Durand's Moderate Reductionism about Hylomorphic Composites

Abstract. According to a standard interpretation of Aristotle, a material substance, like a dog, is a hylomorphic composite of matter and form, its "essential" parts. Is such a composite some thing in addition to its essential parts as united? The moderate reductionist says 'no' whereas the anti-reductionist says 'yes'. In this paper, I will clarify and defend Durand of St.-Pourçain's surprisingly influential version of moderate reductionism, according to which hylomorphic composites are nothing over and above their essential parts and their union, where this union is explained by the presence of two modes: a mode of inherence on the side of form and a mode of substanding on the side of matter.

According to a standard interpretation of Aristotle, a material substance, like a dog, is a *hylomorphic* composite, something "composed" out of matter and form as its "essential" parts. Is a hylomorphic composite something over and above its essential parts? Most scholastics rejected *radical reductionism* which answers this question in the negative. In light of certain theological cases, such as the *triduum*—the three days during which Christ's body and Christ's soul (his form and his matter) existed even though Christ's human nature (the hylomorphic composite) did not—most agreed that a hylomorphic composite is at least its essential parts *as united* somehow, that is, its form and its matter together with a relation or set of relations that explain their union. However, there was disagreement on the further question: Is a composite something over and above its essential parts as united? *Moderate reductionism* says 'no' whereas the *anti-reductionism* says 'yes'. In this paper, I will analyze the early fourteenth-century Dominican Durand of St.-Pourçain's surprisingly influential moderate reductionism, defending it against a variety of objections.

Durand's Dominican contemporaries were divided on this issue, and, somewhat surprisingly, it was the Franciscans William Ware and John Duns Scotus who established the framework for the Dominican debate. Some Dominicans, such as Peter of Palude (*In Sent.* 3.2.2, ca. 1310), who plagiarizes almost the whole of Ware's *In Sent.* 3.2.2 (ca. 1300),² endorse Ware's moderate reductionism, whereas others, such as Hervaeus Natalis (*Quodl.* 2.14, ca. 1308), embrace a kind of anti-

¹ However, William Ockham (with some reservations) and Gregory of Rimini (seemingly without reservations) do pursue this view. See below, footnote 43, for further discussion and references.

² Peter of Palude, *In sententias theologicas Petri Lombardi (In Sent.)* (Paris, 1517) 3.2.2; William Ware, *In sententias theologicas Petri Lombardi (In Sent.)* (Florence, *Biblioteca Laurenziana*, MS Lat. Plut. 33, Dext. 1) 3.2.2. Throughout, I will use standard internal divisions for most works, e.g., *In Sent.* 3.2.2 = Book 3, Distinction 2, Question 2. Ware was surprisingly influential, generally, on both the Franciscans and the Dominicans. See Russell Friedman, "The Sentences Commentary, 1250–1350. General Trends, the Impact of the Religious Orders, and the Test Case of Predestination," in *Medieval Commentaries on the Sentences of Peter Lombard*, ed. G. Evans, vol. 1 (Leiden: Brill, 2002), 41–128. For Ware's views on the ontological status of the composite, see Richard Cross, *The Physics of Duns Scotus: The Scientific Context of a Theological Vision* (Oxford: Oxford University Press, 1998), ch. 5 and "Duns Scotus's Anti-Reductionistic Account of Material Substance," *Vivarium* 33, no. 2 (1995): 137–70.

reductionism associated most closely with Scotus (e.g., *Ord. in Sent.* 3.2.2 and *In Met.* 8.4, before 1308).³ John of Naples (*Quodl.* 7.7, ca. 1316) is an interesting case: he decides that Scotus and Natalis are right about some composites (namely, hylomorphic ones) whereas Ware and Palude are right about other composites (namely, quantitative or homogeneous ones).⁴ What is more surprising, however, is that *none* of these Dominicans endorses Thomas Aquinas's alternative, namely, that the question itself is misguided since only composite substances are *things* strictly speaking: prime matter and substantial form (with due qualification for the human soul) are mere principles, not things. Hence, it makes no sense to ask if the composite is some *thing* over and above its essential parts, as if its parts—its matter and form—were also things in addition to it.⁵

³ Hervaeus Natalis, *Quodlibeta* (*Quodl.*) (Venice, 1513) 2.14; John Duns Scotus, *Ordinatio in sententias theologicas Petri Lombardi* (*Ord. in Sent.*) (Vatican 9 / Wadding 7) 3.2.2; *Quaestiones subtilissimae super libros Metaphysicorum Aristotelis* (*In Met.*) (Wadding Vives 7) 8.4. On Scotus's view, see Thomas Ward, *John Duns Scotus on Parts, Wholes, and Hylomorphism* (Leiden: Brill, 2014); Cross, "Duns Scotus's Anti-Reductionistic Account of Material Substance"; and *The Physics of Duns Scotus*, ch. 5.

⁴ John of Naples, *Quodlibeta* (*Quodl.*) (Florence, *Biblioteca Nazionale Centrale*, Conv. Soppr. J.X.10) 7.7. Naples is an important conduit of medieval views to later thinkers. His *Quodl.* 7.7, which is highly derivative, contains a close paraphrase of Natalis's arguments for anti-reductionism (drawn from Natalis's *Quodl.* 2.14) together with a close paraphrase of Scotus's arguments for anti-reductionism (drawn from Scotus's *Ord. in Sent.* 3.2.2), as well as a verbatim version of Ware's arguments for reductionism (drawn from the presentation of Ware's *In Sent.* 3.2.2 found in Palude's *In Sent.* 3.2.2). John Capreolus, also an important resource for later scholastics, and Francisco Suárez both cite Naples by name and engage with his *Quodl.* 7.7 at length in their discussions of the issue. See Capreolus, *Defensiones theologiae divi Thomae Aquinatis* (*Def.*), ed. C. Paban and T. Pègues (Turin: A. Cattier, 1904) 3.2.2 and Suárez, *Disputationes metaphysicae* (*Disp. met.*) (Opera omnia 26) 36.3.

⁵ See, e.g., Aquinas, *Sententia libri De anima* (Editio Leonina 45.1) 2.1, 69a. For discussion, see John Wippel, *The Metaphysical Thought of Thomas Aquinas: From Finite Being to Uncreated Being* (Washington, D.C: Catholic University of America Press, 2000), 312–27; Jeffrey Brower, *Aquinas's Ontology of the Material World* (Oxford, Oxford University Press, 2014), 19–20; and Robert Pasnau, *Metaphysical Themes* 1274–1671 (Oxford: Oxford University Press, 2011), 35–52.

Durand sides with Palude and Ware against Hervaeus and Scotus, endorsing a form of moderate reductionism in *In Sent.* 3.2.2.⁶ His view was surprisingly influential on later thinkers. For instance, John Capreolus (*Def.* 3.2.2) in the fifteenth century, and Thomas de Vio Cajetan (*In S. th.* 3.6.5), Pedro Hurtado de Mendoza (*UP*, Physica 6.1), and Francisco Suárez (*Disp. Met.* 36.3) in the subsequent centuries, among others, pick out Durand's view for special analysis in their debates.⁷ Even so, Durand never dedicated a question to the issue, nor

⁶ The composition of Durand's Sentences commentary is complex and not fully known. For the most recent discussion of the various versions, see Thomas Jeshcke, Die Lehre von den Seelenpotenzen bei Durandus von Saint-Pourcain (Leiden: Brill, 2022), 52-71. For Book 3, we have yet to establish if there were three versions or just two. (The questions I've studied here only have two versions.) Hence, when quoting from the manuscripts that attest to an early version of Book 3, which has not been edited, I signal this with In Sent. B*, remaining neutral as to whether this is the A version (before 1308) or the B version (before 1312) or some mix of the two. I will quote from Auxerre, Bibliothèque municipale 26, although I have consulted several other manuscripts. For the other books, I signal these with *In Sent.* A or *In Sent.* B or *In Sent.* C when it can be established which redaction is which. (If all the versions are the same, I do not indicate the version.) In the case of In Sent. C (after 1317) I will cite the paragraph numbers (n. or nn.) from the 1563 Lyon edition. In the case of In Sent. A or In Sent. B I will cite the paragraph numbers from the critical edition being published by Peeters (Durandi de Sancto Porciano Scriptum super IV libros Sententiarum). If there is no critical edition for a given quotation, I will use the folio numbers from the Auxerre manuscript. For Quodlibeta Avenionensia (Quodl. Av.) (1314–16) I use the edition by Prospero Stella (Zürich: Pas Verlag, 1965). For Quodlibeta Parisiensia (Quodl. Par.) (1312–13) I use the edition by Takeshiro Takada (Kyoto: [n.p.], 1968).

