

NICOLE ORESME, DUALIST

JACK ZUPKO

According to Nicole Oresme (c. 1320-1382), human beings, unlike all other animals, are composed of two substances, a thinking substance and a sensing substance. How he arrives at this interesting and unusual position is the topic I want to investigate here.¹ His dualism about human nature has been noticed before, though mostly in passing, and without considering the dialectical path he takes to get there.² But I think his arguments are worthy of attention, insofar as they testify to the dialectical richness of Parisian psychology in the

1 In this as in all other matters Oresme, we are indebted to the groundbreaking scholarship of Stefano Caroti. See n. 48 below.

2 Peter C. Marshall first drew attention to Oresme two-substance account of the human soul in the introduction to his edition of Oresme's *Quaestiones De anima* (see MARSHALL 1980, 78-83). The topic is also briefly discussed by Benoît Patar in the introduction to his 1995 edition of the same work, which is the source I use for this article (see ORESME 1995, 170*-177*). Hereafter Benoît Patar's edition of Nicole Oresme's *Expositio et Quaestiones in Aristotelis De Anima* will be quoted as QDA by Book, Question, page, and line number. All the translations of Oresme's texts, when not otherwise indicated, are mine. However, most of Patar's discussion simply quotes Oresme's text in Latin and French translation, although he speculates (oddly, given that the work in question is a commentary on Aristotle from the Paris Arts Faculty) that in offering a dualist account of the human soul, Oresme was "rallying to the side of the large number of theologians of his time who were not satisfied with the Thomist conception" ("se rallier à un grand nombre de théologiens de son époque que la conception thomiste ne satisfaisait pas") and that this might reflect the influence of the Faculty of Theology on his teaching (ORESME 1995, 177*). But as Oresme's *Sentences* commentary has not yet been identified, such suggestions must remain in the realm of speculation.

mid-14th century and demonstrate that on the question of metaphysical structure, the best minds in that period were pulled in multiple directions by authoritative texts and evidence, not unlike today.

Let me make clear at the outset that Oresme should not be viewed as some kind of proto-modern dualist, or dualist *avant la lettre*. Oresmeian dualism should not be confused with the more famous Cartesian variety that came along three centuries later. Oresme and Descartes thought about the metaphysical structure of the created world in completely different ways, and even though their positions are both worthy of the name ‘dualist’, the two substances they posit beneath that term are not the same. Descartes, as is well known, employs thought experiment and hyperbolic doubt: finding himself able to doubt the existence of his body but not his mind, he concludes that mind and body must be two different things. He then posits two substances: an immaterial, unextended ‘mind’-substance and a material, extended body-substance. Oresme, on the other hand, works with a different psychological paradigm, that of Aristotle’s *De anima*, though much enlivened and developed by the medieval commentary tradition on that text. His two substances are accordingly Aristotelian substantial forms: an immaterial, unextended form that thinks and a material, extended sensitive form that senses, which together constitute a single substance or *per se* unity. So we have at most here a case of different methods yielding similar conclusions. Whether Descartes read Oresme, or might have been influenced by Oresme’s ideas, is not known, and not something scholars are yet in a position to explore.

In what follows, I will trace Oresme’s arguments through six questions in his *Quaestiones in libris Aristotelis De anima*: five from Book III, where QQ.3-7 provide what I call a ‘mini-treatise’, or treatise-within-a-commentary, on

the metaphysical structure of the human soul, and one earlier question from Book II, where Oresme considers how many souls, or forms, are needed to explain the animate operations of living things, and with it, the question of whether the sensitive soul is a different kind of entity in human beings than in non-human or 'brute' animals. The result will place Oresme's dualism in its proper context, as well as, I hope, permitting useful comparisons with other 14th-century commentaries on Aristotle's 'Book of the Soul'.

I. How Are Human Souls and Bodies Related?

Oresme develops his account of human soul/body inherence over five consecutive questions in Book III of his *De anima* commentary, which deal with "the nature and substance of the intellect [*de ipsius natura et substantia*]," as opposed to its activities and act of thinking (*intellectio*).³ The questions are common in *De anima* commentaries of the period – (Q. 3) Is the intellect a separate form, unmixed with the body? (Q. 4) Is the intellect a form inhering in matter or the human body? (Q. 5) Is there a certain agent intellect in human beings? (Q. 6) Is the intellectual soul eternal? (Q. 7) Is there a single intellect for all human beings? – but taken together in this way they read like a mini-treatise on the metaphysical status of the human soul. Indeed, Oresme feels constrained by the format of the *quaestiones* genre in writing about the nature of the human intellect. "Although it would be better to treat of this without using questions," he says, "nevertheless, as is customary, we will examine it through questions."⁴ He also tells us that his discussion will cover five opinions on the relation between the human soul and its body, that of Averroes,

³ QDA III.3, 326, 45-46.

⁴ *Ibid.*, 326, 50-51: "Et licet melius tractaretur sine quaestionibus, tamen propter consuetudinem videbitur per quaestiones."

Avempace (and others), Plato and Pythagoras, Alexander of Aphrodisias, and finally, the opinion “of the truth and the faith [*fidei et veritatis*].”⁵ It was of course hardly unusual to fill the dialectical space of a difficult question with the competing views of authorities. What is unusual is how he answers it later on.

Oresme begins with the question of whether the human intellect is a separate form, unmixed with body. He identifies this as the opinion of Averroes, who, according to Oresme, holds that the intellect is a separate power consisting of two entities (*res*) – a possible and an agent intellect – and that it is eternal, everlasting, and numerically one, i.e., not multiplied according to the number of human beings. Oresme clarifies that he understands separation here to concern the notions of existence and inherence, and in particular how one thing can depend on another for its operation, whether that activity is primary and proper to it, as in the case (he assumes) of the intellect depending on the body, or secondary, in the way intelligences depend on celestial spheres for their motion. There follow ten arguments (*rationes*) for the conclusion that the human intellect is immaterial and therefore separate. The list is hardly original – Oresme says that it has been put together from “the words of philosophers [*ex dictis philosophorum*]” – and reads like a teacherly enumeration of previous thinking on the question for an audience of undergraduates, which of course is what it was.⁶ Unlike any material power, Oresme tells us, the intellect is: (1) able to cognize all material forms; (2) not located in a corporeal organ; (3) “indefatigable”, or untiring; (4) not

5 *Ibid.*, 326, 50. Later, in *QDA* III.6, his discussion will also introduce arguments from Cicero and Macrobius, although he does not mention them here.

6 Oresme so enumerates the arguments, from one to ten, in his commentary (*QDA* III.3, 327-331).

weakened or destroyed by exceedingly intense objects; (5) able to reflect on itself (Oresme believed that reflection is an act of awareness, belonging to immaterial powers only); (6) able to act independently of anything material (unusually, Oresme mentions here not abstract or mathematical thinking but prognostication in dreams, as illustrated by the Prophets); (7) able to act when it wishes; (8) able to grasp both simple and complex objects as universals; (9) able to debate and consider things (such as whether a number is even or odd, which brute animals cannot do); and (10) free, by which Oresme means exempt from the deterministic push and pull of all other things ruled by the heavens.

