

BODY AND SOUL

Modern philosophy is haunted by the spectre of Cartesian dualism: the view that a human being is a composite of two fundamentally different substances, one material (the body) and the other immaterial (the mind or soul). Mediaeval philosophers usually do not go so far. While they recognise immaterial living beings, such as angels and God, they do not think souls are necessarily immaterial, much less intrinsically subsistent, entities. Human souls are a special case, being partly immaterial (in a limited way) but non-subsistent, and strictly speaking not substances at all. This philosophical position – similar to contemporary property dualism or nonreductive materialism – was the widespread, though not universal, consensus in the Latin Christian West throughout the Middle Ages. Despite the obvious connection of these issues with religious dogma, mediaeval philosophers were largely undogmatic in their approaches to them, perhaps because their doctrinal commitments pulled in opposite directions: on the one hand, to personal postmortem survival, on the other hand, to the resurrection of the flesh. In consequence, they carefully distinguished what ought to be believed as a matter of faith from what could be established by argument. Their consensus view was thought to be the most philosophically defensible view in its own right, and not the least of its attractions was that it avoided the pitfalls we now recognise in Cartesian dualism.

Mediaeval philosophers did not know about Descartes, of course. Yet they were well aware of a ‘Platonic dualism’ that has most of the features of Cartesian substance dualism: Plato was taken to hold that the human soul and the human body are distinct substances, the former immaterial and the latter material, and that sensing, like thinking, is properly a function of the soul rather than the body.¹ So wrote Aquinas in *sum. theol.* 1^a q. 75 art. 3:

Ancient philosophers did not draw any distinction between sense and intellect, and attributed both as being up to a bodily principle. Plato, how-

* All translations are mine.

¹ The warrant for attributing such ‘platonic dualism’ to Plato seems to be *theaet.* 184C, where Plato says that we sense through bodily organs rather than with them – a view repeated in the (pseudo)-Platonic *First Alcibiades* (129D–130C) and thereafter elevated into the principle that we are really our souls and merely make use of the body. This principle was transmitted to the Middle Ages in several ways, most notably through Augustine, *ciu.* 19.3), and through Nemesius of Emessa, *nat. hom.* 3 (51.32–52.35), a work mistakenly attributed to Gregory of Nyssa.

ever, did draw a distinction between intellect and sense, but he attributed each one to a non-bodily principle, maintaining that sensing, like thinking, holds of the soul in its own right.

The claim that sensing stems from an immaterial principle was rejected in the Middle Ages on the grounds that sensing is intrinsically bound up with the body.² But the notion that thinking might somehow be immaterial and independent called for subtle consideration. Even assuming that the mind can be identified as part of the individual soul,³ there are still puzzling questions that need to be addressed. Is it part of the nature of the intellect or the intellectual soul to be immaterial? Is it capable of existence apart from the body? If so, is such separated existence natural to it? If not, why not? These questions were usually addressed in a more general fashion: what *is* the soul, and what kind of relation does it have to the body?

1. MEDIAEVAL PLATONISM

If any mediæval philosopher were to have endorsed some version of the ‘Platonic dualism’ sketched briefly above, it would be the one with whom the Middle Ages has its beginning: Augustine. He certainly gives this impression in several of his earlier writings. In *imm. an.* 9.16 (ca. 387), for example, Augustine argues that the mind (*animus*) as a principle of life cannot “lack itself” and so must always be alive, hence surviving the dissolution of the body – and in 10.17 he attacks the view that the mind might be no more than a particular organization (*temperatio* of the body, arguing that such a view cannot account for the (supposed) fact that we exercise our minds to their fullest when they are withdrawn from the body. Thus, it seems that for Augustine the mind is not material and has features, including life itself, independently of the body. So, too, in *an. quant.* 13.22 (ca. 388), where Augustine explicitly declares that “the mind is not a body nor anything like a body,” on the grounds that it could then not understand anything immaterial, leading Augustine to formulate a definition of the mind as “a certain substance that shares in reason and is suited to rule over the body.”⁴ This seems to be borne out in the definition he offers in his contemporaneous *mor.* 1.27.52 (ca. 388): a human being is “a rational soul (*rationalis anima*) using a mortal and earthly body.” Augustine,

² See the discussion in King [2007].

³ Pasnau [2007] calls this the ‘mind-soul’ problem. It was posed in stark fashion by Averroës, who held that thinking is a function not of the individual soul but rather of a single separate intellect that is common to all human beings, with which individual minds are in touch when they appear to think.

⁴ That is: *substantia quaedam rationis particeps, regendo corpori accomodatur.*

therefore, seems to be a Cartesian dualist *avant la lettre*: he recognises the mind or rational soul as immaterial in its nature and a substance distinct from the body, which makes use of the body but naturally continues to live even after the dissolution of the body. This should not surprise us given the degree to which Descartes was indebted to Augustine.

Matters are not as they seem at first glance, however. Take Augustine's declaration that the soul is "a certain substance." In the context of *an. quant.* 13.22, this follows immediately upon Augustine's claim that the mind is not one of the four elements – earth, air, fire, or water – but, rather, has "a nature that is proper to it." Hence when he says that the mind is a certain substance, he is not using the term 'substance' in the technical sense of a subject capable of existence in its own right; he means only that the soul is some sort of stuff or other, though not the same as the mundane elements. Immediately after giving his definition, Augustine raises the question whether the mind has quantity or local extension even though it is not a body, that is, even though it is not ordinary material stuff (14.23). And while it is true that the rational soul shares in reason, is suited to rule the body, and makes use of the body, none of these features entails that it is a substance independent of the body (or even that it is intrinsically immaterial).

Similarly, Augustine's description of the rational soul as "using the body" in *mor.* 1.27.52 refers to an earlier discussion in *mor.* 1.4.6, in which he points out that we are composites of body and soul (*ex anima et corpore nos esse compositos*) and, acknowledging that human beings are thereby two – he carefully does not say "two things" – he states unequivocally that we are human beings only when body and soul are conjoined, "for the body would not be a human being if there were no soul, nor again would the soul be a human being if a body were not animated by it."⁵ Augustine asks whether one of the two factors is the more principal: are human beings composed of body and soul equally, like "two horses harnessed together"? Or is the body more principal, as when we call the vessel alone a 'lamp' on account of the flame it supports? Or is the soul more principal, as we say that a horserider is not the horse and the rider, but the rider alone in virtue of guiding the horse? He endorses the last alternative when he asserts that the rational soul makes use of the body, as a horserider makes use of a horse. But that it not to say that the soul is a substance independent of the body; a horserider without a horse is no horserider at all, and, as noted, Augustine insists that human beings are made up of body and soul taken together. This is the position he explicitly

⁵ Augustine, *mor.* 1.4.6: *nam neque corpus homo esset, si anima non esset nec rursus anima homo, si ea corpus non animaretur.* There is an approving reference to this view in *ciu.* 19.3.

endorses in his mature works. In *trin.* 15.7.11, Augustine tells us that soul and body combine to produce a human being, “a rational substance made up of soul and body.”⁶ Here the word ‘substance’ is used technically, for a unified being capable of independent existence. Likewise, in *cura mort.* 3.5 (*ca.* 422), Augustine maintains that bodies are not mere external ornaments or aids to the soul, but instead are integral to human nature.⁷ The soul itself has a “certain natural impulse to look after the body” (*naturalis quidam appetitus corpus administrandi*), as Augustine puts it in *Gn. litt.* 12.35.68 (*ca.* 415) while discussing the resurrection of the flesh and the glorified body we receive after the Last Judgment,⁸ which keeps it conjoined to the body and renders it incomplete when it is not so conjoined. A separated soul is in an unnatural state, though not necessarily an impossible one.