⁷ Thomas de Vio Cajetan, *Summa totius theologiae S. Thomae de Aquino (In S. th.)* (Venice, 1588) 3.6.5; Pedro Hurtado de Mendoza, *Universa philosophia (UP)* (Lyon: Louis Prost, 1624), Physica 6.1. See also Patres Conimbricenses, *Commentarii Collegii Conimbricensis Societatis Iesu in octo libros Physicorum Aristotelis Stagiritae (In phys.)* (Coimbra: Antonii à Mariz, 1592) 2.1, q. 1, art. 2; and Gabriel Vasquez, *Commentariorum ac disputationum in tertiam partem S. Thomae (In S. th.)* (Ingolstadt: Andreas Angermarius, 1610) 3.6.4. Indeed, as I'll argue, Suárez and Hurtado adopt Durand's precise position on the issue. On Suárez and Hurtado's views about the composite, see Jean-Pascal Anfray, "A Jesuit Debate

does he offer us an argument for moderate reductionism in *In Sent* 3.2.2 or in any other single text.

A defense of his view, thus, will have to be reconstructed, which is what I will do here. After laying out some of the basics of Durand's broader ontology as well as the details of his moderate reductionism, I will argue that Durand's position is *precisely* the position that we find in Suárez and Hurtado: a composite is nothing over and above its essential parts as united, and this union is to be explained through the technical apparatus of modes (*modi*).⁸ However, unlike Suárez, who argues that there is just one mode that explains the union of matter and form, Durand maintains, like Hurtado, that there are two.⁹ I will close by looking at how Durand can answer three popular objections to moderate reductionism.

Durand's theory of modes.

Over the course of his career Durand developed a distinctive ontology, and with it a distinctive theory of modes, according to which mind-independent reality divides into two basic kinds of things (*res*): "absolute" (*absoluta*) things, on the one hand, and "modes" (*modi*) of those absolute things, on the other. His usual example of a mode are contact and inherence: contact is the mode that one body has when it is next to (in contact with) another body, and inherence the mode that a "separable" accident (i.e., an accident that can exist on its own without inhering in a substance, such as the quantity of the wafer during the Eucharist) has when it in fact inheres in a substance.¹⁰

about the Modes of Union: Francisco Suárez vs. Pedro Hurtado de Mendoza," *American Catholic Philosophical Quarterly* 93, no. 2 (2019): 309–34; Jean-Pascal Anfray, "The Unity of Composite Substance: The Scholastic Background to the *vinculum substantiale* in Leibniz's Correspondence with Des Bosses," *Vivarium* 58, no. 3 (2020): 219–52; and Tad Schmaltz, *The Metaphysics of the Material World: Suárez, Descartes, Spinoza* (Oxford: Oxford University Press, 2019), 53–60.

⁸ As Anfray, "A Jesuit Debate about the Modes of Union," 311 points out, such a reductionist view was the majority view among the Jesuits.

⁹ On this debate in particular, see Anfray, "A Jesuit Debate about the Modes of Union".

¹⁰ Strictly speaking, each body will have its own mode of contact, and the substance in which the separable accident inheres will also have its own mode of "substanding" that accident (more on this below). A "separable" accident is any

Durand's theory of modes consists in three main theses (the combination of which makes for its distinctiveness). First, a mode is, as mentioned, a *thing* (*res*): a mode is just as much a part of the mind-independent furniture of the world as an absolute thing is—indeed, a mode has both an essence and also its own peculiar sort of existence. However, whereas an absolute thing is *essentially independent*—that is, it can in principle exist without any other created absolute thing in virtue of what it is in its essence—a mode is *essentially dependent*: a mode is, by its very essence, always a mode *of* (dependent upon) some absolute thing (in the

accident that is not essentially dependent upon something else, that is, any accident that, while normally inhering in (depending upon) a substance, can exist on its own at least by divine power without inhering in a substance (for instance, the quantity of the wafer during the Eucharist). Such separable accidents are absolute things on Durand's ontology, and he limits these to continuous quantities and certain qualities (2nd- and 3rd-species qualities like colors). Most accidents, however, Durand holds, are either modes—e.g., 1st- and 4th-species qualities (habits and shapes), discrete quantities (numbers), 2nd- and 3rd-species categorical relations (of power and measure), and items that fall into the last four categories (where, when, position, and having)—or mere concepts ("mere relative denominations") and neither absolute thing nor mode, namely, 1st-species categorical relations (qualitative similarities and quantitative equalities), and actions and passions. For discussion and texts, see Peter Hartman, "Durand of St.-Pourçain's Theory of Modes," *Journal of the History of Philosophy* 60, no. 2 (2022): 203–26.

¹¹ On the claim that a mode is a thing (*res*), see, e.g., *In Sent.* B 1.33.1, n. 14 = *Quodl. Par.* 1.1, 17–18 = *Quodl. Av.* 2.1, 174 = *In Sent.* C 1.30.2, n. 15 (here and throughout '=' indicates that the passage is repeated verbatim, although important additons [*add.*] are indicated inside << >>): "'Res' dicitur analogice de re absoluta et de respectu <<seu de quocumque reali modo essendi *add. Quodl. Av.* 2.1>> sed per prius et simpliciter de re absoluta, per posterius et secundum quid de respectu <<et de quocumque reali modo essendi *add. Quodl. Av.* 2.1>>, qui non est res nisi quia est realis modus essendi." See also *Quodl. Av.* 1.1, 47–48, 50 = *In Sent.* C 1.33.1, nn. 15, 19; *In Sent.* B 1.33.1, n. 4. On the claim that a mode has an essence, see, e.g., *Quodl. Av.* 1.1, 49 = *In Sent.* C 1.33.1, n. 15: "Sed essentia vel quidditas seu entitas horum modorum tota consistit in hoc quod est esse huius." See also *In Sent.* B* 4.12.1, 131ra = *In Sent.* C 4.12.1, n. 4. On the claim that a mode has its own existence, see, e.g., *Quodl. Av.* 1.1, 48–49 = *In Sent.* C 1.33.1, n. 15: "Respectus autem et universaliter omnes modi essendi ... nullam entitatem habent nisi hanc quae est esse huius." See also *Quodl. Av.* 1.1,

technical jargon: its foundation). Even God cannot make a mode that is not the mode of some absolute thing: God cannot make contact, for example, without a body upon which it is founded. Call this *the essentially dependent thing thesis*. ¹²

Second, a mode is really distinct from its foundation (e.g., contact from the body upon which it is founded, inherence from the "separable" accident upon which it is founded, and so on). Both a mode and its foundation are things, and, even though a mode is essentially dependent upon its foundation, its foundation is essentially independent, and so a mode and its foundation are non-mutually separable: its foundation at least can exist separately from it. Since Durand

50 = *In Sent.* C 1.33.1, n. 19; *Quodl. Par.* 1.1, 9–10 = *In Sent.* C 1.30.2, n. 10. For a more thorough discussion of this thesis, see Hartman, "Durand of St.-Pourçain's Theory of Modes," 209–12.

¹² For Durand, essential dependence is not to be confused with natural dependence. Natural dependence is contingent (in the sense that it follows from a thing with natural but not logical necessity). For instance, separable accidents, such as colors, have a natural but not an essential dependence upon substances. Hence, if X is naturally dependent upon Y, X can exist (by divine power at least) without Y, whereas if X is essentially dependent upon Y, X cannot exist (even by divine power) without Y. See especially Quodl. Av. 1.1, 48–49 = In Sent. C 1.33.1, n. 15: "Nam quamvis omne accidens sit 'ens quia entis', ut dicitur quarto Metaphysicae [i.e., 4.2 1003b5-10], tamen aliter et aliter convenit hoc absolutis et respectibus, et universaliter omnibus modis essendi; quia absoluta [sc. accidentia] sunt 'entia quia entis' non quidem essentialiter et formaliter, sed solum concomitative, quia non essent naturaliter nisi essent in alio, scilicet in substantia; tamen sua quidditas non est esse in alio—immo praeter hoc habent suam formalem entitatem et quidditatem, sicut quantitas in sacramento altaris habet suam formalem entitatem et quidditatem absque hoc quod sit in alio vel sit alterius ut subiecti; et idem est de albedine et huiusmodi. Respectus autem et universaliter omnes modi essendi sunt 'entia quia entis' non solum concomitative, sed quidditative et formaliter, quia nullam entitatem habent nisi hanc quae est esse huius. Unde albedo quae est huius ut subiecti, puta cigni, est aliquid essentialiter praeter esse huius, quia esse huius non est eius essentia. Sed iste modus essendi, qui est esse huius, non est quidditative et formaliter aliqua natura vel entitas nisi esse huius; et totus conceptus eius quidditativus et formalis est concipi non ut hoc vel quid, sed [ut] huius; et [ille] qui aliter concipit [eum], non concipit modum essendi, sed rem cuius est modum denominative." See also the texts quoted below in footnote 48 and Hartman, "Durand of St.-Pourçain's Theory of Modes," 210-12.

further takes non-mutual separability to be sufficient for a real distinction, he holds that there is a real distinction between a mode and its foundation. Durand sometimes calls this distinction a real "minor" distinction (*Quodl. Av.* 2.3, 185), in contrast to a real "major" distinction that obtains between two absolute things (e.g., two bodies), which (usually but not always) does entail mutual separability.¹³ Call this *the real distinction thesis*.

