assumes God's omnipotence, which looks to everything possible, provided that it's other than Himself. Yet this logical possibility, taken absolutely, could obtain on its own account even if *per impossibile* God's omnipo-

[41] That is, the negation in the feature *not being something*. Here Scotus only writes *propter negationem causae non ponentis*, which is somewhat obscure, but in the parallel discussion in *Lect.* 1 d. 36 q. unica n. 39 he explains it by *propter privationem dantis esse*, which is the basis for my translation.

[42] *In Metaph.* 9 qq. 1-2 n. 27 presents recognizably the same doctrine: "Note that metaphysical potency taken precisely, namely as it abstracts from any natural power, is founded precisely on the essence that is called the possible being, and is an order of that essence to being as though to a terminus, *e. g.* the potency for the Antichrist's being is founded in the essence of the his soul."

[43] See also *Ord.* 1 d. 43 q. unica n. 5: "Therefore, anything with which being is *per se* incompatible is simply impossible, namely that which of itself is such that being is incompatible with it right away; this is not due to any relationship to God, affirmative or negative; instead, being would be incompatible with it if *per impossibile* God were not to exist." The same point is made in *Lect.* 1 d. 43 q. unica n. 12.

> tence were not to look to it. Therefore, the explanation that being is not incompatible with man because man formally is man (and this holds whether really in the thing or intelligibly in the intellect) is wholly primary, not reducible to anything else.

Thus something is a possible being (an "objective possibility") if the proposition declaring its existence is logically possible, a version of the claim that potency is ordered to act. Furthermore, the possible, like logical possibility, is independent of the actual existence of any power capable of bringing it into being.[44] All that matters is that the possible be such that it could be actual, whether it in fact ever should be actual. Hence the possible is possible because of what it is, *i. e.* by its essence, as Scotus says, rather than through anything else.

There is a subtle point at issue here. For Scotus, things that have essences, strictly speaking, are such that their essences are metaphysically simple, despite the apparent 'composite' nature of their definitions: they form unities that are indecomposable without destruction of the thing whose essence it is.[45] Hence there is no explanation of the possibility of a possible composite substance in terms of its real constituent features, since, for all metaphysical purposes, such essences are internally simple. (Even if they were not, we would eventually have to have recourse to the primitive possibility of the primitive features that make up a composite essence, as well as their joint compossibility.) The same need not hold for their opposites, though; impossible things, such as the chimæra, can be thought of (*imaginatur*) as being made up of jointly incompossible features, the individual elements of which are possible (*Lect.* 1 d. 43 q. unica

[44] Marrone [1998] 277 says that Scotus "could not disengage metaphysical possibility as a mode of being from a concomitant active principle." However, this is based on reading *In Metaph.* 9 qq. 1-2 n. 14 in an unrestricted fashion: see the discussion in §1.

[45] The full explanation of this claim is delicate. For Scotus does hold that the essence of a composite in general, as opposed to that of an individual composite, is itself composite, since the genus and differentia that jointly constitute the specific nature of the essence must be at least formally distinct: *Ord.* 1 d. 8 p. 1 q. 3 nn. 101–107 and 2 d. 3 p. 1 qq. 5-6 nn. 189-190; *Lect.* 1 d. 8 p. 1 q. 3 nn. 100–105; see also *In Metaph.* 7 q. 19 nn. 20–21 and n. 43. Now if either the genus or the differentia were taken away, the specific nature would be destroyed; hence they are really inseparable. But equally, the genus and the differentia are formally distinct, since otherwise the differentia could not contribute any formal differentiating feature to the genus—it would just 'repeat' the content of the genus. Furthermore, since the formal distinction holds *a parte rei*, there must be some real complexity or composition in any specific nature. Hence the quiddity of all creatures must be complex in at least this sense; the same does not hold of God, however. That said, the essence of a composite substance makes up a genuine unity in such a way that it can be classified as a simple entry in a categorial taxonomy, unlike (say) an accidental unity, and this is the sense under discussion.

n. 15; see also *Ord.* 1 d. 43 q. unica n. 16).[46] Hence everything is or is not possible depending on its simple essence, which is what God conceives in the Divine Intellect.