Augustine’s denial of substancehood to the human mind/soul, and his reluctance to allow it existence in its own right, is compatible with his claims that (a) the human mind/soul is in some sense non-bodily, and (b) it may exist in separation from the body. Augustine can support (a) by taking the human mind/soul to have some ontological standing in its own right, without being a substance. Accidents, for instance, are non-substantial existent individuals. So, too, if the human mind/soul were a strongly supervenient or emergent feature of living human beings. (Strong supervenience is plausible for the human mind/soul because it is not physical in its nature.) Furthermore, Augustine can endorse (b) on analogy with the status of accidents in the miracle of the Eucharist. The physical accidents of the bread and wine, which depend of their nature on physical substances in order to exist, are miraculously kept in existence by God while their underlying substances are destroyed. (They are replaced by the substance of the body and the blood of Christ, respectively.) Now the existence of these physical accidents – their colour, shape, flavor, position, and the like – in the absence of their underlying substances is certainly unnatural, and perhaps impossible, since it takes God’s miraculous intervention; the existence of the human mind/soul is perhaps only unnatural, since, unlike the physical accidents involved in the Eucharist, the human mind/soul need not be intrinsically material. On this score, postmortem survival would be logically possible though not by natural means. This seems

⁶ Augustine, *trin.* 15.7.11: *substantia rationalis constans ex anima et corpore*. Augustine never decides how best to describe the soul-body union, but he usually uses words like ‘mixture’ or ‘blend’ or ‘fusion’, which certainly cut against the grain of Cartesian substance dualism: see O’Daly [1987] 42–44 and Rist [1994] 97–104.

⁷ Augustine, *cura mort.* 3.5: *Haec [sc. corpora] enim non ad ornamentum uel adiutorium quod adhibetur extrinsecus, sed ad ipsam naturam hominis pertinent.*

⁸ See Bynum [1995] 94–104 for Augustine’s positive account of the Resurrection.

to be Augustine's mature philosophical view, and arguably his view from the earliest days of his conversion,⁹ and it is a version of the consensus position described above. Furthermore, since postmortem survival depends on direct divine assistance, whether miraculous because it is impossible or merely because it is not attainable through natural means, then the view that the human mind/soul can exist apart from the body is not capable of proof but is held as a matter of faith alone.

Augustine, therefore, rejected Platonic dualism, and *a fortiori* Cartesian dualism, in the case of human beings. Nor did Platonic dualism fare any better in the later Middle Ages – a fate due in no small measure to Augustine's rejection, buttressed by what they took to be a decisive refutation by Aristotle in *de an.* 1.3 (406^b25–28).¹⁰ Thomas Aquinas puts it succinctly (*sum. theol.* 1^a q. 76 art. 1): If soul and body are distinct substances, they must be related as mover and moved, on the straightforward grounds that they do interact although they are distinct – but if they are mover and moved, they cannot then form a unity, since features we normally attribute to the whole person (such as motion) would be attributed only *per accidens*, on Plato's view, to one or the other of the two substances – or, in contemporary terms, mental causation would always be indirect. Put simply, an composite of two distinct substances will never add up to a unified 'third' substance, and hence be no more than an accidental unity. This is the core of several objections Aquinas puts forth against Platonic dualism, and it captures Augustine's uneasiness about the ontological independence of the human soul. For all that, it is important that the *human* soul, the intellective soul, is at stake here; neither Augustine nor Aquinas took seriously the idea that the souls of brute animals might be subsistent. Furthermore, they each recognised the existence of immaterial intellective substances, namely angels, so they were well aware of the metaphysical possibility that there be nonphysical minds. The difficulty is trying to have it both ways, to maintain that the human mind/soul is a substance and, simultaneously, the substantial form of the body, in such a way that it is

⁹ The strongest passage in favor of a strict Platonic dualism is Augustine's aforementioned argument in the *De immortalitate animae*, inspired by Plato's Cyclical Argument in the *Phaedo*, that the soul logically cannot be without life. Yet Augustine did *not* regard this work as worthy of circulation; as he says in *retr.* 1.5, "I do not know how it went out into people's hands and is listed among my works, since I was unwilling for it to do so." It was a sequel of sorts to his *Soliloquia*, in which Augustine flirts with the idea that postmortem survival is an individual achievement, one reached by possessing the (undying) liberal arts in one's soul – not the sort of view to give aid and comfort to the Platonic, much less the Cartesian, dualist.

¹⁰ See Plato, *theat.* 34C–37C, and the discussion in Bazàn [1997].

each of these in virtue of its very nature. Even Aquinas is driven to admit that such a view has no rational foundation:¹¹

Something that is one in its account does not result from two permanent beings, unless they are related as substantial form and matter. . . Hence it remains for us to ask whether an intellectual substance could be the substantial form of some body. Well, to those who consider it rationally, it seems that this is impossible. Something one cannot result from two actually existing substances, for the act of each is that by which it is distinguished from the other. Now an intellectual substance is an actually existing substance, as is apparent from what has been said. Likewise for a body as well. Hence we see that something that is one cannot result from an intellectual substance and a body.

Aquinas is careful to say that it *seems* impossible, at least “to those who consider it rationally (*rationabiliter*),” since faith requires him to leave open the possibility of postmortem existence for the human soul, despite the fact that such a belief flies in the face of (natural) reason.

John Duns Scotus is more forthright in his rejection of Platonic dualism. In his late *quodl.* 9.5, Scotus asks whether God could bring it about that an angel, *i. e.* an intellectual substance, could inform matter *qua* informing substantial form. He replies that it is not possible (9.6), and offers several arguments to that effect, the first of which holds for cases beyond that of the angel – for the human mind/soul, clearly – and is the strongest. Scotus begins by distinguishing three senses in which something can be a *per se* being (9.7), namely when it: (*a*) exists in isolation or apart from a subject, the way an accident is a being *per se* when not inhering in a subject; (*b*) neither actually inheres, nor has an aptitude to inhere, in another; (*c*) is simply unable to be ordered *per se* to any further actualization belonging to it *per se* beyond the one it has. Substances and substantial forms can be beings *per se* according

¹¹ Thomas Aquinas, *c. gent.* 2.56: *Ex duobus autem permanentibus non fit aliquid ratione unum nisi sicut ex forma substantiali et materia. . . Hoc igitur inquirendum relinquatur, utrum substantia intellectualis corporis alicuius forma substantialis esse possit. Videtur autem rationabiliter considerantibus hoc esse impossibile. Ex duabus enim substantiis actu existentibus non potest fieri aliquid unum: actus enim cuiuslibet est id quo ab altero distinguitur. Substantia autem intellectualis est substantia actu existens, ut ex praemissis apparet. Similiter autem et corpus. Non igitur potest aliquid unum fieri, ut uidetur, ex substantia intellectuali et corpore.* Aquinas tries to blunt the edge of this conclusion in *c. gent.* 2.68–69, pointing out that the human body is not an actually existent substance in the absence of the human soul, and so it must then be logically possible for one and the same thing (the human soul) to be its own actuality as a substance and to further actualize a body as a constituent part of a new and distinct substance. He does not explain how or why it is possible.