Finally, a mode, when added to its foundation, does not constitute a hylomorphic composite with it. Call this the non-compositionality thesis. In order for two things to constitute a hylomorphic composite, at minimum one of them must inhere in the other. But a mode cannot inhere in its foundation (nor can its foundation inhere in it). One of Durand's arguments here is an infinite regress argument. Consider the per accidens hylomorphic composite: the brown wafer. In such a composite, we would say that brownness (the "separable" accident) inheres in the wafer (the substance). According to Durand, in order for brownness to inhere in the wafer—and thus constitute a per accidens composite with it—brownness must have a "mode of inherence" founded upon it relating it to the wafer. However, if this mode of inherence were itself to constitute a composite with its foundation (the brownness), then it (the mode) would have to inhere in its foundation (the brownness), and so it (the mode) would need its own mode of inherence founded upon it, which in turn would need its own mode of inherence founded upon it in order to inhere in it, and so we are off to the races towards what metaphysicians nowadays would characterize as a bedrock regress. 14 Hence, if we maintain that

¹³ I say 'usually' since Durand will carve out an exception for prime matter, which, although an "absolute" thing, nevertheless such that it cannot exist on its own without its counterpart, substantial form. See below in our discussion of the independence objection. For the real distinction thesis, see, e.g., *Quodl. Av.* 1.1, 50–51 = *Quodl. Av.* 2.3, 184; *In Sent.* B 1.33.1, n. 13 = *Quodl. Par.* 1.1, 16–17 = *In Sent.* C 1.30.2, n. 14. For discussion, see Hartman, "Durand of St.-Pourçain's Theory of Modes," 212–14.

¹⁴ On such regresses, see, e.g., Peter Simons, "Lowe, the Primacy of Metaphysics, and the Basis of Categorical Distinctions," in *Ontology, Modality, and Mind: Themes from the Metaphysics of E.J. Lowe*, ed. A. Carruth, S. Gibb, and J. Heil (Oxford: Oxford University Press, 2018), 37–47. For Durand's regress argument, see, e.g., *In Sent.* B 1.33.1, n. 14; *Quodl. Par.* 1.1, 17–19 = *In Sent.* C 1.30.2, nn. 15–16; *Quodl. Av.* 1.1, 49–51 = *In Sent.* C 1.33.1, nn. 15–18; and *Quodl. Av.* 2.1, 174–75. In Durand's more matural works he supplements the regress argument with a further argument to support the more general claim that no mode whatsoever inheres in its foundation (i.e., not just inherence but also, e.g., contact and certain

modes of inherence are real mind-independent features of the world which explain the metaphysical fact that one thing inheres in another, then we better not also claim that such modes themselves inhere in their foundations, i.e., constitute a composite with their foundations. But if the mode of inherence does not inhere in its foundation, then, so Durand argues, no mode inheres in its foundation, and so no mode constitutes a hylomorphic composite with its foundation.

So much for Durand's theory of modes. It is a sophisticated theory and in almost every respect it is exactly the theory that Francisco Suárez and later scholastics adopt: a mode is essentially dependent, non-mutually distinct from the absolute thing that functions as its foundation, but such that it does not constitute a hylomorphic composite with its foundation.¹⁵

Durand's moderate reductionist theory of the composite.

Let's now turn to Durand's views about the ontological status of a hylomorphic composite. Is a hylomorphic composite something over and above its essential parts as united? In a somewhat famous passage from his discussion of the hypostatic union in *In Sent.* 3.2.2 (quoted, as mentioned above, by Capreolus and Cajetan as an exemplar of moderate reductionism), Durand writes:

The whole composite and its parts [i.e., matter and form] as united ... are completely the same (*penitus idem*). For a whole is nothing other than its united parts, and its united parts are nothing other than a conjunct whole.¹⁶

other categorical accidents he takes to be modes, e.g., discrete quantities, shapes, etc.) (On these other modes, see footnote 10 above.) This further argument appeals to the essential dependence of modes together with the thesis that if X can inhere, then X can also not inhere and so subsist on its own, at least by divine power. Hence, if a mode were capable of inherence, then it would be capable of subsistence, which goes against the *essential* dependence of a mode upon its foundation. For a more thorough discussion of Durand's argumentation here, see Hartman, "Durand of St.-Pourçain's Theory of Modes," 214–20.

¹⁵ For a much more detailed treatment of Durand's theory of modes, as well as a comparison of it to Suárez's theory, see Hartman, "Durand of St.-Pourçain's Theory of Modes." See also footnote 21 below on Suárez's theory of modes.

Durand is clearly staking out a reductionist claim of some sort here, and indeed it looks to be a form of moderate reductionism: a composite whole is nothing over and above its essential parts (its matter and its form) as united.

However, as mentioned, he does not go on to argue for this claim in the question at hand—his goal in *In Sent.* 3.2.2 is to show that during the hypostatic union (or "assumption") God does not somehow first assume one essential part of a Christ's human nature (e.g., his soul) and then the other one (e.g., his body), or the whole and then the parts, etc. but rather "assumes" Christ's whole composite nature and essential parts as united all at once at the same time.¹⁷ Nor does Durand defend the claim made in the passage elsewhere in his corpus with a dedicated question on the topic of parts and wholes, as his Dominican confreres Hervaeus Natalis, Palude of Palude, and John of Naples do.¹⁸ Hence, we will have to reconstruct his defense of this claim.

Before we do so, however, let us get a little clearer on what Durand is claiming here. As mentioned, it seems clear that his claim is that a whole hylomorphic composite is the same as (nothing over and above) its parts *as united*, that is, its essential parts (its matter and its form) together with the relation or relations that

¹⁶ In Sent. B* 3.2.2, 91rb-va = In Sent. C 3.2.2, n. 12 (translated text in italics): "Sed totum compositum et partes eius ut unitae—sic enim assumptae sunt ut statim probatum est—sunt penitus idem. Totum enim non est aliud quam partes unitae nec partes unitae quam totum coniunctum. Unum etiam clauditur intrinsece in alterius intellectu, quia impossibile est intelligere coniunctum nisi ex partibus unitis, et e converso: impossibile est intelligere coniunctionem partium nisi intelligendo coniunctum ex eis—immo utrobique formaliter videtur esse idem conceptus."

¹⁷ On the issues involved in the hypostatic union and Durand's understanding of it, see Isabel Iribarren, "La christologie de Durand de Saint-Pourçain dans le contexte de l'émergence du thomisme au XIV siècle," *Revue des sciences philosophiques et théologiques* 92 (2008): 241–56 and "The Christological Thought of Durandus of St.-Pourçain in the Context of an Emergent Thomism," in *Philosophical Debates at Paris in the Early Fourteenth Century*, ed. S. Brown, T. Dewender, and T. Kobusch (Leiden: Brill, 2009), 309–24.

¹⁸ For these authors, see the texts cited above in footnotes 2–4. Durand suggests moderate reductionism in a few other places, although always in passing. See, e.g., *In Sent.* B 1.33.2, n. 8 = *In Sent.* C 1.33.2, n. 8. See also *The Passage*, quoted below in the main text.

unite them (its "relational" parts). Hence, it is a form of *moderate* reductionism (as opposed to *radical* reductionism, as discussed above). But what are these relational parts? The answer, we learn elsewhere in his discussion of the noncompositionality thesis, is that these are modes, namely, the mode of inherence (*modus essendi in alio*) founded upon the formal part (relating it to the material part) and a corresponding mode of "substanding" (*modus essendi in quo aliud*) founded upon the material part (relating it to the formal part). Durand lays this out in the following passage (call it *The Passage*) when defending the infinite regress argument discussed above:

The parts of a composite, namely [prime] matter and [substantial] form [in the case of a *per se* composite] or a subject and an accident [in the case of a *per accidens* composite], are *things* (*res*) having the relations (*habitudines*) or modes of being (*modi essendi*) implied by the terms 'to be composed' or 'composition', namely, the mode of inherence (*in alio*) and the mode of substanding (*in quo aliud*)... For form is said to inhere in (*esse in*) matter and matter is said to substand (*in qua est*) form ... since composition is nothing other than form inhering in (*inesse*) matter and matter substanding (*subesse*) form. Hence, setting aside matter and form (which neither separately nor together are formally and quidditatively composition), composition is nothing other than *being of this* (*esse huius*) ... And so it is impossible to conceive of composition ... as a certain thing or being-ness in itself essentially and formally unless it is conceived as *of* this *to* this, e.g., *of* matter *to* form... ¹⁹