Yet now Scotus's simplifying assumption returns with a vengeance. Isn't it the case, after all, that the possible is constituted by the activity of the Divine Intellect? For what a being is—which determines whether it is possible—seems to be a matter of what is conceived in its conception. Doesn't that mean that what makes a being possible, in the end, is a function of the Divine Intellect if not the Divine Will?

Scotus rejects this conclusion.[47] He addresses the question indirectly when looking into whether things are possible or impossible due to God's power, *i. e.* omnipotence; he reasons that to the extent that the will depends on the intellect, the intellect must play an explanatory role (*Ord.* 1 d. 43 q. nn. 6–7):

> The active power by which God is dubbed 'omnipotent' is not formally the intellect, but it does in a way presuppose the intellect's action (whether that 'omnipotence' be the will or some other executive power); however, a stone is a possible being formally of itself; therefore, by reduction as though to a first extrinsic principle, the Divine Intellect will be that from which there is the primary account of possibility in the stone...
>
> Proof of the minor premiss: the possible, in that it is the terminus or the object of omnipotence, is that with which being is not incompatible and which cannot exist of itself necessarily; the stone, produced in intelligible being by the Divine Intellect, has these features of itself formally and through the Divine Intellect principiatively; therefore, it is possible of itself formally, and principiatively, as it were, through the Divine Intellect.

Consider first the dialectic of Scotus's main argument (n. 6). Although the operation of the will depends on the intellect, possible beings are nevertheless possible formally of themselves; hence the Divine Intellect is not the formal ground of the possibility of the possible, but must be involved in some other way. Scotus hints at what that way is when he qualifies the conclusion of his argument by saying that the Divine Intellect is only the source of the possibility of the possible "by reduction as though to a first extrinsic principle" (*reducendo*

[46] Normore [1996] 163–165 argues that all impossible beings are complex for Scotus (although this ignores Scotus's claim at the beginnning of *Ord.* 1 d. 43 q. unica n. 16 that the 'simply impossible' *includes* the incompossible), and apparently inferring that possible beings are likewise composite—but see the preceding note.

[47] Scotus has traditionally been read as accepting this conclusion, *e. g.* Wolter [1993] 106–107; Knuutila [1996] 138–140 criticizes it.

quasi ad primum extrinsecum principum). The key words here are 'reduction,' 'as though,' and 'extrinsic': the first two terms tell us that this is not a literal reduction to a first principle, and the last warns us that the Divine Intellect is not an intrinsic, *i. e.* formal, ground of possibility.

This hint is borne out in Scotus's proof of the minor (n. 7), where he tells us that the possibility of the possible is formally due to itself and stems from the Divine Intellect only 'principiatively' (*principiative*)—a conclusion he further qualifies by 'as it were' (*quasi*). Now to be due to something principiatively means to follow from or be the result of it as a principle, that is, where that something is the source or origin of the result. More generally, it is "that from which, although not present in it, something first comes into being" (*Metaph.* Δ.1 $1013^a 7$–10: ἀρχή = *principium*).[48] Thus the Divine Intellect is that from which the possible comes into being, though it is not the reason why the possible is possible, any more than the builder is the reason why the house is a house. The Divine Intellect is therefore the ontological,[49] rather than the formal, ground of the possible.

Scotus recognizes that there is an important sense in which the Divine Intellect, as the ontological ground of the possible, is, though extrinsic, nevertheless the more basic cause of the possible: something has to *be* before it can be possible. This 'before' is not temporal but logical. Scotus puts the point in a vivid and somewhat misleading way like so: "A thing that is produced in intelligible being by the Divine Intellect in the first instant of nature has its possible being in the second instant of nature" (*Ord.* 1 d. 43 q. unica n. 14). These 'instants of nature' are non-temporal, reflecting distinct levels of logical priority. The Divine Intellect first conceives of Socrates's sister; having been constituted in intelligible being, she thereafter can be said to be possible, a feature she has primitively, in virtue of her essence.[50] Scotus steadfastly refuses to say any more about the formal ground of the possible.