Oresme is willing to accept all ten arguments as evidence for the intellect's immateriality (or more precisely, for its being "unmixed" with matter), but he stops short of Averroes' further conclusion that the human intellect exists separately from the body if by that we mean that it does not inhere in or have the same location as the body. For Averroes, of course, the intellect does not exist in the body, but is rather "appropriated [*approprietur*]" to it, in the way intelligences use celestial spheres to perform their secondary act of moving circularly around the earth (their primary act of reflecting on or thinking about the forms they perform at will).⁷ On the other hand, the human intellect inheres in and has the same location as the body because it depends on it, not only for secondary activities like moving from place to place, but also for its primary and proper act of thinking, which, as Aristotle says, is based on bodily senses and phantasms.

But how does the intellect inhere in the body if it is not mixed with it? Here Oresme is more circumspect, offering only that "according to the truth

⁷ QDA III.3, 331, 72-79.

and the faith [*secundum veritatem et fidem*],” the inherent human intellect is not brought forth or “educated [*educta*]” from the potency of matter (but rather, created), nor extended (but rather, indivisible and whole in each part of the body).⁸ “In this way and not otherwise,” he says, “is the human intellect separate <from the body>.”⁹ It is odd to describe an inherent form as “separate”, but the Averroist-sounding terminology here may simply be Oresme’s way of expressing the human intellect’s distinct origins, i.e., the fact that once created, it is “induced [*inducatur*]” or brought into appropriately disposed matter by God, as opposed to being “educated [*educatur*]” from the potency of matter by some natural process.¹⁰

Oresme explores the human intellect’s actual mode of inherence in the next question (Q. 4), which asks whether the intellect is a form inhering in matter or the human body. He identifies three opinions on the question, this time bringing Alexander of Aphrodisias into the discussion along with Averroes and the opinion of the faith. According to Oresme, Alexander holds that the human soul is a corruptible material form inhering in matter and educated from its potency, differing from other animal souls only in its power and ‘nobility’, or the degree to which it can operate apart from material affections. Here, the operations of the human intellectual soul are said to exceed the souls of brute animals, which can be placed on a continuum of psychological perfection ranging from shellfish, which have “a modicum of cognitive ability [*modicae cognitionis*]”, to monkeys, which appear to engage in rational discourse and to possess concepts similar to those we find in human cognition.¹¹

8 *Ibid.*, 331, 84-88.

9 *Ibid.*, 331, 89-90.

10 *Ibid.*, 332, 4-10.

11 QDA III.4, 335, 67-68: “videntur discurrere et habere notitias similes cognitionibus humanis.”

An Alexandrian materialist locates such differences in the differing capacities and dispositions of their respective sense organs. And since external appearances signify internal dispositions, an Alexandrian can use physiognomy to establish that the more a brute animal resembles us humans, the greater its cognitive capacity, to the point where “it has seemed to some that if monkeys could speak, they would reason just like humans, although on certain topics they would not do so as perfectly.”¹²

But Oresme pursues the psychological continuum idea no further because, as noted above, he accepts the ten arguments in Q. 3 against the human soul’s mixture with the body, which would of course mean that despite some external similarities, the human intellectual soul differs radically from all other animal souls, and inheres in the body differently than any material form does. He adds that he accepts these arguments not because they are fully demonstrable (they are not), but because their conclusions are “plausible [*probabiles*]” or readily believable, even though we do not hold them as firmly as demonstrable truths.

Oresme moves on to consider the position of Averroes, which he describes as “extreme [*extrema*]” and “more improbable and less evidently true than the others.”¹³ This is the view mentioned in Q. 3 that the human intellect is “entirely immaterial, not brought forth from the potency of matter or inhering in matter, but merely appropriated to it, as an intelligence is appropriated to a celestial sphere.”¹⁴ But Oresme finds that this contradicts what Averroes

12 *Ibid.*, 335, 75-77: “sicut dicebatur de simeis in tantum quod videtur aliquibus quod, si possent loqui, ratiocinarentur sicut homines, quamvis tamen in quibusdam non ita perfecte.”

13 *Ibid.*, 336, 88-89: “ista opinio inter omnes est improbabiliior et minus verisimilis.”

14 *Ibid.*, 336, 85-87: “intellectus is omnino immaterialis, non eductus de potentia materiae nec inhaerens materiae, sed solummodo appropriatus sicut intelligentia appropriatur orbi.”

says in his commentary on *De caelo* about the way spheres, and the stars affixed to them, are naturally moved by intelligences:¹⁵ the motion of the heavens must be natural and calibrated from eternity in such a way that the addition of even one star would make the force required to move the whole deficient, causing the heavenly machinery to grind to a halt (conversely, the subtraction of even one star would create a violent or unnatural surplus of force); but the matter to which the human intellect would be appropriated is added to and subtracted from all the time, via the generation and corruption of individual human beings, from which Oresme concludes that if there were a single intelligence for human beings, “it would immediately cease to move and understand [*statim desineret movere et intelligere*].”¹⁶ Furthermore, Oresme finds Averroes’ view to be inconsistent with Aristotle’s understanding of the intellect as that by which human beings differ “essentially and intrinically [*essentialiter et intrinsece*]” from other animals, just as those other animals, e.g., donkeys and horses, differ from each other by virtue of intrinsic substantial forms; likewise, he rejects as un-Aristotelian the view of unnamed advocates of the plurality of substantial forms that human beings might differ from other animals by means of a material and corruptible sensitive form.¹⁷ Finally, he argues that Averroes’ single separate human intellect does not agree with Aristotle’s remarks in the *Nicomachean Ethics* that a continent person upholds the dictates of intellect and reason, which seem to identify such a person with

15 Averroes 2003 *In De caelo*, II.71, f. 145v G. See also Arthur Hyman’s explanation of Averroes’ argument that there exists only one star per planetary orbit in his edition/translation of the Hebrew text of Averroes’ *De substantia orbis* (AVERROES 1986, ch. 3, 106, n. 32).

16 QDA III.4, 336, 98-99.

17 *Ibid.*, 336-337, 0-8. This is perhaps a nod to the continuum argument Oresme ascribes to the Alexandrians above, since the human sensory apparatus was thought to be more refined and ‘perfect’ than those of brute animals.

his intellect¹⁸, and that we regard actions stemming from intellect and reason as most properly human, which would not be the case if they were powers existing separately from us.¹⁹

Oresme then presents his own opinion on body/soul inherence, which he describes as a “middle way [*est in medio modo*]” between Alexander and Averroes.²⁰ This is the view introduced in the previous question, “in keeping with the truth and the faith [*secundum veritatem et fidem*],” that the human intellect is the substantial form of the human body, inhering in it and making it what it is essentially: a rational animal. But he quickly clarifies that the intellect is said to be a material form only in the sense that it inheres in and informs a material body. Unlike other material forms, including the souls of non-human animals, it is not brought forth or educed from the potency of matter by any natural agency; nor is it extended or possessed of quantitative material parts; nor is it subject to corruption by any material power or disposition, although it is corruptible in some immaterial fashion.²¹ Of course, a form that lacks four of the five characteristics shared by all other material forms does not really sound like a material form at all, just as the highly attenuated sense of ‘separate’ Oresme ascribes to the human intellect in Q. 3 does not seem to amount to real separateness. But Oresme insists that the best way to approach the metaphysical structure of the human intellect is apophatically, as it were: “it is *not material* in the way suggested by Alexander, and *not immaterial* in the way proposed by Averroes [*non est ita materialis, si-*

18 *Ibid.*, 337, 17: “ac si diceret quod homo est ipsemet intellectus.” See *Eth. Nicom.*, VII.1, 1145b14.