¹⁹ Quodl. Av. 1.1, 49 = In Sent. C 1.33.1, n. 15 (translated text in italics): "Verbi gratia, componi et tangi sunt modi essendi reales rerum componentium vel tangentium importantes solam realem habitudinem. Partes ergo compositi, scilicet materia et forma vel subiectum et accidens, sunt res quarum sunt illae habitudines seu modi essendi qui importantur per 'componi' vel per 'compositionem', qui modi sunt in alio et in quo aliud, et eis denominative conveniunt. Forma enim dicitur esse in materia et materia in qua est forma—et utrumque est verum denominative et non essentialiter, quia essentia partium compositi non est sic esse; sed essentia vel quidditas seu entitas horum modorum tota consist in hoc quod est esse huius—quia compositio non est aliud quam formam inesse materia et materiam subesse forma. Propter quod, exclusa materia et forma, quorum neutrum nec utrumque est formaliter et quidditative compositio, compositio non est aliud quam esse huius. Et idem est de tactu respectu tangentium. Et ideo impossibile est concipere compositionem vel tactum ut quamdam rem vel entitatem secundum se essentialiter et formaliter nisi huius ad

Every composite, then, has, in addition to its two (non-relational) essential parts (its matter and its form), *two* further relational parts, that is, two modes: substanding, which unites the material part to the formal part, and inherence, which unites the formal part to the material part.²⁰ Since modes themselves are things on Durand's theory of modes (albeit essentially dependent things), a composite turns out to have four things as its parts: the absolute thing that functions as the formal part, a mode of inherence founded upon it (uniting it with the material part), the absolute thing that functions as the material part, and a mode of substanding founded upon it (uniting it with the formal part). As *The Passage* suggests, this is true of both *per se* and *per accidens* composites: a *per*

hoc, puta materiae ad formam quoad compositionem." For discussion of this passage, see Thomas Dewender, "Der ontologische Status der Relationen nach Durandus von St.-Pourcain, Hervaeus Natalis und Petrus Aureoli," in *Philosophical Debates at Paris in the Early Fourteenth Century*, 294–96.

²⁰ *Quodl. Av.* 1.1, 50 = *In Sent.* C 1.33.1, n. 17 (emphasis mine): "Unde compositio, quae includit duos modos essendi, scilicet modum essendi ut in alio et modum essendi ut in quo aliud, quorum primus denominative competit formae et secundus materiae, non facit cum aliqua dictarum partium compositionem, quamvis differat aliquo modo realiter ab utraque. Quinimmo, tota compositio est illarum rerum quibus huiusmodi conveniunt denominative, scilicet materiae et formae. Cuius ratio est guia omnis talis compositio est per hoc guod una res inhaeret alteri." See also Hervaeus Natalis, Quodl. 2.14, 61va (presenting a view like Durand's): "Prima [opinio] ergo ponit quod totum differt a partibus, quia addit super partes quosdam modos. Nam una pars habet modum eius in quo est aliquid sicut in materia et subiecto; alia autem habet modum essendi in alio, sicut perfectio formalis in perfectibili." See also Anonymous, *Quaestio* "Utrum corpus Christi sive quodlibet aliud totum reale sit realiter aliquid praeter omnes suas partes" (Saint-Omer, Bibliothèque municipale, 129), 252rb (presenting the same view): "Alii [dicunt] quod illud additum [sc. quod totum addit supra partes] sunt modi intrinseci differentes a materia et forma, non componentes tamen cum materia et forma, qui modi sunt modus essendi in alio ut perfectio quoad formam et modus essendi in quo aliud ut in perfectibili essentiali quoad materiam." On the Omer manuscript, see Josef Koch, Durandus de S. Porciano O.P.: Forschungen zum Streit um Thomas von Aquin zu Beginn des 14. Jahrhunderts (Münster: Aschendorff, 1927), 345–46. This interesting (and long) question is the first of a set of questions, the last of which is attributed to 'Nycolay de Lyra', included as an appendix to Durandus de Aureliaco's Evidentiae contra Durandum (ca. 1320s). (As far as I can tell the question itself has not been studied in any detail.)

accidens composite, e.g., our brown wafer, is nothing over and above the accidental form of brownness, its mode of inhering in the wafer, the wafer, and the its mode of substanding brownness. Likewise, a *per se* composite, e.g., a dog or a human being, is nothing over and above its substantial form, the substantial form's mode of inhering in prime matter, prime matter, and prime matter's mode of substanding that substantial form.

On a historical note, Durand's view here—that a composite is its essential parts as united where that union is explained in terms of modes—is almost exactly the moderate reductionist position that Suárez defends in his very long discussion of wholes and parts in *Disp. met.* 36.3 and elsewhere, and it is *exactly* the view that Suárez's contemporary Hurtado defends in his (equally long) discussion in *UP*, Physica 5–6. Both Suárez and Hurtado hold that a composite is nothing over and above its (non-relational) essential parts and the relation or relations that unite them, and both hold that such relation or relations of union should best be understood as modes, in precisely the sense of 'modes' that Durand defends in his general theory of modes (i.e., essentially dependent, non-mutually distinct, and non-compositive).²¹ However, whereas Suárez maintains that there is just one

²¹ On Hurtado's theory of modes, see, e.g., UP, Metaphysica 2.5–6 and 6.2–3 and the discussion in Anfray, "A Jesuit Debate about the Modes of Union". On Suárez's theory of modes, see *Disp. met.* (Opera omnia 25) 7.1–2 and the discussion in Stephen Menn, "Suárez, Nominalism, and Modes," in Hispanic Philosophy in the Age of Discovery, ed. K. White (Washington, D.C.: Catholic University of America Press, 1997), 225–56; Schmaltz, The Metaphysics of the Material World, 41–47; and Pasnau, Metaphysical Themes, 244–75. On the essential dependence of modes in Suárez, see *Disp. met.* 7.1, n. 18, 25:256a-b; in Hurtado, see *UP*, Metaphysica 2.5. On the non-mutual distinction of modes in Suárez, see *Disp. met.* 7.1, nn. 9–13, 25:252b-254a; in Hurtado, UP, Metaphysica 6.2-3. On the noncompositionality thesis in Suárez, see Disp. met. 7.2, n. 6, 25:263a-b; in Hurtado, UP, Metaphysica 2.5, n. 73, 739b. Note, however, that Suárez holds back from calling modes 'things' and the modal distinction a 'real' distinction (e.g., Disp. met. 7.1, n. 16, 25:255a-b) while Durand and Hurtado do not (e.g., UP, Metaphysica 2.5 and 6.2). This, however, in my view, is a mere verbal dispute: Suárez clearly does not hold a deflationary view about modes. See, e.g., Disp. met. 7.1, n. 17, 25:255b-56a (where he tells us that modes are "something positive"); Disp. met. 7.1, n. 19, 25:256b–57b (where he tells us that modes are things in a broad sense); and Disp. met. 47.2, n. 8, 26:788a (where he tells us that modes have their own kind of existence). On last point, see also Hurtado, UP, Metaphysica 6.2.1, n. 13, 788b–89a (emphasis in the original): "Distingui autem realiter erit unum conceptum a parte rei non esse

mode involved in the union of the form and matter, namely, the mode of inherence that the form has,²² Hurtado maintains, just as Durand does, that the union involves two modes: inherence on the side of the formal part and also substanding on the side of the material part.²³ Since both engage with Durand on the issue,²⁴ and both adopt a general theory of modes that is basically the same as Durand's—Suárez cites Durand explicitly and approvingly when establishing his own theory of modes (*Disp. met.* 7.1, n. 19, 25:256b–57b; *Disp. met.* 47.2, n. 4,

alium. In qua distinctione comprehenditur distinctio modalis, quam Pater Suarez, disputatione 7a, sectione 1a, numero 16o, vocat 'ex natura rei', quam vocem ergo refugio ne recidam in Scoticismum sectione sequenti impugnandum. Vocetur igitur 'distinctio realis modalis'. Dixi hanc distinctionem sub reali contineri, quia existit a parte rei, et sicut modus simpliciter est ens reale, ita et eius distinctio realis. Vocatur autem 'modalis', quia alterum vel utrumque extremum est modus, de quo late egi disputatione 2a, sectione 5a ubi probavi *modum esse rem*. Vocari autem modum, quia non tam videtur afferre novam entitatem quam novam determinationem entitatis praeexistentis."