But what of the ontological standing of the possible? What kind of being does Socrates's merely possible sister have? This brings us to (*ii*), our second topic regarding the possible. Scotus takes this up as one of several questions regarding the possible, the replies to which are presented in *In Metaph.* 9 qq. 1-2 nn. 27–38. The problem, as Scotus sees it, is easy to state. If the possible is a

[48] Marrone [1998] 271–272 asserts that "The word 'principiatively' should tip us off that what Duns was thinking about in the commentary accounts of creation was instead the sort of potentiality he associated with the principle of change or *principium* for a thing"[*i. e.* power]. I find no support for this reading.

[49] I take this terminology from the excellent analysis in Mondadori [1999].

[50] This can obviously be generalized to an account of creation: see Vos [1994] and Beck [1998].

kind of relation between a merely possible item, such as Socrates's sister, and her existence (in some set of circumstances), then what is the relation founded on? The obvious answer, "Socrates's sister," is to say that the relation is founded on a non-being, and therefore is a non-being itself (*ibid.* n. 26).

Scotus offers a pair of solutions, preferring the second, though not definitively.[51] The first makes a case for some kind of independent ontological standing of the possible, whereas the second regards the possible as merely conceptual. His reticence about which view to adopt is excusable; there are good reasons for, and serious objections to, each proposal. He begins by making a case for the reality of the possible (*In Metaph.* 9 qq. 1-2 n. 33). Scotus reasons that to an active power there corresponds something possible, *e. g.* to the builder's active power to build a house there corresponds the possible house. Now this is more than just a logical possibility, Scotus points argues, since it is logically possible for a house to exist in the absence of any power to actualize the possibility, that is, even if there were no builder around with an active though unactualized power to build a house. There seems to be a real difference between these two cases. And "for this reason, therefore, metaphysical potency is postulated in the essence of the possible—some kind of being that isn't in the chimæra" (*ibidem.*).

We have seen above how Scotus takes the difference between the possible and the impossible to be a brute metaphysical fact. His point here is different. Even if the difference between a man and a chimæra is primitive and a function of each being the very thing (or kind of thing) it is, Scotus's argument in n. 33 is that there must be a further real feature, beyond the brute facts of their possibility or impossibility, present in the man but not in the chimæra, that grounds his potency to actual existence.[52] Put a different way: Socrates's sister and the chimæra are equally non-existent; there must be some real feature that differentiates them into distinct kinds of non-existent.

The difficulty, of course, is in spelling out precisely what the real feature possessed by possibles could be: "It's a major puzzle what kind of being this foundation has before it exists" (*ibidem.*). And there Scotus leaves the matter,

[51] Scotus declares that the second solution seems plausible (n. 36: *videtur probabilis*), no more. But later he refers to an objection to the first solution approvingly, as though it were an effective refutation of that view (*In Metaph.* 9 q. 5 n. 13).

[52] This line of argument will be more or less persuasive depending on whether the reificatory move—the insistence on some feature *a parte rei* differentiating the cases—seems plausible. We might be tempted to reject it, distinguishing Scotus's cases by the simple presence or absence of the additional active power, holding on to the claim that the possible is independent of power. It is this last thesis, I think, that causes trouble for the ingenious suggestion in Boler [1996] that talk of the possible is a complex way of talking about the actual, with no ontological commitment to its supervenient modal states.

moving on to the "plausible" second solution. Before we also leave it, we should ask whether the ontological status of the possible could be explained through its origins in the Divine Intellect. The attractions of this move should be obvious. Since the Divine Intellect is involved in the production of the possible, and indeed is its ontological though not its formal ground, it seems like a natural solution. Unfortunately, it can't do the job. The "major puzzle" revolves around the ontological status of the foundation of the relation to existence as a terminus of the potency that the possible has to exist. But the foundation of this relation must be the feature in the thing that makes it possible in the first place, which is precisely what the Divine Intellect does not provide. Hence the existence of possibles in the Divine Intellect doesn't help explain the ontological status of the possible *qua* possible.[53]

The alternative, as Scotus sees it, is to deny that the possible does have any ontological status: "Another solution is that a being in potency is simply a nonbeing, and consequently a relation founded on it is only a relation of reason" (n. 35). This solution is particularly attractive to those who hold that essence and existence differ only by reason (n. 36), since without a real distinction between them we aren't left with the embarrassment of explaining the 'reality' of the non-existent essence. On this score, "the potency of the essence (as foundation) to its existence (as terminus) is only a relation of reason" (*ibidem.*). Likewise, the possible being that is 'contained' in an active power is no more than a conceptual construct (n. 37).