to *(b)*, the latter because it does not, strictly speaking, inhere in a subject but instead informs its subject. But the most proper sense in which something is capable of existence *per se* is *(c)*, according to which something is not only actual but complete. Scotus argues that something like the human mind/soul is not a being *per se* according to *(c)* if it is a substance according to *(b)*:¹²

A substantial form is ordered *per se* to the being (*esse*) of the whole composite. This being, however, is simply the act of the composite primarily and that of the form participatively, because a part is only said “to be *per se*” incidentally (that is *per se* participatively), whereas the whole is said “to be” primarily. Therefore, what subsists of itself and is unable to be ordered *per se* to some being cannot be a form *per se*.

Scotus’s technical jargon is forbidding but clear: an intellectual substance cannot be one in itself and also become one (or worse yet be the principle of unity) in combination with something further. Since the human mind/soul clearly exists in combination with the body to produce something that is one, the position that it is in itself a substance, capable of full independent existence, has to be given up – as Scotus explicitly does, arguing for it in the remainder of his *quodl.* 9. He takes Aquinas to task for not being sufficiently clear in his account, in particular for not distinguishing *(b)* and *(c)*. The human mind/soul is such as not to require anything else to exist, in particular a human body, but in that condition it is not of its nature complete, which is why there is a resurrection of the flesh in the end.

Despite their several differences, Augustine and Aquinas and Scotus agree that Platonic dualism should be rejected, and they even agree on the general shape of the grounds for its rejection, namely the insuperable difficulty of the human mind/soul being at once independent and also capable of engendering a distinct complete unity in combination with something else. It should however be noted that in the first half of the thirteenth century some philosophers, apparently inspired by Avicenna, opted to deny instead the claim that the human mind/soul could engender such a unity in combination with the body: John Blund and Philip the Chancellor, for instance, denied that the soul could be a form (and hence a principle of unity) on the grounds that forms were necessarily bound up with their matter and perishable with it, and hence was an independent substance only accidentally united to the body – a dualist view deemed too radical by the next generation of thinkers, such as William

¹² Duns Scotus, *quodl.* 9.8 (Alluntis 345): *Quia forma substantialis per se ordinatur ad esse totius; illud autem esse est actus simpliciter, compositi quidem per se primo, sed formae participatiue; quia pars dicitur esse per se per accidens, hoc est per se participatiue, totum autem primo. Quod igitur est per se subsistens nec potest ordinari ad aliquod esse per se, illud non potest esse per se forma.*

of Auxerre and Hugh of St.-Cher, who argue that the human soul must somehow incorporate the power of “substantial unification” (*unibilitas substantialis*) in combination with the body.¹³ In the end, the loser in the contest was the position that the human mind/soul could be a substance. It therefore must be some sort of (substantial) form. But how can any sort of form inform the body and yet persist in its absence? This is the question that dominated the other main stream of mediæval philosophy, which took its inspiration from the texts of Aristotle rather than from the Platonic tradition.

2. MEDIAEVAL ARISTOTELIANISM

With the translation and assimilation of Aristotle’s philosophical corpus, a process that took roughly the century from 1150 to 1250, the way was cleared for a new understanding of psychology through his *De anima*. According to Aristotle, ‘psychology’ is the branch of natural philosophy that deals with things whose nature involves being alive. The first order of business, therefore, is to clarify what is meant by ‘life’. After working through several definitions, Aristotle concludes that the soul is a principle of life, in that it is “the first actuality of a natural body structured with organs” (*de an.* 2.1 412^a27–28: ἐντελέχεια ἡ πρώτη σώματος φυσικοῦ ὀργανικοῦ). Here ‘organ’ is taken generally, so that even parts of plants, such as leaves, qualify as organs (412^b2–3).¹⁴ Aristotle then goes on to point out that the powers and capacities of the soul form three natural clusters: nutrition and growth are associated with the vegetative soul as found in all living things; perception and movement with the sensitive soul found in all animals; and thought with the intellective soul in human beings. Broadly speaking these souls are ordered hierarchically, distinguished by the kinds of things to which they belong. Whether they are really distinct from one another was the subject

¹³ See John Blund, *an.* 2.1.15: “No form is a thing that exists *per se* in separation from substance; therefore since the soul is a form, it cannot have the feature of existing *per se* in separation from substance, and so cannot be separated from the body but rather perishes with it.” Philip the Chancellor adopts the same view (*s. de bono* 281), and holds that the human mind/soul, like a form, acts to perfect the human body when it is combined with matter, but is separate from matter as a substance (281.54–282.60). Bieniak [2010] canvasses the debates and their historical development.

¹⁴ It was not lost on mediæval philosophers that Aristotle’s definition seems to exclude non-organic life (angels), to say nothing of nontemporal entities (God); they sidestepped the issue by holding that in the *De anima* Aristotle was engaged in natural philosophy and so quite properly did not take account of supernatural beings.

of much dispute throughout the Middle Ages.¹⁵ Aristotle said almost nothing about the prospect of non-organic life, other than his infamously obscure comments about possible separability of the intellect, but he did say a great deal about organic life, and his mediæval disciples followed him in this regard, beginning their discussion of soul with plant and animal life and only gradually building up to the complicated issue of human (intellective) life. In the first half of the thirteenth century, a consensus was formed on at least the correct way to understand the vegetative and sensitive souls, the springboard for the analysis of the human soul.¹⁶

According to Aristotle, in plants and extremely simple animals the soul is divisible and extended, and thereby material. The life of a plant, for instance, is generally diffused throughout the plant. If shoots are cut from one plant and then nurtured on their own, the result will be a new plant, with a new life of its own (the death of either will not affect the life of the other). The life of each is no more than the actualization of the nutritive capacities of each, which seems to be a purely material phenomenon. Hence the vegetative soul is material. The case is similar for the sensitive souls of extremely simple animals: sponges, worms, and bivalves. Much like a plant, a worm can be cut in half and each half continue to live its own separate life; since a worm is capable of self-movement and has at least some powers of sensation (touch), it must have a sensitive soul. In mediæval terminology, these simple animals have an ‘incomplete’ sensitive soul, as divisible and extended as the vegetative soul in plants. Matters are different in other animals, whose sensitive souls are complete; their bodies, unlike the bodies of sponges or worms or shellfish, are articulated into organs, and their souls, while they are extended in their bodies, are not divisible – separated parts of higher animals do not continue to live independently. Instead, the soul is present in such animals “as a whole in the whole and as a whole in every part”.¹⁷ each part of the animal’s body is vivified by the (complete) sensitive soul, but there is no particular place

¹⁵ For convenience I will speak as though they are really distinct, but their metaphysical status is a question that can for the most part be addressed separately: philosophers who accept a plurality of substantial forms will hold that the human intellect is literally separable from the body-bound sensitive and vegetative souls, while philosophers who insist on the unicity of substantial form will hold that the whole soul is separable from the body (at which point its sensitive and vegetative powers have no outlet for their exercise). The issue is taken up with reference to the intellective soul in §4 below.