²² *Disp. met.* 13.9, nn. 9–16, 25:431b–34a; *Disp. met.* 36.3, n. 8, 26:488a-b. For Suárez's views on substantial forms, see, among many others, Dominik Perler, "Suárez on the Unity of Material Substances," *Vivarium* 58, no. 3 (2020): 143–67; Daniel Heider, "Suárez on Material Substance: Reification of Intrinsic Principles and the Unity of Material Composites," *Organon F* 15, no. 4 (2008): 423–38; Tad Schmaltz, "Suárez and Descartes on the Substantial Mode(s) of Union," *Journal of the History of Philosophy* 58, no. 3 (2020): 471–92; Helen Hattab, "Suárez's Last Stand for the Substantial Form," in *The Philosophy of Francisco Suárez*, ed. B. Hill and H. Lagerlund (Oxford: Oxford University Press, 2012), 101–18; and Sydney Penner, "Suárez on Substantial Forms: A Heroic Last Stand?", in *Francisco Suárez* (1548-1617): *Jesuits and the Complexities of Modernity*, ed. R. Maryks and J. de Frutos (Leiden: Brill, 2019), 46-71.

²³ *UP*, Physica 5.2–4. Hurtado talks of *informatio* and *materializatio* whereas Durand talks of inherence and substanding. For discussion, see Anfray, "A Jesuit Debate about the Modes of Union" and "The Unity of Composite Substance".

²⁴ See, e.g., Hurtado, *UP*, Physica 6.1, n. 3, 211a: "Ex hac ratione compositi videtur inferri totum compositum includere utramque partem et compositionem, praeter illas autem nihil addit nec ratione distinctum, ut recte Durandus affirmat in 30 [libro], distinctione 2a, quaestione 2a, numero 12o." Suárez, *Disp. met.* 36.3, n. 6, 26:487b.

26:786a-b)—it isn't hard to imagine a fairly direct line of influence running from the most resolute doctor up to Suárez and Hurtado.²⁵

Objections & replies.

So much for the general contours of Durand's moderate reductionism. Next I want to harden it a bit with some objections and look at how Durand might reply to them.

According to *The Passage*, as we saw, matter and substantial form are both *things* (*res*),²⁶ and, indeed, as the context makes clear, *absolute* things (as opposed to modes).²⁷ While a number of scholastics accepted the idea that the essential parts of a composite were themselves *bona fide* things,²⁸ Durand's further commitment to the idea that absolute things (in contrast to modes) are essentially independent things—that is, able to exist on their own—places some pressure on his account, for he would seem to have to hold, as a consequence, that both substantial form and prime matter can exist on their own.²⁹ However, while Durand accepts that

²⁵ Durand, the *Doctor Resolutissimus*, was extremely popular during the 16th century—his *Sentences* were printed at least fifteen times between 1508 and 1594—especially among the Jesuits in Spain, where there was a Durandian chair at Salamanca. See Koch, *Durandus de S. Porciano*, 208–10.

 $^{^{26}}$ *Quodl. Av.* 1.1, 49 = *In Sent.* C 1.33.1, n. 15 (emphasis mine; the full passage is given above in footnote 19): "Partes ergo compositi scilicet *materia* et forma ... sunt *res.*.." See also *Quodl. Av.* 1.1, 50 = *In Sent.* C 1.33.1, n. 17 (emphasis mine; the full passage is given above in footnote 20): "... tota compositio est illarum *rerum* ... scilicet *materiae* et formae."

²⁷ See also *In Sent.* B* 3.1.1, 89ra = *In Sent.* C 3.1.1, n. 9 and *In Sent.* A 2.12.1, n. 5 = *In Sent.* C 2.12.1, n. 9.

²⁸ *Pace* Aquinas (see footnote 5 above). For Suárez and Hurtado's endorsement of this claim, see, e.g., Suárez, *Disp. met.* 33.1, n. 5, 26:331b (for discussion, see Perler, "Suárez on the Unity of Material Substances" and Heider, "Suárez on Material Substance"); Hurtado, *UP*, Physica 2.6 (who calls it "the more common view" at n. 63, 174a, and even attributes it to Durand there).

²⁹ A consequence Suárez and Hurtado were happy to accept. See, e.g., Suárez, *Disp. met.* 15.9, n. 5, 25:533b–34a (for discussion: Heider, "Suárez on Material Substance"); Hurtado, *UP*, Physica 2.9.

substantial form (at least in the case of the human substantial form, i.e., the soul) can exist on its own without matter, he explicitly rejects the idea that matter can exist on its own footnote without substantial form (*In Sent.* 2.12.1–2). So how can matter be an "absolute" thing (i.e., essentially independent) and yet incapable of independent existence? Call this *the independence objection*. Further, if a *per se* composite (i.e., a material substance like a dog) is made up of two absolute things (matter and form), then how are we to distinguish *per se* composites from *per accidens* composites (like a brown wafer), which are also, on Durand's view, made up of two absolute things (a complete substance and a "separable" accident), or, in other terms, what distinguishes *per se* unities from *per accidens* unities? Call this *the per se unity objection*.³⁰

Durand's answer to both objections appeals to a further distinction he draws between two kinds of absolute things: absolute *potential* things, such as prime matter, on the one hand, and absolute *actual* things, such as substantial forms and separable accidental forms, on the other.³¹ According to Durand, one thing that distinguishes an absolute *potential* thing from an absolute *actual* thing is the fact that a potential thing cannot *actually* exist on its own without an actual thing, even by divine power: prime matter, for instance, only *actually* exists insofar as it is informed by a substantial form, whereas substantial form can *actually* exist even if prime matter does not substand it.³²

Durand can also appeal to matter's status as a potential thing in order to distinguish *per se* unities (those made up of matter and substantial form) from *per accidens* unities (those made up from a substance and an accidental form). As he argues, a *per accidens* composite (and so a *per accidens* unity) is such that both of its essential parts are actual things (e.g., the wafer and brownness), whereas a *per se* composite (and so a *per se* unity, i.e., a substance) is such that one of its essential parts is a potential thing (namely, matter).³³

³⁰ See, e.g., Scotus, *Ord. in Sent.* 3.2.2 and *In Met.* 8.4 (among other places) and Hervaeus Natalis, *Quodl.* 2.14 for this objection. For discussion of Scotus on the issue, see, e.g., Cross, "Duns Scotus's Anti-Reductionistic Account of Material Substance."

³¹ See, e.g., *In Sent.* A 1.8.6, nn. 16, 20–21 = *In Sent.* C 1.8.1.2, n. 16, 20–21; *In Sent.* 2.12.1–2; and *In Sent.* 4.43–44.

³² Durand defends this at length in *In Sent.* 2.12.2.

³³ Durand defends this at length in *In Sent.* 2.12.1. Durand admits that having one essential part which is potential is a necessary but not a sufficient condition for

The argument from generation.

In this last section, I will deal with another objection, which I call *the argument from generation*. This was a popular argument for anti-reductionism: it can be found, in one form or another, in William Ware (who rejects it), John Duns Scotus, John of Naples, Hervaeus Natalis, and John Capreolus (who accept it), among others.³⁴ Roughly, the argument is that *being generated* (and *being corrupted*) seem to be properties of the *composite as a whole* and not properties of its parts. More precisely, the argument runs like this:

- 1. Generation directly results in either the composite, matter, form, or form together with the union of form and matter (i.e., the relation or relations that explain the union of form with matter.)
- 2. It cannot directly result in matter.
- 3. The mere production of form is insufficient without its union with matter.

being a *per se* unity, for he does not wish to allow that a composite made up out of an accidental form and prime matter should count as a *per se* unity. Hence, Durand's full answer is that a *per se* unity results from the fact that one of the parts is a potential thing *and the other part is a substantial, not an accidental, form.* See *In Sent.* A 2.12.1, n. 8 = *In Sent.* B 2.12.1, n. 8 = *In Sent.* C 2.12.1, n. 8. See also, e.g., *In Sent.* C 1.8.2.4, nn. 10, 16.

³⁴ Ware, *In Sent.* 3.2.2, 165r (apud Palude, *In Sent.* 3.2.2, 16va); Scotus, *Ord. in* Sent. 3.2.2, nn. 74–75, Vatican 9:149–50 (= n. 7, Wadding 7:76); Lectura in Sent. 3.2.2, nn. 81–82, Vatican 20:103; Reportatio in Sent. 3.2.2, n. 5, Wadding Vives 23:253a; and *In Met.* 8.4, n. 8, Wadding Vives 7:525b; John of Naples, *Quodl.* 7.7, 129va; Hervaeus Natalis, Quodl. 2.14, 62vb–63ra; and Capreolus, Def. 3.2.2, 5:25a– 26a (mostly just a rehash of Scotus's *In Met.* 8.4). The argument is also common in the later scholastics. See, e.g., Suárez, Disp. met. 36.3, n. 3, 26:487a; Hurtado, UP, Physica 6.1, n. 17, 212b; Patres Conimbricenses, *In phys.* 2.1, q. 1, art. 1, 92–93; Rodrigo de Arriaga, Cursus philosophicus (Antwerp: Ex Officina Plantiniana, 1632), Physica 5.1, n. 2, 309b–10a; and Chrysostomus Javellus, *In omnibus* Metaphysicae libris (In Met.) (Venice, 1568) 7.20, 186v. On this argument, see Richard Cross, "Ockham on Part and Whole," Vivarium 37, no. 2 (1999): 143-67; The Physics of Duns Scotus, ch. 5; "Duns Scotus's Anti-Reductionistic Account of Material Substance"; and Ward, John Duns Scotus on Parts, Wholes, and Hylomorphism, chs. 3–4. The argument itself has its roots in Aristotle's Metaphysics 7.17 (1041b11–17). One can formulate a similar argument for corruption, as most of the authors do.