19 QDA III.4, 337, 17-24.

20 QDA III.4, 338, l. 46.

21 QDA III.4, 338, ll. 32-43.

cut posuit Alexander, nec tamen immaterialis, sicut posuit Averroes].”²²

Oresme is trying to walk a very fine line here. We get a hint of how he intends to walk it when he says in response to one of the initial arguments of Q. 4 that there could not “naturally [*naturaliter*]” be a material form lacking all the characteristics of a material form save inherence in matter.²³ But it turns out that the intellect is different even in its mode of inherence, informing the body definitively rather than circumscriptively, which is to say, being present as a whole in each particular part of the body rather than part-by-part, so that the soul-part inhering in someone’s hand is “at a distance” from the part inhering the foot. Accordingly, to the objection that an intellect inhering part-by-part would paradoxically be “at a distance from itself [*distaret a se*],” Oresme replies simply that the intellect “always is where it is [*semper est ubi ipsa est*],” which makes sense only if its presence in diverse parts of the body is per accidens, or by virtue of something else, like the human body, which does have spatially extended parts. Why this would not also make the intellect into an accidental form of the human body, Oresme does not say just yet.

Oresme turns next to the question (Q. 5) of whether there is some kind of agent intellect in a human being. Here the interlocuters are Averroes, Avempace, and again, the opinion that is in accordance with the truth and the faith, his dialectical touchstone throughout the five questions of this mini-treatise. We are now told that Averroes believes that the possible and agent intellects are two substances forming a third substance, “just as matter and form make one thing [*sicut etiam ex materia et forma fit unum*].”²⁴ Although the

²² QDA III.4, 338, ll. 44-45.

²³ QDA III.4, 339, ll. 63-65.

²⁴ QDA III.5, 342, 41-42. Oresme also mentions some “followers” of Averroes who hold

parts of the composite are everlasting, the composite itself is not, because it is produced by our act of thinking when it considers phantasms or images belonging to the internal senses. The result is a “spiritual composite [*compositio spiritualis*],” analogous to the bodily composite formed by the union of matter and form.²⁵ But this view must be rejected, Oresme says, first because it would make our soul even more of a composite than the soul of a donkey (presumably because its act of thinking would also have substantial parts), whereas the soul is a “simple form [*simplex forma*].” Second, there would be no conjunction of possible and agent intellects if everyone were asleep and no one were actually thinking, and yet even then both intellects continue to exist, unlike matter and form when they are separated. Third, and in the same way, the separation of the agent and possible intellects when they cease to be actually thinking does not entail their corruption, unlike matter and form. Finally, there is no such composition in other separate substances, such as an intelligence, “which is like another separate substance according to the Commentator [*qui est sicut una alia substantia separata secundum Commentatorem*].”²⁶ Whatever spiritual composition is, it does not behave metaphysically like matter/form composition, and so is of no help where human body/soul composition is concerned.

Next up is Avempace (aka Abubacher; Ibn Bājja), whose views are discussed at length in Averroes’ *Long Commentary on De anima*, which almost

this view, among whom Benoît Patar, the editor of the text, plausibly identifies John of Jandun (ORESME 1995, 342, n. 39). But Oresme concedes later in the question that Averroes actually does not actually assume that there are two distinct intellectual substances, but only a difference in act and potency, and matter and form, and that the possible intellect is “something [*hoc aliquid*]” only through the agent intellect (QDA III.5, 347, 62-67).

²⁵ *Ibid.*, 342, 44-46.

²⁶ *Ibid.*, 343, 50-68.

certainly is Oresme's source here. Avempace identifies the human possible intellect with the cogitative and recollective powers of the sensory part of the soul, which is material and therefore corruptible. On this view, thinking is the transient act of an unchanging and separate agent intellect upon the possible intellect, similar to the way in which God acts upon creation without himself being changed, or the sun in illuminating the things it makes visible. But Oresme rejects this idea because Aristotle calls the human soul 'the place of the forms', in which he says Aristotle was referring to the aspect of the soul that is separable from the body, and in any case, thinking occurs when intelligible species are received by the intellect, not the senses. Likewise, the intellect is sometimes thinking and sometimes not, but this must be by virtue of the thoughts (and knowledge and virtues) that are actually in it, not the senses.

The opinion of the truth and the faith, to which Oresme subscribes (and which he says is "more evidently true [*magis verisimilis*]" than the other opinions),²⁷ is then presented in terms of three conclusions along with supporting arguments. The first is that the human intellect is obviously acted on by received attributes such as intelligible species and acts, i.e., intentions and dispositions of knowledge (*scientia*) and the like, as opposed to being completely transcendent and unaffected.²⁸ The second conclusion is that our intellect also acts when it thinks. Unlike other cognitive processes, the universal agency of God on the one hand, and nature in the form of images and external objects on the other, do not suffice to explain how the intellect understands something anew; rather, the intellect is able to determine itself, i.e., to act when it wishes as long as there is no impediment; as a free power, the human intellect

²⁷ *Ibid.*, 344, 89-90.

²⁸ *Ibid.*, 344, 90-92.

must be active and not entirely passive; in the same way, there would be no basis for praising or blaming someone unless the intellect is able to initiate action; indeed, an entirely passive intellect must be deemed “less noble [*nobilius*]” than the phantasms or images it receives, which would in that case be the only agents of intellectual cognition.²⁹ The third and final conclusion is that it is the same intellect that acts and is acted upon with respect to our thinking. Oresme says that we have no reason to posit more than one human intellect if the same power can act and be acted upon in different ways, like the power of sense. In fact, it is the human intellect’s natural perfection to think in the presence of intelligible species, something even more evident for acts of “spiritual motion [*in motu spirituali*]” like thinking, as opposed to, say, water when it cools itself. Finally, reiterating his argument based on the razor, Oresme says that it is simply not necessary to posit more than one intellect as long as the various ways or modes in which the intellect is said to be active and passive are kept distinct.

Q. 6 raises what was likely for Oresme’s audience the most important question of all: whether the human intellective soul is eternal. He begins by making the standard distinction between the terms ‘eternal [*aeternum*]’ and ‘perpetual [*perpetuum*]’ or ‘everlasting’, with ‘perpetual’ applying to things that have only a beginning or an end to their existence, whereas ‘eternal’ is properly used of things without either a beginning or an end, so that their existence stretches to infinity in both directions of the time line, i.e., both before and after the present instant.³⁰ Knowing his authorities are not in agreement on the question, Oresme tells us that he will first be “enumerating the argu-

²⁹ *Ibid.*, 345, 93-14.