¹⁶ See Dales [1995] for a sketch of philosophical psychology in the thirteenth century.

¹⁷ This common tag was taken from Augustine, *trin.* 6.6.8, who derives it from late Platonism.

in which that soul is located, and it is present as a whole in each part of the animal's body. That is, life of the sort possessed by anything but the simplest kinds of animals – hereafter I drop the reminder – is a nonlocalized property of the living animal. Hence the sensitive soul in animals is indivisible, in that no part of the sensitive soul can be isolated from any other part of the sensitive soul.¹⁸ Now the bodies of animals are complex because they are made up of *organs*, that is, local physiological structures that carry out specific bodily functions: heart, stomach, lungs, kidneys, liver. Some organs will be sense-organs, responsive to a range of changes in external stimulus and the proximate bodily vehicle for its associated sense-faculty: eyes for vision, ears for hearing, and the like. According to the standard mediæval reading of Aristotle, a given sense-faculty is associated with a particular bodily organ. What makes an organ fit to be a sense-organ is its differential response to different external material causes: the eyes to colour and shape, the nose to odours, and so on. This differential response is a matter of the sense-organ's being put into some determinate physiological configuration in response to an external cause. The ability of the sense-organ to take on a determinate configuration – that is, the organ's responsiveness – simply *is* the actualization of the sense-faculty, and applies only to the sense-organs of bodies vivified by the sensitive soul. The sense-faculty is reduced from potency to act as the sense-organ is put into its new determinate configuration: what it is for the cat to see the mouse is for the cat's eye to 'take on' the typical grey color-shape in its eye. Seeing the mouse, or more exactly seeing the grey shape, is something that happens in the cat through the reduction of the sense-organ associated with vision from potency to act.

The life of an animal, at least of a complex animal, is a holistic feature of the animal. It is therefore not identifiable with some matter or some material part belonging to the animal – or, put in mediæval terms, the (sensitive) soul is not a body. That is to say, the life of a complex organic system consists at least partially in the appropriate interaction of its constituent organic subsystems, and the proper functional relation among the parts is not itself a part, and *a fortiori* not a material part. Rather, the sensitive soul is (weakly) supervenient on the material constituents that make up the animal's body, and wholly dependent upon them. But this does not give the sensitive soul any independent ontological weight, for such things can be 'reduced' or 'eliminated' in favor of the arrangement and disposition of the material parts upon which they supervene. And what is true for the sensitive soul as a whole also

¹⁸ The sense-faculties can be altered or damaged by interference with their associated sense-organs, and hence the sensitive soul depends to some extent on the proper configuration of the body.

holds for the activity of sensing.¹⁹ Sense-perception is consequent upon the physiological changes in the sense-organ without being itself a material phenomenon. The sense-organ is the proximate subject of the sensing, as noted, but the act of sensing is properly received in the ensouled composite as a whole: we do not say that the eyes see, but rather that the cat sees.²⁰ Sensing is therefore an activity that can take place only through a bodily organ, much as dancing requires a dancer. This is true of all operations of the sensitive soul. As Aquinas puts it (*sum. theol.* 1^a q. 75 art. 3): “Hence it is clear that the sensitive soul does not have any operation on its own; rather, every operation of the sensitive soul belongs to the composite, and so it follows that since the souls of non-human animals do not operate on their own, they are not subsistent.”

In addition to the external senses, animals also have an inner sense that integrates the deliverances of the external senses. This was thought to have exactly the same ontological status as the external senses, on the grounds that it worked in the same way: the inner sense is an organic power, and the organ in question is commonly identified as the heart (or less commonly as part of the brain).²¹ The upshot is that the sensitive soul, common to non-

¹⁹ Many contemporary philosophers think that the existence of sensory qualia, at least in humans, does argue for a more robust ontological status for the subject of such qualia – although they are reticent whether animals have such sensory qualia. See King [2007] for a discussion of qualia in mediæval philosophy.

²⁰ See for instance Duns Scotus, *ord.* 4 d. 44 q. 2 n. 6 (WV 20 217a–b): “The power of seeing is properly something that essentially includes on the one hand a perfection belonging to the soul and on the other hand a perfection belonging to the elemental body, corresponding to the former perfection, for a common operation. In the same fashion, the sensation itself primarily belongs to the whole made of these two perfections in such a way that its proximate subject and the ground for receiving it is not in the soul, or something that is precisely in the soul, nor the form of the chemical elements combined in the organ. Instead, it is the form of the composite made up of the elemental body and the soul, as a whole, and this kind of perfection is the proximate ground of receiving the sensation.”

²¹ There is a power of the sensitive soul that does raise questions about its materiality. Animals are said to have a *uis aestimatiua* (the correlate of human “particular reason”) by which an animal is said to receive the (non-material?) *intentiones* of things: the sheep perceives the harmfulness of the wolf, for instance. It might seem that an animal needs a robustly immaterial faculty to perceive such *intentiones*. The standard account, however, argues that the sense in which the wolf’s harmfulness is ‘immaterial’ is simply that it is response-dependent: the sheep perceives the properties of the wolf in the standard way, but is hardwired to respond to its large size, sharp teeth, and threatening aspect with fear. While harmfulness is not a perceptual property as such, the response naturally triggered by the sight of a wolf has to do with the sheep’s internal hardwiring as regards patterns of straightforwardly

human animals and to human beings, was understood to be a thoroughly material affair: since all its activities are defined in reference to matter, it must existentially depend on matter.²² The materiality of the sensitive soul, therefore, has two aspects: dependence upon bodily organs and dependence upon the whole composite. Hence there need not be anything more to a live animal than its material parts and their interconnected functioning.

3. THE PHILOSOPHICAL MATERIALISTS

As with the sensitive soul, so too with the intellective soul – or so argued several philosophers at the beginning of the fourteenth century. They held that the immateriality and substantiality of the intellective soul could not be proved; some went so far as to hold that natural reason dictates the conclusion that the intellective soul is as material as the sensitive soul, and that the opposite is held only through faith, in the teeth of reason. This position was historically associated with Alexander of Aphrodisias, as reported by Averroës, who is said to have thought that thinking is the highest perfection that can be ‘educated’ from matter. I refer to the philosophers who adopt these positions as ‘philosophical materialists’, since philosophical reasoning alone, apart from revealed truth, would lead them to be materialists.

Philosophical materialism seems to have gotten off the ground with the movement known as “the new philosophy,” that is, nominalism.²³ William of Ockham states philosophical materialism as follows:²⁴

perceptual properties. See, for instance, Siger of Brabant, *in de an.* 3 q. 4, arguing that we can say that a sheep apprehends the harmfulness of the wolf only when it perceives a sensible property, such as shape or size.

²² Defenders of the unicity of substantial form argue that the sensitive soul is immaterial in virtue of being a set of powers lodged in the complete human soul (which includes both intellective and sensitive powers); there need not be a contradiction between existing in an immaterial state and not being able to exercise sensitive powers while in that state.