- 4. It cannot directly result in the union of the form with matter.
- 5. Therefore, generation directly results in the composite, an absolute thing over and above its essential parts.

Put in other words, it is the *composite* dog that is directly generated. Matter is not generated, for it is by definition ungenerated; the mere production of a new substantial form is insufficient, for generation results in the further fact that a substantial form is somehow united with matter. However, it also cannot directly result in the union of form with matter (for reasons we will get to momentarily). Hence, the direct result of generation is the composite, an absolute thing over and above its essential parts.

Premise (4), then, is our crucial premise. Why can't generation directly result in both the substantial form together with the relation or relations that go into its union with matter? Premise (4) was often defended by appeal to a scholastic dogma: a non-relational change (e.g., qualitative, quantitative, or substantial change, i.e., generation) cannot directly result in a relation. While most of the authors I've studied, when defending this premise, were content to simply appeal to Aristotle (Book 5, Chapter 1 of the *Physics*), where he does seem to defend precisely this claim, some argued as follows. Relational change (change that results in a relation) always requires an antecedent non-relational change in one or both of the relata. For instance, in order for Socrates to (relationally) change so as to become "similar" to Plato in color, either Socrates or Plato (or both) must undergo a non-relational change in color beforehand (a qualitative change). 35 So too for any relational change. Hence, a relation might be the indirect result of a non-relational change (like generation), but never the direct result of one. Hence, a relation—including the relation or relations involved in the union of form with matter—cannot be a direct result of generation, i.e., substantial change, a kind of non-relational change.³⁶

Moderate reductionists like William Ware—and for that matter Suárez and Hurtado—rejected premise (4).³⁷ Substantial change (i.e., generation) *can and does* directly result in both the substantial form and also the union of substantial form with matter, that is, the relation or relations (or mode or modes) that make up

³⁵ See, e.g., Scotus, *In Met.* 8.4, nn. 4–5, 8–9, Wadding Vives 7:522a–23b, 525a–26a.

³⁶ As we will see in a moment, because of certain theological cases, it will not do to say that the relation or relations involved in union are mere conceptual or internal relations, like similarity perhaps, which obtain when their relata obtain without any addition of being.

that union (inherence, for Suárez; inherence and substanding for Durand and Hurtado). Durand, however, accepts premise (4): generation cannot directly result in a relation or mode. He does, it is true, reject the scholastic dogma that non-relational change *in general* cannot directly result in a relation or mode. However, he adopts a modified form of the dogma, according to which *natural* non-relational change (i.e., qualitative, quantitative, and substantial changes) cannot, although *divine* actions and *natural* locomotions can. Locomotion, for instance, directly results in a "where"—the relation (for Durand, a mode) of being contained by some other thing—, and the hypostatic union or "assumption" is a case where God directly produces the relation (again, for Durand, a mode) of dependence that Christ's human nature has upon the divine. ³⁸ So too God can

³⁷ Ware, *In Sent.* 3.2.2, 165v (apud Palude, *In Sent.* 3.2.2, 17ra); Suárez, *Disp. met.* 36.3, n. 15, 26:490b (for discussion, see Schmaltz, "Suárez and Descartes on the Substantial Mode(s) of Union," 478); Hurtado, *UP*, Physica 6.1, nn. 17–18, 212b–13a; ibid., 6.4, nn. 40–47, 216a–17a.

³⁸ Where (*ubi*) and the hypostatic union, for Durand, are what we would call nowadays external relations as opposed to internal relations, that is, ones that do not necessarily obtain once their relata exist. (More on this below.) See, e.g., In Sent. B* 3.5.1, 92va (also apud Palude, In Sent. 3.5.1, 33va, emphasis mine): "Et si dicatur contra hoc—quod ad relationem non est actio vel motus, ut dicitur quinto Physicorum, talis autem unio non est nisi quaedam relatio—est dicendum quod ad relationem [sc. an internal relation] ... non est immediate motus vel actio, quia illa ab intrinseco oritur habens sufficiens fundamentum in relativo; et ideo non acquiritur nisi acquisitione sui fundamenti ad quod primo est actio. Sed respectus extrinsecus advenientes [sc. an external relation] ... possunt terminare actionem vel motum, ut patet de ubi ad quod terminatur motus localis; et similis respectus est unio naturae assumptae ad naturam et personam assumentem. Talis autem respectus non habet in natura assumpta intrinsecus et sufficiens fundamentum, sed advenit ei extrinsecus; et ideo ad ipsum potest terminari assumptio. Sic igitur natura assumpta et natura assumens sunt quidem extrema unionis, sed non proprie terminus assumptionis, sed solum ipsa unio." The corresponding text in *In Sent.* C (3.5.2, n. 8) is slightly different: "Et si dicatur contra hoc—quia ad relationem non est actio vel motus, ut dicitur quinto Physicorum, talis autem unio non est nisi quaedam relatio—est dicendum ad hoc quod sicut visum fuit libro primo distinctione 30a duplex est respectus. Unus qui est sola denominatio sumpta ex pluribus [= internal relation] ... ut similitudo et aequalitas. Et talis respectus non est aliqua res praeter suum fundamentum, nec ad ipsum potest esse motus vel actio... Alius respectus est qui non est sola

directly create (or destroy) the relation (mode) of inherence that a separable accident has upon its substance, and with it the relation (mode) of substanding that the substance has with respect to that accident.³⁹

However, for Durand, natural non-relational change—substantial, qualitative, and quantitative changes that come about from natural agents acting naturally—cannot directly result in relations or modes. Hence, Durand accepts premise (4): a natural substantial change (i.e., generation) cannot directly result in a relation or mode, and so if the union of substantial form with matter is a matter of a relation (mode) or relations (modes), then generation cannot directly result in such a union.

Let's take stock. *Being generated* would seem to be a property of the composite, and not its essential parts on their own, for generation does not directly result in matter (since matter is incapable of being generated); nor does it directly result in the substantial form alone, since substantial form must also be united with matter; nor can it directly result in substantial form together with the relation or

denominatio sumpta ex pluribus, sed est realis modus essendi, vel per se consequens ad fundamentum [= per se external relation], ut inhaerere consequitur per se naturam accidentis, vel per accidens et extrinsecus adveniens [= per accidens external relation], sicut ubi vel esse tali loco et tangere et tangi... Et ad eos [i.e., per accidens external relations] potest esse et est verus motus, sicut motus localis est ad ubi... Similiter corpora distantia per motum localem alterius vel amborum sunt propingua et se tangentia. Et ad hoc terminatur motus, quamvis tangere et tangi non sint nisi reales modi essendi et quidam respectus extrinsecus advenientes... Eodem modo cum esse unitum sit quidam realis modus essendi, ad ipsum potest terminari actio vel motus. Sed ad unionem, de qua nunc loquimur, quae ex humanae naturae cum natura et persona divina, non potest terminari actio naturalis sed sola divina quae potest naturae humanae dare novum modum essendi sicut dat accidenti in sacramento altaris. Sic igitur natura assumpta et natura et persona assumens sunt quidem extrema unionis, sed non proprie terminus assumptionis, sed solum ipsa unio." (I will return to this passage below in and around footnote 46.) See also In Sent. 2.15.3 and and In Sent. C 1.30.2, n. 7.

³⁹ Likewise, God can destroy any external relation without destroying the relata. See e.g., *In Sent.* B* 3.1.1, 89rb = *In Sent.* C 3.1.1, n. 14; *In Sent.* A 2.1.2, n. 14 = *In Sent.* C 2.1.4, n. 27. Another case where a divine action directly results in a relation is the case of the internal production of the Son by the Father. See, e.g., *In Sent.* B 1.7.1, n. 13 = *In Sent.* C 1.7.2, n. 41. Durand is, in fact, agreeing with—plagiarizing from—William Ware (*In Sent.* 1.7.2) here.

relations that unite it with matter, since, in general, a natural non-relational change like generation cannot directly result in a relation. Hence, so it would seem, generation must directly result in the composite, some absolute thing over and above its essential parts.