³⁰ *Ibid.*, III.6, 350, 49-54. Oddly, however, the distinction is not in play in subsequent arguments, where Oresme uses the terms ‘eternal’ and ‘perpetual’ synonymously.

ments and proofs by which the ancients have proved the soul to be eternal," saving his own thoughts on "the diversity of opinions on the topic" for the next question.³¹ But what follows is not so much a set of new arguments as a mélange of ancient opinions, mostly from Cicero – an atypical authority for a commentary on Aristotle's *De anima*. There is only one conclusion Oresme wishes to establish: that the human soul is "eternal or perpetual" (he does not yet say which) because it is incorruptible, being a separate and immaterial power. For proof of the latter, he refers us back to his ten arguments from "the words of philosophers [*ex dictis philosophorum*]" in Q. 3 above,³² repeating the third and fourth arguments about the intellect's indefatigability and immunity from destruction by superlative objects,³³ and the seventh and tenth arguments, this time backed by Macrobius, for whom the human intellect is a free, self-moving power, which, unlike brute animals, is exempt from the deterministic influence of the stars. Cicero is the next pagan authority called to the witness stand, with five points from his *Tusculan Disputations* I.xiii-xv: (1) belief in gods and in the eternity of the intellect or human soul is widespread among civilized peoples of the world; (2) unlike other animals, humans care for the future and for their posterity; (3) philosophers, poets, and other outstanding individuals all hope to be ennobled after death, but this desire would be in vain if the human soul were corrupted along with the body; (4) no one ever offers to die for his country without the hope of gaining immortality thereby; and (5) some phenomena "in natural histories [*in historiis*]" cannot be explained without the assumption that the human soul remains

31 *Ibid.*, 350, 55-57: "primo enumeranda sunt argumenta et probationes quibus antiqui probaverunt animam esse aeternam; secundo videbitur de diversitate opinionum circa istam materiam."

32 *Ibid.*, 350, 58-64. The text mentions "nine [*novem*]" arguments, so either Oresme or his scribes have miscounted here.

33 *Ibid.*, 350-351, 65-70.

after the death of the body.³⁴ These are not philosophical arguments, or at least not very good philosophical arguments. But rhetorically, it is important for Oresme to establish that the assumption that the human soul is everlasting is found among pagan authorities, not just Christian ones. The testimony of authorities is an argumentative strategy here, if not to prove, then to support the verisimilitude of the human soul's immortality, or, as Oresme puts it, to make that conclusion "more plausible for the wise in the natural light of reason [*sapientibus ista est magis probabilis in lumine naturali*]." ³⁵

But there is more from Cicero. Oresme mentions six further arguments,³⁶ some of which recapitulate points made above, but all of which stem from various remarks in Cicero's *Tusculan Disputations* or *On the Nature of the Gods*: (1) because the human soul is immaterial and unextended, it must also be indivisible, and "every indivisible substance is everlasting [*omnis substantia indivisibilis est perpetua*]"³⁷ (2) the human soul's natural desire for beauty and perpetual happiness would be in vain if it were not everlasting;³⁸ (3) according to all philosophers and the wise, human happiness consists not in sensual delights appropriate to brute animals, but in the pleasures of speculation about eternal things;³⁹ (4) likewise, our ability to acquire knowledge of eternal and separate substances is a sign that we participate in everlasting-

34 *Ibid.*, 352-353, 82-17. Oresme does not say which natural phenomena would be inexplicable if the soul is not immortal, but presumably he is referring in general to what Cicero mentions in the *Tusculan Disputations*, such as our natural desire for immortality, which is found even among those innocent of natural philosophy (I.xiii).

35 *Ibid.*, 354, 50-51.

36 *Ibid.*, 353-354, 18-51.

37 Oresme does not cite an authority for this argument; it appears to come from Cicero, *De natura deorum*, III.xii.

38 *Tusculan Disputations* I.xix.

39 *Tusculan Disputations* I.xxxi.

ness ourselves;⁴⁰ (5) we see that even the shape (*figura*) of the human body is raised to the heavens, as when we extend our hands to heaven in prayer;⁴¹ and (6) the duration of human existence ought to exceed that of brute animals, but we see that embodied human life (if that is all there is) does not exceed that of many beasts, such as the phoenix and the raven.⁴² Again, Oresme's rhetorical strategy here is obviously not one of finding an airtight rational justification for human intellectual soul's immortality, for there is none. The fact that this is not demonstrable, such that believing the opposite would land one in contradiction, demands a different approach, one that involves persuasion and the gradual wearing down of objections so that the desired conclusion becomes more plausible or rationally acceptable than the alternative, or at least less subject to doubt.

In his replies to the initial arguments in Q. 6, however, Oresme commits himself to a piece of metaphysical doctrine about the human soul that is unusual, to say the least. This is the claim that human beings have not one but two substantial forms: "I say that the sensitive soul is corrupted at the corruption of a human being, because <a human being> has two forms, as was seen in Book II above."⁴³ This looks at first glance to be an invocation of the doctrine of the plurality of substantial forms, defended with regard to the human soul by Duns Scotus and William of Ockham, and rejected by Thomas Aquinas. It turns out, however, that for Oresme the plurality is just that, a duality, and that it obtains in just one case, that of human beings. But he merely as-

40 *Tusculan Disputations* I.xix.

41 *De natura deorum* I.xviii; II.xlviii. The point seems ironically similar to the physiognomy argument ascribed to the Alexandrians above.

42 *Tusculan Disputations* I.xxxi.

43 QDA III.6, 355, 58-60: "dico quod in corruptione hominis anima sensitiva corrumpitur, quia <homo> habet duas formas, ut visum est in secundo <huius>." One of the manuscripts even has 'souls [*animas*]' instead of 'forms [*formas*]'.

serts the doctrine in Q. 6 without defending it; for his arguments, we need to follow his reference to that Book II Question “Are there in the same living thing, as in a human being, multiple souls, namely, vegetative, sensitive, and intellective?”