²³ See Pluta [2007]b for a sketch of how widely held philosophical materialism was at the turn of the fourteenth century, particularly in Paris. The ground for it had been prepared in advance. In 1277, for instance, Henry of Ghent drew a distinction between “the way of nature” and “the way of faith,” arguing that the former requires us to hold that the human mind/soul is united to the body only by means of a natural form drawn forth from the power of matter (*quodl.* 2.2 Wielockx 12:77–82) – a view apparently put forward to counter Richard of Middleton’s claim that the form of a material composite is no more than the (arrangement of) matter: see Zavalloni [1951] 121–122, and the discussion in §4 below.

²⁴ William of Ockham, *quodl.* 1.10 (OTH 9 63:39–64:49): *Dico quod intelligendo per ‘animam intellectivam’ formam immaterialem, incorruptibilem quae tota est in toto corpore*

If we understand ‘intellective soul’ to mean an immaterial and incorruptible form that is whole in the whole body and whole in every part, then it cannot be evidently known through reason or through experience that there is such a form in us. . . It is clear that this cannot be demonstrated, since every argument proving these things accepts points that are doubtful to one who follows natural reason.

Here Ockham says only that immateriality is one of a set of features that are not demonstrable since the arguments put forward rely on dubious claims, but shortly later he clarifies his view:²⁵

Someone following natural reason would grant that we do experience thinking in ourselves, which is the act of a material and corruptible form; and he would consequently declare that such a form is received in an extended form. Nor do we experience the thinking that is the proper operation of an immaterial substance.

Ockham treads carefully but he clearly endorses the strong claim that natural reason alone leads one to conclude that the intellective soul is no more immaterial than the sensitive soul.

Where Ockham is cautious, Buridan is bold. In his third series of lectures on the *De anima*, Buridan declares that natural reason leads to philosophical materialism:²⁶

I shall firstly list the conclusions that someone would hold if he were to use only natural reasons, without the catholic faith, through principles having evidentness from appearances by the nature of sense and intellect, without any special supernatural revelation. . . The seventh such conclusion (which was the view of Alexander of Aphrodisias) is that [the human intellect] is generable and corruptible, extended, drawn forth [from mat-

et tota in qualibet parte, nec potest euidenter sciri per rationem uel per experientiam quod talis forma sit in nobis. . . Quod autem non possit demonstrari patet, quia omnis ratio probans ista accipit dubia homini sequenti naturalem rationem.

²⁵ William of Ockham, *quodl.* 1.10 (OTh 9 65:88–93): *Ad principale, concederet sequens naturalem rationem quod experimur intellectionem in nobis. quae est actus formae corporeae et corruptibilis; et diceret consequenter quod talis forma recipitur in forma extensa. Non autem experimur illam intellectionem quae est operatio propria substantiae immaterialis.*

²⁶ Jean Buridan, *q. de an.* 3.6 Zupko 48:48–52 and 51:99–105: *Et enumero primo conclusiones quas aliquis poneret si sine fide catholica solum rationibus naturalibus uteretur, per principia ex speciebus habentibus euidentiam per naturam sensus et intellectus, sine speciali et supernaturali reuelatione. . . Septima conclusio infertur (quae erat opinio Alexandri), quod est generabilis et corruptibilis, extensus, eductus, inhaerens, et multiplicatus. Sed tamen firmiter tenendum est quod non omnes conclusiones sunt uerae, quia sunt contra fidem catholicam. Sed credo quod oppositae conclusiones non sunt demonstrabiles sine speciali et supernaturali reuelatione.* See also Zupko [1993] for Buridan’s view of the soul.

ter], inherent, and multiplied. Yet we should nevertheless hold firmly that not all these conclusions are true, since they are contrary to the catholic faith. But I believe that conclusions opposed to them are not demonstrable without special supernatural revelation.

Alexander's position, which Buridan endorses, is that the human intellective soul, like the animal sensitive soul, is a supervenient feature of the arrangement of its material constituent parts:²⁷

Alexander of Aphrodisias declared that the human intellect is a generable and corruptible material form, drawn forth out of a potentiality belonging to matter, and it is extended by the extension of matter, just like the soul of a cow or the soul of a dog, and it does not remain after death.

Philosophers who follow natural reason alone, Buridan maintains, would come to hold Alexander's position: the human intellective soul is just as material as "the soul of a cow or the soul of a dog," with no special ontological status.

Buridan criticizes arguments that try to establish that the human intellect is in any way a substance in its own right, and he also offers four positive arguments for philosophical materialism (*q. de an.* 3.4 Zupko 32:83–34:130). First, if the intellective soul were separable then it would either (a) not belong to the essence of the human being, since it would be by nature independent of it; (b) or the human being would not have the sort of unity characteristic of a primary substance, an objection we have seen in nascent form in Augustine and later developed by Aquinas and Scotus (§1). Second, a non-material intellective soul would be no 'closer' (*proximior*) by its nature to any one human body rather than to another, since as a semi-independent substance it does not, strictly speaking, inhere in any; hence natural reason would not identify an intellect as belonging to any one person rather than to another. Third, Socrates's soul moves from place to place with him, or it does not; but if the mind/soul were immaterial it would not be localizable, in which case the preceding argument applies. Fourth, by natural reason we would not hold that the mind/soul exists prior to our birth, and the situation is symmetric for death. The upshot, Buridan concludes, is that "setting aside the catholic faith and supernatural infusion of the truth into us, our natural reason would dictate that the human intellect is drawn forth out of power belonging to matter, and that it is generable and corruptible" (*q. de an.* 3.5 Zupko 42:91–95).

If the intellective soul merely supervenes on the body, like the sensitive

²⁷ Jean Buridan, *q. de an.* 3.3 Zupko 22:59–62: *Dicebat Alexander quod intellectus humanus est forma materialis generabilis et corruptibilis, educta de potentia materiae, et extensa extensione materiae, sicut anima bouis aut anima canis, et non est manens post mortem.*

soul, then it is simply impossible for it to exist apart from the body – it would be like preserving the watch’s working without the watch, a contradiction in terms. Buridan likens it to the articles of faith: the separate existence of the mind/soul is not evident, “unless God were to produce that evidentness for us by His special grace and beyond the common course of nature, just as He could make evident to anyone the article of the Trinity or of the Incarnation” (*q. de an.* 3.3 Zupko 25:148–26:151). These articles of faith are simply beyond human comprehension, as is the postmortem existence of the human mind/soul. No wonder Buridan earlier called the intellective soul “miraculous” (*q. de an.* 2.9 Sobol 138).

Buridan’s view – or perhaps just his example – seems to have been adopted by many of his students. Marsilius of Inghen, for example, inserts what Olaf Pluta has called a “hidden question” – a question embedded in another question – into his own questions on the *De anima*, namely whether the intellect uses a bodily organ to think; Marsilius argues that the brain is literally the organ associated with thinking. Later nominalists are even more bold: Nicholas of Amsterdam, for instance, argues that according to natural reason the mind is purely material.²⁸ By the time of the Renaissance, the common wisdom had it that the intellective soul was purely material – at least, according to natural reason. But the disclaimers about natural reason became fewer and farther between while the physiological evidence for the materiality of thinking was piled higher and higher, until a philosopher such as Giacomo Zabarella could devote literally hundreds of pages to the “purely natural” (materialist) investigation of the mind, in his massive *De rebus naturalibus in libros Aristotelis de anima* (1590). Psychology was well on the track to being a purely natural science at that point, having no need of any kind of dualism to explain cognitive phenomena.