How might Durand respond, then, to the argument from generation? In various places Durand does say that substantial form is the direct result of generation.⁴⁰ He also admits that the production of substantial form on its own is insufficient, for substantial form must also be united with matter. For instance, when fussing about the generation of a human being, wherein the substantial form (i.e., the rational soul) is created by God (and so not generated), Durand writes:

Something can be the result (*terminus*) of generation in two ways. In one way, because through generation it acquires existence (*esse*) and also existence in this (*esse in hoc*)—for instance, in matter, the subject of generation. Such a result cannot exist before generation, nor can it remain after corruption. Such are all natural [substantial] forms except for the human soul.⁴¹

So generation (except in the case of a human being) seems to directly result in both the substantial form and the relation or relations involved in the union of substantial form with matter. (Here, Durand only talks of inherence [esse in hoc], but, as we saw above, he also thinks that substanding—the counterpart mode founded upon matter—is involved. Going forward, I will sometimes speak simply

⁴⁰ See, e.g., *In Sent.* B 1.3.3, n. 10 = *In Sent.* C 1.3.2.2, n. 10; *In Sent.* C 1.3.2.2, n. 18; *In Sent.* B 4.44.1, n. 7 = *In Sent.* C 4.44.1, n. 7; *In Sent.* A 2.12.1, n. 24 = *In Sent.* B 2.12.1, n. 24 = *In Sent.* C 2.12.1, n. 24; *In Sent.* B 2.3.1, n. 17 = *In Sent.* C 2.3.1, n. 16; and *In Sent.* C 2.7.4, n. 8. Likewise, natural corruption has as its term or result the substantial form. See *In Sent.* B* 3.21.1, 104va = *In Sent.* C 3.21.1, nn. 4, 8;

⁴¹ In Sent. A 2.17.2, n. 3 = In Sent. B 2.17.2, n. 3 = In Sent. C 2.17.2, n. 4 (translated text in italics): "Intelligendum ergo quod duplicitur aliquid potest esse terminus generationis. Uno modo, quia per generationem acquirit esse et esse in hoc, puta in materia quae est subiectum generationis; et talis terminus non potest praeexistere generationi nec manere post corruptionem; et tales sunt omnes formae naturales sub anima humana. Alio modo terminat aliquid generationem non quia acquirit esse absolute per generationem, sed quia acquirit esse in hoc; et talis terminus potest manere post corruptionem et praeexistere generationi; sic est de anima humana quae acquirit esse per creationem, sed esse in materia acquirit aliquo modo per generationem, saltem dispositive."

of the relation or mode of inherence as what explains union for the sake of exposition.) Now, granted that Durand accepts premise (4)—that generation cannot directly result in a relation—then what are we to make of this passage?

One possibile answer might be this: the relation in question—inherence, that is, the relation of subtantial form's being in or united with matter—is what we would nowadays call an *internal* relation, one that obtains necessarily once its relata exist. (So too with its counterpart substanding on the side of matter.) Internal relations are "ontological free lunches", as we would say nowadays: they entail no "addition of being", for relative statements that characterize internal relations are made true thanks to the existence of their non-relational relata alone. For instance, if we suppose that similarity is an internal relation, then we can claim that there is no further thing that needs to exist in order to explain the (relational) fact that Socrates is similar in color to Plato, over and above Socrates, Plato, and their non-relational colors. Likewise, internal relations are causal free lunches: we do not need to ask into what the cause of such a relation (e.g., similarity) is, as if it might be some further thing over and above its relata requiring its own cause over and above whatever caused its relata. Once God has created Socrates, Plato, and their respective colors, God does not need to then create their similarity as well: it comes for free. *External* relations, by contrast, are neither ontological nor causal free lunches. Consider contact. The mere existence of the relata of contact (two balls, say) is *not* sufficient to make sentences that characterize contact situations true. Two balls are not enough. Something more must be added to the world, namely, the external relation(s) of contact. Likewise, something more than the cause of the two balls is needed as a causal explanation of their contact.⁴²

⁴² For the contemporary discussion on the distinction between internal and external relations, see, e.g., David Armstrong, *A World as State of Affairs* (Cambridge: Cambridge University Press, 1997). Durand states the distinction with admirable clarity in *Quodl. Par.* 1.2, 71: "... extrema quandoque sunt sufficiens fundamentum talis denominationis sine respectu medio ab ipsis realiter differente, quandoque autem non, sicut dictum est de ubi." Notably, he thinks that the internal/external distinction cuts across Aristotle's relational categories: *some* categorical relations (i.e., relations in the category of relation, namely, "first-mode" relations like similarity and equality) are internal, whereas others (namely, "second-" and "third-mode" relations of power and measure) are external; likewise *some* of the last six "relational" categories pick out external relations (viz., where, when, having) whereas others name internal relations (viz., action and passion). See especially *Quodl. Par.* 1.2, 70–73 and *In Sent.* B 1.30.2,

Hence, if we suppose that inherence—the existence of substantial form in matter—is an *internal* relation, then we can hold that it obtains once its relata exist, that is, since matter already exists, inherence will obtain once substantial form comes to exist. Inherence is an ontological and causal free lunch: it is no addition to being and it does not require some further cause. Statements that characterize inherence, e.g., "Substantial form inheres in matter," are made true simply by their non-relational relata alone. Hence, we do not need to suppose that the relation of inherence (or substanding) is also *generated* when the substantial form is generated: it simply obtains when the substantial form is generated (provided, of course, matter already exists). It is not, then, the direct result of generation, and so premise (4) is not violated.⁴³

While such a solution might satisfy some contemporary hylormophists, this sort of solution is not available to Durand (and, for that matter, his contemporaries). In light of certain theological dogmas—and the metaphysical commitments they entail—, he cannot hold that inherence is an internal relation. For instance, the miracle of the Eucharist—and the thesis of divine omnipotence backing it up—entails that the mere existence of the wafer and the mere existence of brownness (or whatever color the wafer is) are not enough to make it true that brownness inheres in the wafer, for God could have made it such that brownness does not inhere in the wafer while simultaneously preserving both the wafer and the brownness in existence. Likewise, in light of the capacity for the soul to persist after death, or the fact that during the triduum Christ's substantial form (his soul) still exists whereas Christ's human nature (the composite) does not, it would seem to follow that, in general, the inherence of a substantial form in prime matter (i.e., inherence within a per se composite) cannot be a matter of mere internal

n. 20, as well as the long passages quoted above in footnote 38. For discussion, see Hartman, "Durand of St.-Pourçain's Theory of Modes," 222–23.

As Something like this is the view defended by William Ockham and Gregory of Rimini. On Ockham, see Calvin Normore, "Ockham's Metaphysics of Parts," *The Journal of Philosophy* 103, no. 12 (2006): 737–54 and Cross, "Ockham on Part and Whole". Ockham seems to be of two minds on the issue due to some theological concerns. See Cross, 153; Marilyn Adams, *William Ockham* (Notre Dame: Notre Dame University Press, 1987), 1:250–59, 267–76; Mark Henninger, *Relations* (Oxford: Clarendon Press, 1989), 127–35, 140–45. On Rimini, see Anfray, "A Jesuit Debate about the Modes of Union," 315 and the article by Richard Cross in this issue [NOTE TO EDITOR: PLEASE INCLUDE PROPER REFERENCE WHEN AVAILABLE].

relations. Instead, these must be external relations, ones that do *not* necessarily obtain once their relata exist.

But, as we saw above, external relations are not ontological or causal free lunches. They are an addition to being (namely, for Durand, modes), and they seem to require an additional causal explanation. So what is the cause of such external relations? In the case of contact, Durand, as we saw, has an answer. Locomotive change is the exception to the rule: it can directly result in such an external relation (a "where") added to a body. However, as we also saw, Durand explicitly forbids other forms of natural change (substantial, qualitative, and quantitative changes) from directly resulting in relations or modes, and so he would seem to be hard-pressed to provide us with an answer to the question of what generates the union of form and matter conceived of as external relations.

Here's where we are. Durand cannot maintain that the substantial form alone is the direct result of generation, since this is insufficient without its union with matter. However, its union cannot be the direct result of generation, since otherwise this would violate even a weak form of premise (4): a natural non-relational change like generation cannot directly result in a relation. Nor can Durand claim that its union only involves internal relations (and so does not need a cause) since various theological cases demand that the union of substantial form with matter involves external relations (and so needs a cause). So what is the cause of their union, that is, the relation or relations which explain the fact that substantial form is in matter and that matter stands under substantial form?

Durand has the resources to provide us with an answer that, I submit, is both plausible and philosophically rewarding in its own right. In his discussion of relations in Book 1, Distinction 30, Durand draws a curious distinction between *three* kinds of relations: internal relations, on the one hand, and two kinds of external relations, on the other.⁴⁵

⁴⁴ See the passages quoted above in footnote 38.