II. An Excursus into the Senses

In Book II, Q. 5, of his *Quaestiones on De anima*, Oresme outlines his position that there are two souls in a human being, although every other living thing has just one:

Another view is that there are only two souls and two forms in a human being, as follows: just as in a horse or a donkey there is a unique material form, which is corruptible and generable from a material potency, so also <there is a material form> in a human being. But along with this there is in a human being an intellective soul, which is not a material form [...].⁴⁴

Oresme gives four arguments for this view, along with a set of responses to arguments enumerated earlier in the question on behalf of the more conventional view that human beings have only one substantial form, i.e., the intellect or intellective soul. The first argument is that it is necessary for every living thing to have a material form to account for changes to its body, just as it is impossible for a piece of wax to be shaped and reshaped without its matter. But if this is so, then in a human being there exists, along with a material form, “an intellective soul of an altogether different nature than the material form, able to constitute an individual per se while being separable from the

⁴⁴ *Ibid.*, II.5, 152-153, 30-34: “Alia via est quod in homine sunt duae animae et duae formae tantummodo ita quod, sicut in equo aut asino est unica forma materialis, ita etiam in homine, quae est corruptibilis et generabilis de potentia materiae; et cum hoc est in eo anima intellectiva quae non est forma materialis [...].”

body and able to remain <apart from it>.”⁴⁵ Because it lacks such an immaterial form, the material soul of a donkey cannot be everlasting or survive the death of its body.⁴⁶ The second argument contends that “the form and substance of the flesh [*forma et substantia carnis*]” of a human being differs from the forms of its material parts – e.g., of bone, hand, and foot – all of which differ from the intellectualive soul.⁴⁷ But the difference between these material forms is not substantial; Oresme instead uses the language of modes to describe their differences: “the being of flesh [*esse carnem*]” and “the being of bone [*esse os*]” are different forms inhering in different parts of the same matter, i.e., the human body. But the human intellectualive soul is different again: because it is indivisible, it inheres as a whole in every part of the body.⁴⁸ The third argument for the conclusion that in addition to their immaterial form, human beings have a “non-intellective and extended material form [*aliqua forma extensa non intellectiva*],” is that it is impossible for a corporeal body to be extended without an extended or extendable substantial form, and the intellectualive soul is, by hypothesis, immaterial and unextended.⁴⁹ Finally, Oresme points out that the human body must obviously have some form and matter after death, because there would be no

45 *Ibid.*, 153, 41-43: “Et ideo in homine cum hoc est anima intellectiva quae est omnino alterius rationis a forma materiali; et ideo potest esse suppositum per se et separari a corpore ipsa manente.”

46 *Ibid.*, 153, 49-50: “omnino esset impossibile quod anima asini perpetuaretur aut maneret post mortem.”

47 *Ibid.*, 153, 51-64.

48 *Ibid.*, 153, 57-59: “eadem est anima intellectiva hominis quae est in carne et in osse et in qualibet alia parte, cum ipsa sit indivisibilis, et ubicumque tota, ut visum est prius.” The paragraph closes with an odd editorial comment – “Et istae duae rationes sunt difficiliores pro ista parte” (“And these two arguments <i.e., the first and the second> are the more difficult arguments for this position”) – which looks like a scribal aside that has found its way into the main text. On Oresmeian modes in general, see CAROTI 2000, CAROTI 2001, and CAROTI 2004.

49 *Ibid.*, 154, 65-70.

“true corruption [*vera corruptio*]” of the body after death unless the corpse has a substantial form that is corrupted along with its matter.⁵⁰

In his responses to earlier arguments for the conventional view, Oresme elaborates on his notion of the duality of substantial forms in a human being. He denies that his positing a different subject for each of the soul’s states and operations multiplies entities beyond necessity because the material forms of flesh, bone, and so on “constitute a single whole having many integral parts [*constituant unam totalem habentem multas partes integrales*].” Likewise, he denies multiplying modes of being (*esse*) beyond necessity because although it is impossible for the same thing to have two material modes of being, “it can have one <mode of being> from a material form and another from an immaterial form,” so that “it might even be said that humanity is not animality or that animality is not humanity, although asinity <or ‘donkeyhood’> would be animality”⁵¹ – which would follow, of course, only if the humanity and the animality came from different substances. To the objection that a corpse without an intellective soul would still be a human being because it would retain the bodily dispositions of a human (making the same thing in one sense human and in another sense not), Oresme replies that this is not possible “naturally [*per naturam*],” although he concedes that God could annihilate a human being’s intellective soul, leaving behind something with just a sensitive soul, and that accordingly,

⁵⁰ *Ibid.*, 154, 71-75. Again, the paragraph closes with an odd remark – “This approach appears for now to be more true [*Ista via apparet pro nunc verior*]” – that also looks like imported scribal marginalia.

⁵¹ *Ibid.*, 154, 86-90: “quamvis sit impossibile quod aliquis habeat duo esse materialia, tamen potest habere unum a forma materiali et aliud ab immateriali. Et forte diceretur quod humanitas non est animalitas vel quod animalitas non est humanitas, licet asinitas esset animalitas.” Also 155, 2-5: “potest tamen habere unam materialem <formam> et aliam immaterialem, sicut et in eodem orbe caeli sunt plures intelligentiae [...]”

what remains would be a single brute, irrational animal. And when it is asked, 'To what species would it belong?', I say that it would be a new species, and that there are no such things in nature, except perhaps, as some say, certain animals of the forest that are similar to human beings in appearance.⁵²

Regrettably, Oresme does not tell us more about these forest homunculi,⁵³ but it makes sense for him to treat them, and whatever it is that would remain following God's annihilation of the human intellective soul, as animals, because he holds that the remaining sensitive soul is also a substantial form that would remain in hylomorphic composition with the human body. He could even speak of such animals in Aristotelian terms as being human only homonymously, i.e., as merely resembling a human being, like a corpse, or a picture. The difference between Oresme and more orthodox Aristotelian commentators, such as Thomas Aquinas and John Buridan, is that the surviving entity or 'homonym' would still be a substance.⁵⁴

Oresme then takes on Averroes' arguments against the plurality of substantial forms,⁵⁵ which would also cut against his supposition that embodied

52 *Ibid.*, 154, 93-98: "Concedo tamen quod Deus posset hoc facere; et tunc illud quod restaret esset unum animal brutum irrationale. Et cum quaeritur de qua specie, dico quod esset una species nova, et non est aliqua talis in natura nisi forte, sicut dicunt aliqui, quod sunt quaedam animalia silvestria homini similia in figura."

53 Oresme's source for this bit of lore is unknown. While he discusses many marvels of nature in his well-known treatise, *De causis mirabilium*, homunculi are not among them.

54 Oresme mentions a fourth argument that could be used against his view that human beings are composed of two substantial forms, based on the authority of Augustine and the author of *De differentiae spiritus et animae* (Costa ben Luca), who hold that "one and the same soul is called by various names in keeping with its various activities and duties, "'intellective' while it is understanding, 'sensitive' while it is sensing, and so on" (QDA II.5, 152, 26-29: "una et eadem anima secundum diversa opera et officia variis nominibus appellata, et dum intelligit, vocatur intellectiva, dum sentit dicitur sensitiva, et ita de aliis"). But his response is merely to confirm that these philosophers held those opinions, not to refute them.