4. THE METAPHYSICS OF HYLOMORPHIC COMPOUNDS

The philosophical materialists were committed to the strong view that the human mind/soul is supervenient on the human body, much like the sensitive soul (as described in §2). While their view seems to follow logically, being no more than an extension of the logic regarding the sensitive soul to the case of the intellective soul, it did not follow directly upon it historically. For although philosophical materialism became dominant at the end of the Middle Ages, as noted, it was not the mainstream view earlier. Instead, the consensus in the High Middle Ages was that some version of the Augustinian solution canvassed in §1 above had to be correct, a version of property-dualism that

²⁸ See Pluta [2000] and [2007]a for the views of Marsilius and Nicholas, respectively.

granted the human mind/soul to be a form with some kind of ontological standing independent of its combination with matter – a status with sufficient ontological independence to allow the form to be the locus of emergent non-material properties (namely the mental properties of thinking and willing). In the second half of the thirteenth century, the effort to clarify the Augustinian solution and make it precise in an aristotelian framework was carried out as part of the larger project of getting clear about the metaphysics of hylomorphic compounds, that is, of form/matter composites. The context in which debates over the metaphysical nature of such hylomorphic compounds took place had to do with whether a substance had only a single substantial form (the ‘unitarian’ position) or more than one (the ‘pluralist’ position). The central point at issue was the unity of the form/matter composite, which is the worry at the heart of the Augustinian solution.

The case of Henry of Ghent is instructive. Initially hesitant in his *quodl.* 1.4 (1276), he developed a full theory of the plurality of substantial forms in human beings in his *quodl.* 2.2 (1277), *quodl.* 3.6 (1278), and *quodl.* 4.13 (1279).²⁹ The restriction is important. Henry accepts Aristotle’s dictum (*met.* 7.13 1039^a3–5) that a being that is *per se* one cannot be produced by two beings that are each already in act, at least in the normal course of events. Unity is possible, however, when the constituent elements of a hylomorphic compound are related as act and potency. Henry therefore maintains that in each non-human form/matter composite there is but a single form, which actualizes prime matter and so brings about a unified composite substance. Human beings have to be treated differently, though, because of the nonmaterial character of the human mind/soul; since thinking is an activity independent of the body, Henry reasons, its actualization (accomplished via a form) cannot be drawn forth from the power of matter. Hence there must be two distinct forms at work in the hylomorphic compound that is a human being. On the one hand, there is the form of the body (*forma corporeitatis*), which is the counterpart to the sensitive soul: it ‘prepares’ the body by organizing it in human-like ways so that there is a body that is properly disposed to become animated, that is, to be a living human body, when vivified by the sensitive soul. Here the sensitive soul may be said to be drawn forth from the power of matter, as described in §2 above. But in the case of human beings, it does something more, namely prepare the body to be capable of receiving the intellectual soul. This is not a natural process. Rather, God directly creates and

²⁹ Henry seems to have put forward his theory in the face of ecclesiastical pressure: see Porro [2006] for this point and a discussion of the ‘suppressed’ passage (omitted from the final redaction), in which Henry describes the sorts of pressure brought to bear against him, in his *quodl.* 10.5.

infuses the intellectual soul in each human being – a way of recognising the point that mental properties as emergent cannot be explained, or not fully explained, by the material features of the hylomorphic compound.³⁰ Now both the form of the body and that of the intellectual soul inform the single subject at once; there is no temporal separation in their metaphysical action. But how do they combine to produce a unity?

According to Henry, each of the forms act in concert to provide a single subsistence to the hylomorphic compound that is the human being. The form of the body imparts life and structure and organization to the human body, ‘perfecting’ it as a kind of animate existence, whereas the form that is the intellectual soul ‘perfects’ the human being as a partially spiritual creature capable of nonmaterial acts. Neither form is sufficient without the other: the form of the body alone would not produce a complete and unified concrete being (*suppositum*) on its own, and neither would the intellectual soul. For the perfection imparted by the intellectual soul is realized in a material composite, and hence require that there be an appropriately disposed body receptive to its activity; the perfection imparted by the form of the body produces an animal that is capable of and fit for a certain kind of life, namely a life characterized by intelligent thought and choice, but cannot on its own provide that life. Since they are each suited to inform the same (prime) matter, they are coordinate forms, although the action of the intellectual soul is ‘higher’ – rather as though two people were to lift a piano that neither can lift alone, though one of them is far stronger than the other and hence more important. Technically, each form is said to provide its own natural being (*esse*) to the composite, and conjointly they have a single action of making it be a concrete object: a single unified substance that has its distinctive existence, which Henry calls the *esse suppositi* (the being that characterizes the supposit). As forms, each gives being to the composite; as a nonmaterial form, the intellectual soul has a supernatural rather than a natural origin and is its own separate ontological principle.³¹ Not surprisingly, Henry refrained from giving any philosophical arguments for the postmortem survival of the human mind/soul, which is so bound up with the material form of the body that it is hard to see how it could be separated. Since faith teaches that it is created and

³⁰ See Macken [1979] and Wilson [1982] for an account of Henry’s theory of the human composite.

³¹ Henry’s claim that the intellectual soul be combined with the form of the body in order to exist led some philosophers to charge him with holding that the intellectual soul is (at least partly) material. This is the essence of one of the objections raised by Thomas of Sutton to Henry’s account: see Klima [2001] for a full discussion.

infused from without, we may also have faith that it survives the dissolution of the material composite of which it is a part. But this is not a conclusion at which we can arrive through natural reason, as Henry is careful to underline. Presumably the intellective soul *qua* form does not have sufficient ontological independence to make it clear that it survive the dissolution of the composite; Henry's position seems to be that it cannot do so of its own accord, and that direct divine intervention is required for it to continue in existence once the composite is no more.

Henry's view is complex and subtle.³² Yet despite the lengths to which Henry went to describe the conjoint action of the two substantial forms in human beings, some philosophers objected that he still did not provide a satisfactory account of the unity of the concrete individual. Godfrey of Fontaines, for example, considers Henry's theory at length in his *quodl.* 2.7 (PhB 2 95–133) and 3.5 (PhB 2 194–211), both from 1286, and begins with the objection that two substantial forms cannot combine to produce something that is essentially one.³³ Take the form of the body. Since it is part of the nature of any form to actualize something – to endow it with being – then the form of the body must impart some kind of being *per se* to the composite, independent of whatever being the intellective soul might bestow. Likewise for the intellective soul *vis-à-vis* the form of the body. But then each independently constitutes a composite in some kind of substantial being, and hence Henry's account must run afoul of the Aristotelian dictum, mentioned above, that a single thing cannot result from two distinct actual things. Henry tried to forestall this objection by distinguishing between the form's imparting mere being and imparting the sort of being that a suppositum has (*i. e.* concrete being). Godfrey will have none of it, insisting that each form must have some effect apart from the other, each in its own way 'perfecting' the composite. In that case, reasons Godfrey, at least one of a number of objectionable conclusions will follow: (*a*) the form of the body will create a substantial unity and the intellective soul will then be accidental to it, or conversely; (*b*) the same logic will apply to nonhuman animals who may then be said to have two, or indeed any number, of substantial forms; (*c*) there will be no reason to think that the sensitive soul is not drawn forth from matter whereas the intellective soul is

³² It is more subtle than can be explored here. For one thing, Henry's claim that there is only an intentional distinction between essence and existence in the form/matter composite is a key part of his analysis of its metaphysical structure.