⁴⁵ As far as I know, nobody has commented on this three-fold distinction. On Durand's theory of relations, see Peter Hartman, "The Relation-Theory of Mental Acts: Durand of St.-Pourçain on the Ontological Status of Mental Acts," *Oxford Studies in Medieval Philosophy* 7 (2019): 186–211; Henninger, *Relations*, 177–78; Dewender, "Der ontologische Status"; Isabel Iribarren, "Henry of Ghent's Teaching on Modes and Its Influence in the Fourteenth Century," *Medieval Studies* 64 (2002): 293–94; *Durandus of St. Pourçain: A Dominican Theologian in the Shadows of Aquinas* (Oxford: Oxford University Press, 2005), 109–21; and Rolf

'Relation' can be said in two ways. In one way, it stands for a real respect in the world which follows upon its foundation either (1) *per se* or (2) *accidentaliter*: *per se* just as inherence follows upon the nature of an accident; *accidentaliter* just as being touched and touching *accidentaliter* come to bodies that touch each other [i.e., are in contact with each other]. In another way, (3) 'relation' ... does not name a real respect but rather a real denomination.⁴⁶

A "real denomination" (or as he puts it in other passages a "real denomination taken from many things" [realis denominatio sumpta ex pluribus]), as Durand makes clear, is an internal relation—his paradigm examples are similarity and equality—, and as such these can be eliminated from our ontology as no addition of being and causal free lunches.⁴⁷ However, in the passage quoted above Durand is contrasting such internal relations with two kinds of external relations: per se and per accidens (or "accidentaliter") external relations. A per accidens external relation is one like contact, whereas a per se external relation is one like inherence. Both are an addition of being: they are modes (things) over and above their relata. However, per se external relations are a causal free lunch whereas per accidens external relations are not. While both do not necessarily obtain (with logical necessity) once their relata exist—in contrast with internal relations—, all the same there is an important difference between them. A per se external relation (e.g., inherence) necessarily obtains once its relata exist according to the

Schönberger, Relation als Vergleich. Die Relationstheorie des Johannes Buridan im Kontext seines Denkens und der Scholastik (Leiden: Brill, 1994), 125–31.

⁴⁶ *In Sent.* C 1.30.2, n. 14: "... relatio dicitur dupliciter: uno modo pro respectu reali existente in rerum natura consequente ad suum fundamentum [1] per se vel [2] accidentaliter: per se, sicut esse in alio sequitur ad naturam accidentis; accidentaliter, sicut tangi vel tangere accidentaliter advenit corporibus se tangentibus. [3] Alio modo relatio ... non dicit respectum realem sed denominationem realem, ut infra patebit." See also *In Sent.* C 1.30.3, n. 10 and *In Sent.* C 3.5.2, n. 8. This distinction was not as precise in earlier versions of Durand's work. It is missing in *In Sent.* B 1.33.1 (the ur-text for *In Sent.* C 1.30.2), for instance, and in *In Sent.* B* 3.5.1 (quoted above in footnote 38) it is at best hinted at. (Compare, for instance, the two texts quoted above in footnote 38 with the text just quoted.) The earliest clear statement of this distinction, to my knowledge, occurs in *Quodl. Par.* 1.1, 15. See also *Quodl. Par.* 1.3, 81.

 $^{^{47}}$ *Quodl. Par.* 1.1, 19–20 = *In Sent.* C 1.30.2, n. 17. See also *In Sent.* C 3.5.2, n. 8 (quoted in full in footnote 38 above).

common course of nature (that is, with natural but not logical necessity),⁴⁸ whereas a per accidens external relation (e.g., contact) neither necessarily nor logically obtains once its relata exist.

In other words, internal relations (like similarity) obtain once their relata exist with logical necessity, such that even God cannot make, e.g., two red balls that are not similar to each other. Per se external relations (like inherence) obtain once their relata exist with mere natural but not logical necessity, such that they would obtain once their relata exist were God to not intervene (if left to themselves, as it were). For instance, once we bake the bread, and so once brownness exists, brownness will "automatically", as it were, inhere in the bread unless God intervenes; however, this is not a logical necessity but a mere natural one, for God can intervene so that brownness does not inhere in the bread—or, indeed, God can allow brownness to inhere in the bread and then intervene and make brownness not inhere in the bread, which is precisely what the miracle of the Eucharist metaphysically entails for Durand. Finally, per accidens external relations (like contact) obtain by neither logical nor natural necessity: two balls can both naturally and miraculously exist and yet not be in contact with each other, for instance.

The thought, then, seems to be this. Even though inherence (or its counterpart substanding) is an external relation—since its relata (matter, substantial form) can exist without it—nevertheless, so far as its *production* is concerned, it behaves like an internal relation: once its relata exist, it obtains "automatically", as it were, provided God does not intervene (i.e., it obtains with mere natural necessity). We do not need to look for a second production, so to speak, over and above the production of its relata to explain its existence. Indeed, in light of the

⁴⁸ In Sent. C 1.30.3, n. 11: "... realis respectus consequens fundamentum per se [i.e., a per se external relation] simul est cum fundamento suo, sicut esse in alio [i.e., inherence] simul est duratione cum natura accidentis." See also the passages where Durand distinguishes essential dependence from natural dependence, e.g., Quodl. Av. 1.1, 48 = In Sent. C 1.33.1, n. 15 (emphasis mine, quoted above in footnote 12): "... absoluta [accidentia] sunt 'entia quia entis' non quidem essentialiter et formaliter, sed solum concomitative, quia non essent naturaliter nisi essent in alio, scilicet in substantia; tamen sua quidditas non est esse in alio—immo, praeter hoc habent suam formalem entitatem et quidditatem, sicut quantitas in sacramento altaris habet suam formalem entitatem et quidditatem absque hoc quod sit in alio vel sit alterius ut subiecti; et idem est de albedine et huiusmodi." See also In Sent. B* 4.12.1, 131rb = In Sent. C 4.12.1, n. 11; and In Sent. B* 3.6.2, 94ra = In Sent. C 3.6.2, n. 21.

claim that a natural non-relational change cannot directly result in a relation—premise (4)—there cannot be a natural cause of its existence. ⁴⁹ In other words, while a *per se* external relation (such as inherence or substanding) is not an ontological free lunch (for it is a *thing in addition to* its foundation), it is nevertheless a *causal* free lunch: once the relata of inherence and substanding exist, and provided God does not intervene, then we can claim that inherence and substanding obtain without having to go about looking for a *cause* of their obtaining (just like with internal relations).

Hence, Durand's answer to the argument from generation, I submit, would be this. Natural generation directly results in a new substantial form *consequent to which* inherence and substanding—*per se* external relations—naturally follow (i.e., provided God does not intervene); and once we have inherence and substanding, we have the composite, which is nothing over and above its essential parts (matter and form) and their union, i.e., the relations (or modes) of substanding and inherence.

Conclusion.

Let's take stock. Durand maintains that a hylomorphic composite is nothing over and above its essential parts (matter and form) as united, and that this union is to be explained in terms of modes, a view that is strikingly similar to the moderate reductionism endorsed by Suárez and Hurtado. However, whereas Suárez holds that the union of matter and form is in virtue of one mode (namely, inherence), Durand and Hurtado maintain that it is in virtue of two modes (substanding, founded upon matter uniting it with form, and its counterpart, inherence, founded upon form uniting it with matter). Although his statement of moderate reductinism was often cited by later thinkers, Durand never in fact defends the view in any one place. However, I have argued that he has the resources to respond to several common objections: the independence objection, the per se unity objection, and the argument from generation. The fact that matter is a potential thing allows Durand to explain why it is that matter cannot actually exist independently even though it is an "absolute" thing, and it is also what distinguishes a per se composite (or unity), which has at least one potential part, from a mere per accidens composite (or unity), which does not. Finally, Durand's distinction between two kinds of external relations—per se and per accidens external relations—provides him with an interesting, and I think plausible,

⁴⁹ See *Quodl. Av.* 3.3, 268 = *In Sent.* C 3.1.5, n. 6; *In Sent.* C 2.1.4, n. 12; and *In Sent.* A 2.8.1, n. 5 = *In Sent.* B 2.8.1, n. 5 = *In Sent.* C 2.8.1, n. 5.

answer to the argument from generation, an answer that does not require him to admit that relations are the direct result of a non-relational change, and yet still allows him to countenance the claim that the relations (modes) involved in the union of form and matter are an addition to being, something over and above matter and form.⁵⁰

⁵⁰I would like to thank Thomas Jeschke for kindly providing me with early drafts of the critical edition to Durand's *Sentences*, and the audience at KU Leuven's conference on Hylomorphism, Richard Cross, Russell Friedman, and Zita Toth for extremely helpful feedback.