55 The original arguments are given at QDA II.5, 148, 89-95.

human beings have a plurality of two substantial forms. To the argument that a single subject cannot have more than one substantial form, Oresme replies that this is true of material forms, although a single subject can have one material form and another immaterial form, just as there can be several intelligences governing the same celestial sphere.⁵⁶ In the same way, although it is true that a living thing with multiple substantial forms would not make something one per se, this does not pose a problem in human beings, where “the sensitive material <soul> is disposed to the intellective [*sensitiva materialis disponit ad intellectivam*].”⁵⁷ By this Oresme presumably means that a human being derives its substantial nature and primary unity from the intellect, with the sensitive soul playing some as-yet-unspecified contributory role. Finally, would not a soul (the intellective) that is actually in a subject through another soul (the sensory) be an accident of the latter? Oresme again asserts human exceptionalism here: although this is true of material forms, when an immaterial form “is added to an actual being <or entity> [*adveniat enti in actu*],” it does not thereby become an accident of that entity. Whence a human being would have two substantial forms: an immaterial form (the intellective soul), and a material form, the latter of which is treated “in the same way as one would speak about the forms of brute animals.”⁵⁸

Oresme then turns to objections to the four positive arguments he gave earlier on behalf of his position.⁵⁹ First, if it is said that it is impossible for

56 QDA II.5, 155, 00-5. Oresme adds, “I would not posit <these multiple intelligences or forms> equally [*non aequae ponam*].”

57 *Ibid.*, 155, 6-7.

58 *Ibid.*, 155, 10-11: “unde de forma materiali hominis diceretur eodem modo sicut dictum est de formis brutorum.”

59 Not to put too fine a point on his own position, Oresme begins by stating that the opposing view “should be discussed with arguments that are against <it> not for the purpose of knowing but rather avoiding <its conclusions>.” (QDA II.5, 155, 12-13: “discurrendum est per rationes quae sunt contra non sciendae sed evadendae”).

matter (such as the human body) to be without a material form, this is denied, but not because the animal functions of the human body are somehow transferred to or taken over by the intellectual soul at the moment of divine ensoulment, the previous material form being somehow cancelled or annihilated; rather, an immaterial form “can supplement whatever the material form does [*potest supplere quidquid facit forma materialis*],”⁶⁰ or in other words, function right alongside it. This is possible because, as Oresme puts it, “the form is more distinct from the matter [*forma magis est distincta a materia*],” even though he acknowledges Aristotle would deny this!⁶¹ Second, if there is no bar to having two substantial forms, why wouldn’t the multiple animate functions of a human being be more plausibly attributed to multiple such forms, such as a form of bone, a form of flesh, and so on? Oresme does not exactly refute this possibility in his reply, but only reiterates that as an immaterial form, the intellect is able to bestow “different partial modes of being substantially [*diversa esse partialia substantialiter*]” by virtue of its definitive (as opposed to circumscriptive) presence in different parts of the body, taking on the mode of flesh in one part, the mode of bone in another, and so on.⁶² This seems to lead to there being multiple partial substantial forms in the same human body, but Oresme does not seem worried about that possibility. Likewise, he offers in response to the third objection the thought that form is extended in the human body by virtue of quantity, without needing another substantial form for its matter, and to the fourth objection that the human body does not need its own substantial form to be the subject of corruption at death, because it is sufficient to say that a (formless) cadaver is generated and

60 QDA II.5, 155, 17-18.

61 *Ibid.*, 155, 18-20.

62 *Ibid.*, 155, 21-25.

then corrupted, as in the case of the corruption of a horse, in which no such form is posited.

Continuing to undermine the plausibility of alterative views, Oresme next directs his attention to another set of arguments on behalf of the plurality of substantial forms in humans, this time taken from the beginning of Book II, Q. 5.⁶³ To the suggestion that we must posit many substantial forms in a living thing as long as we use its many animate “operations [*operationes*]” or activities to differentiate them, Oresme denies that every such activity should be attributed to a different form, presumably on the grounds that a soul’s primary activities subsume its secondary operations. Thus, there is a distinct sensitive soul, but not an auditory soul or an olfactory soul.⁶⁴ Likewise, there is no need to posit separate animal and equine souls in a horse to account for the fact that horses are the only animals that whinny, because there is a sense in which the capacity to whinny inheres in the sensory soul of a horse, without the latter being the formal cause of it, from which it follows that there is a “slight equivocation [*levis aequivocatio*]” in our use of the term.⁶⁵ To the argument (which we have seen above, in connection with Averroes) that there is no bar to multiple intelligences informing the same celestial sphere, Oresme concedes it, but holds that this is possible only for immaterial forms like intelligences; everything in the sublunary realm is limited to one material form per body.⁶⁶ Finally, in response to a fourth argument about multiplying forms by the soul’s activities, Oresme reiterates that we should think of these not as substantial forms but as “partial integral forms [*formae*

63 These are found at QDA II.5, 146-147, 22-42. Unlike the plurality arguments refuted above, these are not specifically associated with Averroes.

64 QDA II.5, 155, 31-34.

65 *Ibid.*, 156, 35-41.

66 *Ibid.*, 156, 42-43.

partiales integrales],” each of which may be considered part of the soul but not a soul unto itself.⁶⁷

In the final section of Q. 5, Oresme responds to nine arguments on behalf of the position that the intellectual and sensitive souls in a human being are distinct,⁶⁸ which is, as we have seen, his own position on the question. Why does he close by refuting his own position? Whether this testifies to his pedagogical thoroughness, making sure his student audience hears all views and arguments on the question in an even-handed way, or his ambivalence about the possibility of resolving it, is not easy to say. In any case, he says some things in these responses that muddy the waters if he really holds that human beings have two substantial forms, one material and one immaterial. First, to the argument that the sensitive and intellectual souls in a human being must be distinct insofar as the former but not the latter is “educated [*educta*]” or drawn out from matter, it is replied that “the human sensitive soul is immaterial because it is intellectual, and so it has a different nature than the forms of brute animals [*anima sensitiva hominis est immaterialis, quia est intellectiva. Et ideo est alterius rationis a formis brutorum*].” Again, this is not Oresme’s position. It is, however, the position of his Parisian contemporary, John Buridan, who finds that in order to preserve the metaphysical unity of the human substance, he must make the human sensitive soul immaterial, like the intellectual soul, despite its evident and obvious organic similarities to the material souls of brute animals and their virtually identical operations,

⁶⁷ *Ibid.*, 156, 44-48.

⁶⁸ The original arguments are found at QDA II.5, 147-148, 43-88. In conclusion, Oresme says that there are also many arguments and authorities for the plurality of (substantial) forms, but that these nine arguments will suffice for the plurality of souls in a human being.

such as vision, and hearing.⁶⁹ Continuing on behalf of Buridan's position, Oresme next distinguishes between the sense organs and their animating power, pointing out that the human soul does not need to be material just because it operates through material organs indirectly, in thought and volition, or directly, in vision, hearing, nutrition, and so on.⁷⁰ Likewise, no distinct sensitive soul needs to be posited as the subject of human corruption because strictly speaking, there is no corruption there, but only the separation of the human soul from its corporeal matter, both of which continue on, like a line divided into halves.⁷¹ Furthermore, we should not assume that because the vegetative and sensitive souls of a human embryo play an essential role in preparing the body for the arrival of the intellectual soul, they are not thereby corrupted. That is because the matter of the foetus has no form of its own prior to the introduction of the intellectual soul, but only "part of the soul of its mother, of which it is <still> a part [*partem de anima ipsius matris cuius pars est*]," which form is then corrupted with the arrival of a new form, "as nature intended [*ita est ordo naturae*]."⁷² Nor, fifth, does the fact that the same individual can have mixed and opposing desires with respect to a certain course of action argue for multiple souls in a human being, because these are felt with respect to different objects, as in Aristotle's example of the merchant

69 QDA II.5, 156, 49-51. In the final version of his own *De anima* commentary, Buridan holds that both the intellectual and sensitive souls are unextended because they are, in fact, the same (see BURIDAN 2020 QDA III.17, pars. 12; 16); he even takes the human vegetative capacity to be unextended because it belongs to the same immaterial form that is the human soul. For this reason, he asserts, "there is a different mode of nutrition in humans than there is in other living things" (BURIDAN 2020 QDA III.17, par. 18: "est in homine alius modus nutritionis quam in aliis viventibus est"). For discussion of Buridan's position, see ZUPKO 2008.