³³ Godfrey of Fontaines, *quodl.* 2.7 (114–115): "It does not seem possible that two such substantial forms ought to be postulated in the human being, since nothing that is one *per se* could be made up out of them." See further Wippel [1981] 332–336 for Godfrey's attack on Henry.

infused, and hence there will be several souls in a human being.³⁴ Thomas of Sutton, later echoed by Duns Scotus, charges Henry of “evasion” in his account of the unity of the substantial composite, despite Henry’s explicit treatment of the subject.

Yet for all his objections to Henry, Godfrey does not in the end take a stand on the ontological status of the composite. He ranks several theories in order of what he takes to be their plausibility, and indeed declares that his hesitation stems from the difficulty in squaring the nonphysical nature of thought with its role as the substantial form of a material composite. There must be some kind of unity in human beings, but Godfrey cannot explain how it comes about, and so does not commit himself to any particular account of the metaphysics of hylomorphic compounds. Thus Godfrey accepts the mainstream consensus on property-dualism but is dissatisfied with the current attempts to make it more precise.

Godfrey’s insistence on the unity of the concrete individual human being is in keeping with the mediæval consensus. It is sometimes taken as evidence that he endorses the unicity of substantial form – Thomas Aquinas’s position. Yet as we have seen the challenge for the Augustinian solution from the very beginning has been to give an adequate account of how the human mind/soul could have some ontological independence from the body and nevertheless be the substantial form of the composite. Aquinas’s view, though a minority position, was at one with the consensus on this point. What put his view out of the mainstream was his claim that unity of a substantial composite was entirely due to its having only a single simple substantial form. This may have given a principle of unity at a stroke, but it denied one of the key intuitions of the Augustinian solution, namely that some constituent principles of a concrete individual could have an ontological standing that was partially the same as that of the composite as a whole and partially different from it. By countenancing only a single form, Aquinas rendered any such talk at best metaphorical and at worse simply incorrect.³⁵ Even those philosophers like Godfrey who insisted on unity as fundamental were more than willing to

³⁴ Godfrey of Fontaines, *quodl.* 2.7 (116–122), which includes further arguments against Henry’s position.

³⁵ Aquinas’s discussion of the dual nature of the human mind/soul, as both substantial form and independent substance, is most famously put forward in *sum. theol.* 1^a q. 75 art. 1: see Bazàn [1997]. Aquinas’s insistence on the unicity of substantial form made it difficult, if not impossible, for him to give a coherent account of the postmortem survival of the human mind/soul – to say nothing of how a corpse could be numerically the same as a human body. Cross [2002] and Klima [2009] are recent attempts to show how Aquinas’s theory holds together; Pasnau [2002] is more sceptical. There was another respect in which Aquinas was apart from

speak as though there were a plurality of forms in the individual, and to think that the interrelation of these forms had to be the foundation of whatever unity the composite had; the debate centered on how this could be possible.

The most sophisticated exponent of the mainstream consensus was John Duns Scotus. In the generation after Henry and Godfrey, he began his analysis from the nature of unity, arguing that a composite could be made up of a series of other entities as long as they were ordered to a single form.³⁶ Briefly, Scotus recognises in a concrete living being the following entities, each of which has some claim to existence in its own right: prime matter, the form of the body, local forms of bodily organs, and the soul. How all these disparate individual entities constitute a unified object that has some claim to be treated as ontologically basic will take some delicate handling.

Form plays two distinct roles in the constitution of material particulars according to Scotus: (a) it informs matter, and (b) it is an essential part of the whole composite. Yet these features of form when it is in a composite are not essential to form, Scotus holds, since we can see that form lacks these ‘imperfections’ in the case of the divine (*ord.* 1 d. 8 p. 1 q. 4 nn. 213–214 Vat. 4 271:1–272:9), where it neither informs anything nor is a constituent principle of anything further. Form can therefore be self-sustaining: it is prior to matter, and prior to the composite as well, since each is in act through the form and not conversely (*in met.* 7 q. 6 n. 9 OPh 4 143:1–10), and thus has some being of its own (n. 12). But if form need not inform matter and has being of its own, then it is possible for a bodily form to exist independently of matter – a conclusion Scotus draws explicitly.³⁷ In a living being, Scotus argues that there must be at least two distinct forms: the form of the body, which structures the organic body as a whole and also explains the numerical identity of a corpse with the living body it previously was (*ord.* 4 d. 11 p. 1 art. 2 q. 1 nn. 278–284 Vat. 12 265:964–267:41); and the animating soul. Scotus argues further on

the mainstream: he seems to have held that the postmortem survival of the human mind/soul is natural, not requiring any direct divine intervention: see his argument in *sum. theol.* 1^a q. 75 art. 6 and *q. disp. de an.* 14, which argue that the immaterial form that is the human mind/soul cannot be destroyed by the destruction of the composite it informs, and hence perdures; see Novak [1987].

³⁶ See the careful and insightful discussion in Cross [1995], which begins with this point.

³⁷ Duns Scotus, *rep.* 2 d. 12 q. 2 n. 12 (WV 23 20a): “Hence, since [matter and form] are each an absolute being, I grant that each can exist without the other; but the bodily form is not thereby immaterial, since, despite the fact that it is separate, perfecting matter is nevertheless compatible with it.” See also *lect.* 2 d. 12 q. un. nn. 53–57 (Vat. 19 90:1–91:17) for Scotus’s argument that substantial forms do not have an essential relation to matter.

the grounds of human generation that if God, and not the human parents, provides the soul in generation, the parents seem left with contributing only the matter to their progeny, which seems to underestimate their role. Scotus therefore proposes that human parents contribute a substantial form, namely the form of the body, which is further informed by the human soul (*ord.* 3 d. 2 q. 3 nn. 111–112 Vat. 9 165:849–166:861) contributed by God. However, the matter is not first organized by the form of the body and then by the human soul at different times, but both inform the matter at once, a point he takes over from Henry of Ghent.