The drawback to this second solution is that it has no way to explain (or explain away) the impulses behind the first solution: possible beings are somehow just like real beings, only nonactual; the reality of the possible is a feature of the world and not of the mind; and the like.[54] Scotus takes the tack in n. 35 of trying to assimilate the possible to privation. Just as 'privation' formally expresses nonbeing but somehow implies a subject, so too 'the possible' expresses nonbeing, but "a certain nonbeing, namely one upon which a being can follow." A reasonable suggestion, but in need of development. Scotus spins it out as follows:

> We understand the being that follows upon it as though it were the same, as if it were initialy to be the foundation for potency and there-

[53] This is the suggestion in Normore [1996] 165–167. There will be remaining questions about the ontological status of the possible as items in the Divine Intellect, just as there are about all intentional beings, but this need not involve whatever makes the possible possible.

[54] Santogrossi [1993] 69–70 argues that the difference between the first and second solutions has instead to do with their distinct conceptions of relations of reason. Yet this undervalues the ontological motives behind the first solution.

> after the terminus for the potency—which is only according to the intellect conceiving the 'same': for when there is nothing in reality, there is neither same nor different, since these are differences of being.

This line of reasoning is hopeless as it stands. Distinct privations, such as blindness and deafness, are distinct even if each simply expresses nonbeing. Matters only get worse for possible beings: if we took him at his word, Scotus would have us deny that Socrates's sister is different from Socrates's brother, and also deny that they are the same. Quine's slogan that there is no entity without identity seems right on target and called for here. And without much more work on the passing suggestion that the possible is like privation, there isn't much content to the second solution.

The better thought in Scotus's account above is that questions of ontological standing, properly speaking, only apply to actual existents, and hence the 'existence' of possibles doesn't cause any particular ontological problems: they aren't actual! Now this seems like a dodge, and perhaps it is, but if so it's a deep dodge. Recall that potency/act is a transcendental division of being, and that for Scotus the possible is opposed to act, so that the possible and the actual give an exclusive and exhaustive partition of beings. When we inquire about the 'ontological standing' of the possible, we can't be wondering which class of beings it falls into. Nor are we asking what makes the possible possible, since, as we have seen, that is a brute metaphysical fact. Instead, I think the query splits into two separate lines of investigation, each linked to other sections of Scotus's metaphysics in the following ways.

On the one hand, we're asking about how to think about nonbeing where being may follow, and this is a question about how to think properly. When are we each thinking about the same nonactual possible being? When can we legitimately say that a given actual being is the very possible being we were thinking about? Is there any ontological standing to mental contents (*esse intentionale*)? On the other hand, thinking about being following on nonbeing is also a metaphysical question about the nature of being and nonbeing. Though we are not asking about what makes the possible possible, we are asking what makes the actual actual— in short, we are looking into the nature of *esse* (and the related notions of actuality and actualization). Scotus has much to say about the question of the meaning of Being, the *Seinsfrage*, and it is directly relevant to describing how things are, and thus how they are not but might be (the possible).

If my suggestion about Scotus's reasoning here is correct, then it's no wonder Scotus doesn't expand on the second solution after presenting it, since it involves many of the deepest (and darkest) parts of his metaphysics. Exploring such topics, while rewarding, would take us too far afield from modality. How-

ever, it should be clear that the study of modality is philosophically fruitful in Duns Scotus—not only with regard to the possible, but also in his analysis of modality and explorations of each kind, as I've tried to show. Indeed, by starting with modality we are led through Scotus's metaphysics in fresh and stimulating ways, where familiar doctrines can be seen anew and unfamiliar doctrines brought into the light.

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