70 *Ibid.*, 156, 52-56.

71 *Ibid.*, 156, 57-59. Needless to say, this is a weak analogy, given that the separated intellectual soul is immaterial.

72 *Ibid.*, 156, 63-65; 69.

who is happy about saving himself in a storm while also feeling regret at the cost of throwing his cargo overboard.⁷³ Nor, sixth, does the assumption of a single intellective soul as human substantial form render nutrition incoherent, because the immaterial soul comes to be in the matter of the food we consume wholly in each part, so the volume of matter in the body can increase without also ‘growing’ its substantial form.⁷⁴ Next, it is also not true that we cannot make sense of the contribution of human parents in the generation of their offspring short of providing them with (material) substantial form. Rather, what the parents do is prepare the matter of the embryo to receive the intellective soul, which is a much nobler form, and which makes their material contribution “better and nobler [*melius et nobilius*]” than the generation of a single brute animal soul.⁷⁵ One might also think that the corruption of a human being produces a new form, “the form of a cadaver [*forma cadaveris*].” Oresme grants this on behalf of the single substantial form view, but denies it is problematic because the human form and cadaver form would exist in succession, not at the same time. What agency generates the cadaver form? Not, as one might think, fatal blows or other such proximate causes, but the order of nature and celestial bodies.⁷⁶ Finally, in reply to the argument that oppositional freedom is a rational power belonging to the intellect alone and not to the senses (so that the sensitive soul must therefore be distinct), we reply by ascribing the freedom to choose between opposites to the human sensitive soul as well, although Oresme adds the qualification that this does not include the activities of the

⁷³ *Ibid.*, 157, 71-76. Cf. *Eth. Nicom.* III.1, 1110a10.

⁷⁴ *Ibid.*, 157, 77-80.

⁷⁵ *Ibid.*, 157, 81-88. Oresme adds that in any case, brute animals can be said to produce substance in the generation of offspring only by virtue of a superior cause (God and the sun, presumably).

⁷⁶ *Ibid.*, 157, 89-95.

sense organs, but only “other activities which are said to be voluntary simpliciter [*alias operationes quae dicuntur voluntariae simpliciter*]” (he does not say what these are).⁷⁷ Q. 5 of Book II ends at that point.

III. Back to the Intellect

Returning to his replies to the initial arguments in Book III, Q. 6, Oresme continues to define his own position in the broader terms sketched at the beginning of Q. 3: being immaterial, the human intellective soul is not strictly speaking generated or educed from the potency of matter; it is eternal not in the sense that it has always existed (*a parte ante*), because it is created, but in the sense that once created, it will always exist (*a parte post*); likewise, if (as Oresme assumes) the universe was created in time, there would not be infinitely many human intellects now, although this cannot be demonstrated; similarly, nothing beneath the sphere of the moon would be everlasting as long as all such beings are composed of material elements, but this is not so where the human soul is concerned; sixth, although it seems to follow from the dependency of human intellectual cognition on the senses, whether directly or indirectly, that we do not remember after death (since we would then be without the organ of memory, which Aristotle locates in the body), the truth of the matter is that we can, as Plato and other philosophers assumed; finally, Oresme makes the rather extreme claim that Averroes “lies [*mentitur*]” when he says that the intellect is composite and that nothing composite is eternal, because there is a sense in which the composite of possible and agent intellects is corruptible and a sense in which it is not (Oresme does not specify these senses, but perhaps he means that Averroes’ agent intellect continues to

⁷⁷ *Ibid.*, 157, 96-01.

exist even when it is not combined with the possible in intellect in an occurrent act of thinking.)

The last question in Oresme's mini-treatise, Q. 7, is for the most part directed against Averroes' monopsychism – "Is there a single intellect for all human beings [*Utrum in omnibus hominibus sit unicus intellectus*]?" – with references to arguments made in earlier questions, now reframed so as to reduce Averroes' view to absurdity.⁷⁸ Oresme also takes the opportunity in Q. 7 to summarize other views he has already discussed, such as that of Alexander of Aphrodisias and the truth of the faith, as well as one he hasn't: the opinion of Plato, with which Oresme was acquainted through Neoplatonic sources such as Augustine and Macrobius.⁷⁹ According to this view, intellects are co-eternal with the world and intellectualive souls are finite in number, corresponding to the number of the stars; at death they return to the stars, where some are punished and others rewarded according to their merits; after many centuries (*saecula*), they are returned to bodies and the whole cycle begins again. Incredibly, Oresme says that this was also Aristotle's opinion, as well as (for good measure) Virgil's.⁸⁰ Pythagoras is said to have a similar opinion, except that he believes that the souls of humans enter into brute animal bodies to be

⁷⁸ There is also a moral/theological argument for the soul's immortality, which looks oddly-placed in a treatise on the soul's metaphysical structure and which seems to be included in Q. 7 because it does not fit anywhere else. See QDA III.7, 358, 40-44: "nisi anima humana maneret post mortem, non videtur quod mundus esset bene ordinatus nec quod esset perfecta iustitia, propter hoc quod aliqua mala remanerent impunita et aliqua bona inremunerata; quod videtur repugnare divinae iustitiae et ordinationi optima ipsius universi." ("unless the human soul remains after death, it does not seem that the world would be well-ordered or that there would be perfect justice, because some evil would remain unpunished and some good unrewarded, and this seems to impugn divine justice and the optimal order of the universe itself").

⁷⁹ QDA III.7, 363-364, 52-83.

⁸⁰ *Ibid.*, 364, 67.

incarcerated there.⁸¹ Finally, Oresme evaluates this whirl of authorities on the metaphysics of the human soul.⁸² He says that the first opinion, that of Averroes, “does not have the appearance <of truth> [*nullam habet apparentiam*],” as is shown by his previous arguments against it. The second opinion, that of Alexander of Aphrodisias, is said to be more plausible, although “it does not appear to be true in the natural light of reason, i.e., to the wise and when we are speaking naturally [*non apparet vera in lumine naturali, et hoc <est> sapientibus et naturaliter loquendo*].” If we assume the eternity of the world, the third opinion, that of Plato, is the most plausible of all, so much so that “the greatest philosophers,” including Aristotle, “followed him in it [*maximi philosophi quoad hoc sunt ipsum secuti*].” But if we assume that the world had a beginning and will have an end, then “the opinion of the faith is more plausible naturally <speaking> [*opinio fidei est magis probabilis naturaliter*].”⁸³

IV. Conclusion

As permitted by the commentary genre, Oresme simply moves on to the next question at the end of Q. 7, without decisively resolving the problem of whether there are two substantial forms in a human being or just one. What we are left with is his assertion that he subscribes to the position of the truth and the faith, and that he prefers the view that there are two substantial forms in a human being over the more conventional view that there is just

81 *Ibid.*, 364, 68-70.