Scotus is careful to distinguish the existence (*esse*) that each component element of a particular living being has. For example, the soul has existence *per se*, and this existence is separate from the existence of the composite of which the soul is a constituent element, even though when combined with the body the soul has existence through the composite (*in met.* 7 q. 6 nn. 12–13 OPh 4 143:16–144:8). The point here is subtle. Scotus is maintaining that although the constituent elements of a unified whole have their own individual existences, the whole, nevertheless, may have only one existence, and the existences of the constituent elements be somehow dependent upon the existence of the whole. In replying to the sort of objection mooted by Godfrey of Fontaines and Thomas of Sutton which tries to infer the uniqueness of substantial form from the fact that the composite is a single existence, Scotus writes:³⁸

I grant the first claim, that there is only one existence that belongs to one being. But the second proposition, that one existence requires exactly one form, should be denied. . . For just as ‘being’ and ‘one’ are divided into simple and composite, so too are ‘existence’ and ‘one existence’. Therefore, existence that is essentially one is not precisely restricted to simple existence, just as nothing divided is precisely restricted to one of the divi-

³⁸ Duns Scotus, *ord.* 4 d. 11 p. 1 art. 2 q. 1 nn. 250–251 (Vat. 12 255:722–737: *Concedo primam propositionem, quod “unius entis est unum ‘esse’”; sed secunda, scilicet quod “unum ‘esse’ requirit tantum unam formam” neganda est, accipiendo ‘esse’; uniformiter in maiore et in minore: sicut enim ens et unum diuiduntur in simplex et compositum, ita ‘esse’ et ‘unum esse’, distinguntur in ‘esse’ tale et tale; ergo ‘esse’ per se unum non determinat sibi ‘esse’ simpliciter, sicut nec aliquod diuisum determinat sibi praecise alterum diuidendum. Isto modo totius compositi est unum ‘esse’, et tamen includit multa ‘esse’ partialia, sicut ‘totum’ est unum ens et tamen multas partiales entitates habet et includit: nescio enim istam fictionem quod ‘esse’ est quid superueniens essentiae, non compositum sicut essentia est composita; hoc modo ‘esse’ totius compositi includit ‘esse’ omnium partium, et includit multa ‘esse’ partialia multarum partium uel formarum, sicut totum ens ex multis formis includit omnes illas entitates partiales.* Scotus addresses this remark directly against the unitarian view of substantial form espoused by Aquinas.

sions that divide it. In this way there is one existence of the whole composite, which nevertheless includes many partial existences, just as the whole is one being and nevertheless contains many partial beingnesses. For I know nothing about this fiction that the existence supervening on the essence is not composite if the essence is composite. The existence of the whole composite includes the existence of all the parts in this way, and it includes many partial existences belonging to the many parts or forms, just as the whole being made up of many forms includes those partial actualities.

The existences of the constituent parts of the composite are not simply added or aggregated; they have instead an essential order to one another, and overall an essential order to the ‘topmost’ substantial form that gives existence to the whole composite, as Scotus goes on to say. In this way the whole composite can be divided into act and potency, namely the final ‘completive’ (*completiva*) form and the remainder of the composite. And as with existences, so with the beings themselves: the unity of the composite is to be found in the union of its constituent elements through an internal essential order. The beings that are the matter and the form are distinct (*in met.* 8 q. 4 n. 41 OPh 4 501:9–13), but they are essentially ordered to one another (*ibid.* nn. 31–33 OPh 4 498:13–499:8).

Scotus takes the ordering of forms to be pervasive, and the inability of certain forms to be so ordered is a special feature of *per se* beings. Recall from §1 above that Scotus distinguished three types of *per se* beings: those that can exist in isolation from a subject; those that do not inhere, whether actually or aptitudinally, in a subject; those that are simply unable to be ordered *per se* to any further actualization belonging to it in its own right beyond the one it has. As noted, the last is crucial, because that is the sort of being that is had by something that is ontologically basic, the suppositum (*i. e.* the fully actual concrete particular). Being unable to be *per se* ordered to any further act is the mark of the concrete. That is why the individual has a privileged place in Scotus’s ontology. But recognising this is compatible with granting the independent ontological status of the substantial form that may inform the composite, as the human mind/soul does.

The essential ordering of the constituent parts of a composite substance is therefore a description of the unity of the composite. Scotus is clear that his account describes the unity but does not strictly speaking explain it, since the principle of the essential ordering has to do with the act-potency relations among these elements, which are given immediately and not susceptible of

further analysis.³⁹ Furthermore, the essence of the composite is something distinct from any of its constituent elements: it is a composite of form as such and matter as such. It cannot be identified simply with the substantial form, since that is only one of the constituents of the composite and has its own proper essence and existence, as we have seen. However, the substantial form does give further actuality to the remainder of the elements that make up the composite, and, on this score, it can be called the ‘partial form’ of the composite (*ord.* 3 d. 2 q. 2 nn. 81–83 *Vat.* 9 152:626–153:646). It should not be confused with the ‘form of the whole’ (*viz.* the whole composite), which is “not an informing form” but rather that in virtue of which the composite as a whole has a nature or quiddity.⁴⁰ In short, the essence of the composite is something over and above the parts of the composite, not reducible to them. What it is to be this composite (or this kind of composite) is itself an emergent feature. The essence of the composite, then, is tightly linked to all of the constituent elements of the composite, as they are essentially ordered to one another. Indeed, it seems as though an individual composite can have an essence only if all its constituents are properly aligned. Finally, the metaphysical glue that holds together an individual as a unity is the tightest available in the aristotelian universe: the unity that comes with potency and act.

The upshot is that, for Scotus, the unity of the composite is preserved by the correct ordering obtaining among its component entities, which allows for essential and existential (in)dependence. In the particular case of the human mind/soul, it is not essentially dependent upon the composite of which it is a constituent part; whether it depends on the composite for its existence is a matter that has to be left to faith – natural reason cannot show that it continues in existence after death (REF). Yet even if it does, it does not have the full actuality proper to a suppositum, since in that state it cannot discharge what appears to be one of its essential functions, namely its aptitude to inform a body and making it human. (To inform a subject is not an essential feature of form *qua* form, but it does appear to be an essential feature of the human mind/soul.) It may continue to have this essential aptitude even when it is in no position to exercise it, but cannot be or be a part of a fully actual concrete being unless it is realized. Not for nothing was Scotus known as the subtle

³⁹ Scotus explicitly denies that his account provides an explanation: *in met.* 8 q. 4 n. 11 and n. 54 (OPh 4 492:8–13 and 504:13–20 respectively); *ord.* 3 d. 2 q. 2 n. 84 (*Vat.* 9 153:647–154:665). *lect.* 2 d. 12 q. un. nn. 49–51 (*Vat.* 19 88:11–89:21); see Cross [1995]. The further inexplicability of act-potency relations is a consequence of the fact that they transcendently divide being, and hence there is nothing higher in terms of which an explanation could be provided.

⁴⁰ Cross [1995] argues at length for this thesis.

doctor.

CONCLUSION

With Scotus's account of the unity of the composite substance the mediæval elaboration of the Augustinian solution reached its apex. One or another version of it held sway as the mainstream consensus for the remainder of the Middle Ages, until philosophical materialism came into its own. The careful analysis of the ontological status of the constituent principles of a hylomorphic compound was one of the great achievements of the mediæval thought, one that owed nothing to dogma but everything to subtle philosophical thinking at its best. Its replacement by philosophical materialism can be seen as the continuation of a naturalistic trend in scholastic thought that was only displaced by the less sophisticated Cartesian dualism that ushered in modern philosophy. We will only be the richer for a proper appreciation of mediæval thought on this score.

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