82 *Ibid.*, 365, 84-99.

83 Q. 7 closes with four *pro forma* replies to the rather specious arguments for Averroes' position at the beginning of the question (QDA III.7, 356, 00-16), but these simply reiterate the opinion of the truth and the faith, which Oresme has already sketched.

one.

The metaphysical consequences of his position come into better relief when we compare his treatment of the sensitive soul with what we find in Buridan. Where non-human or brute animals are concerned, Buridan argues that there is only one soul or substantial form, and that it is possessed of sensitive and vegetative capacities.⁸⁴ Oresme agrees.⁸⁵ But if we are talking about the sensitive capacities of human beings, Buridan attributes these to a single immaterial, unextended soul that is primarily intellective but also possessed of sensitive and vegetative capacities (which presumably go unexercised when the human intellect is separated from its body).⁸⁶ Oresme disagrees, countering that the intellective and sensitive souls are distinct and heterogeneous substantial forms, because even if we assume that the intellect is immaterial, a material and extended sensitive soul better accounts for animate functions in the human body, which take place in powers such as vision and hearing – powers that operate through material organs.⁸⁷ Buridan embraces heterogeneity at the level of the soul's operations, yielding strange results, such as that human vision must be specifically different from non-human animal vision because the former is an immaterial power and the latter material.⁸⁸ But Oresme's position has strangeness in other places, as in his willing-

84 BURIDAN 2020 *QDA* II.4, par. 17: "Non obstantibus istis, ego credo oppositum, scilicet quod in equo unica sit anima et quod non sit in eo anima vegetativa distincta a sensitiva nec sensitiva distincta a vegetativa. Et verum est quod generaliter improbare istam multiplicationem formarum secundum multiplicationem praedicatorum quidditativorum pertinet ad septem Metaphysicae. Ideo, hoc supponendo, nihil dicam hic nisi quod specialiter pertinet ad animas et animata."

85 *QDA* II.5, 151, 64-65: "in eodem, sicut in equo, non sunt plures animae totales, quarum quaelibet informet totum."

86 See n. 69 above.

87 See *QDA* III.6, 355, 58-60 and the discussion in section II above.

88 Again, for discussion, see ZUPKO 2008.

ness to countenance the existence of forest homunculi, i.e., living creatures that look just like us, with sensitive souls just like ours, but which lack any intellectual capacity. Also, when he marks it as an advantage of his dualist position that it would provide a formal subject for the corruption of the human body at death (as opposed to the standard Aristotelian view that a cadaver is human body only homonymously, or not really a human at all),⁸⁹ he does not seem to realize that non-human animals would still have their corruption defined in terms of the departure of their sensitive souls, so that the deaths of a horse and a human would proceed heterogeneously as well. There might be additional, theological, problems concerned with the resurrection of the body if the human sensitive soul must somehow be recovered or regenerated for a person's glorified body to have working senses. But because this is a *De anima* and not a *Sentences* commentary, Oresme does not consider those problems here. What is true is that he embraces dualism in the case of human souls for good, Aristotelian reasons, and because the alternative explanations, which place the subject and source of the soul's material or bodily capacities in an immaterial substance, seem to him less natural in view of his knowledge of how those capacities work.

JACK ZUPKO

UNIVERSITY OF ALBERTA

⁸⁹ See *QDA* II.5, 154, 71-75 and the discussion in section II above.

BIBLIOGRAPHY

Sources

AVERROES 1986 *De sub. orbis* = AVERROES, *De substantia orbis*, ed. ARTHUR HYMAN, Cambridge-Jerusalem, Medieval Academy of America-Israel Academy of Sciences and Humanities 1986.

AVERROES 2003 *In De caelo* = AVERROES, *Long Commentary on De caelo et mundo. Latin Translation by Michael Scot*, eds. FRANCIS J. CARMODY, RUDIGER ARNZEN, 2 vols., Leuven, Peeters 2003.

BURIDAN 2020 QDA = JOHN BURIDAN, *Questions on Aristotle's De anima (Third and Final Lecture)/Johanni Buridani Quaestiones in libros De anima Aristotelis secundum tertiam sive ultimam lecturam, lib. I-III*, edited and translated, with an introduction, by GYULA KLIMA, PETER HARTMAN, PETER SOBOL, JACK ZUPKO, Cham, Springer, forthcoming in 2020.

ORESME 1995 QDA = NICOLAI ORESME *Expositio et Quaestiones in Aristotelis De Anima*, ed. BENOÎT PATAR, Louvain-la-Neuve-Louvain-Paris, Éditions de l'Institut Supérieur de Philosophie-Éditions Peeters 1995.

Studies

CAROTI 2000 = STEFANO CAROTI, «Nicole Oresme et les *modi rerum*», *Oriens – Occidens. Sciences, Mathématiques et Philosophie de l'Antiquité à l'Âge classique* 3 (2000), 115-144.

CAROTI 2001 = STEFANO CAROTI, «Time and *modi rerum* in Nicole Oresme's *Physics* Commentary», in PASQUALE PORRO (ed.), *The Medieval Concept of Time. Studies on the Scholastic Debate and its Reception in Early Modern Philosophy*, Leiden-Boston-Köln, Brill 2001, pp. 319-349.

CAROTI 2004 = STEFANO CAROTI, «Les *modi rerum* ... encore une fois. Une source possible de Nicole Oresme: le commentaire sur le livre 1^{er}1^{er} des *Sentences* de Jean de Mirecourt», in STEFANO CAROTI, JEAN CELEYRETTE (eds.), *Quia inter doctores est magna dissensio. Les débats de philosophie naturelle à Paris au XIV^e siècle*, Firenze, Olschki, 2004, pp. 195-222.

MARSHALL 1980 = PETER C. MARSHALL, *Nicholas Oresme's Questiones super libros Aristotelis De anima: A Critical Edition with Introduction and Commentary*, Ph.D. Dissertation, Cornell University, Ithaca, N.Y., 1980.

ZUPKO 2008 = JACK ZUPKO, «Horse Sense and Human Sense: The Heterogeneity of Sense Perception in Buridan's Philosophical Psychology», in SIMO KNUUTTILA, PEKKA KÄRKKÄINEN (eds.), *Theories of Perception in Medieval and Early Modern Philosophy*, Dordrecht, Springer 2008, pp. 171-186 (Studies in the History of the Philosophy of Mind, 6).