Avicenna on common natures and the ground of the categories

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Abstract: A main function of common natures in Avicenna's metaphysics is supposed to be providing an objective ground for the categories. Thus, it is commonly assumed that in his metaphysics things are objectively divided into the categories into which they are because members of each category share the same common nature. However, common natures cannot perform the function unless they are shared, in a real sense of the word, by the members of the respective categories, and it is not clear at all in what real sense Avicenna took common natures to be shared by them. On the one hand, he rejected Platonic and Aristotelian realisms about common natures, the two standard accounts of how common natures are shared by their instances. On the other hand, it is unclear that his alternative account(s) of common natures renders them genuinely common. The primary goal of this paper is to examine whether Avicenna's common natures can provide an objective ground for the categories. It considers various interpretations of Avicenna's account and argues that they are either incorrect interpretations of Avicenna or do not render common natures genuinely common. It concludes with proposing to look elsewhere in Avicenna's system to find the objective ground.

1. The problem

In our scientific as well as everyday discourse, we frequently categorize things. Some things are animate, while others are inanimate. Some things are sapient, while others are not. Some things are blue, some are green, some are red, and so on. According to some philosophers, all categorizations are subjective. On such subjectivist views, there is nothing about the external world which explains our actual categorizations; the categorizations are, rather, mere projections of our mind or language onto the world. In contrast, working in the Aristotelian framework, Avicenna maintained that at least some categorizations have their root in objective reality, that they are not

mere projections of our mind or language onto the world. In his view, even if no human mind or language existed, things would still belong to at least some of the categories into which they are actually classified. More specifically, he thought (like Aristotle) that, at the most general level, (contingent)[1] beings fall, independent of our mind and language, into ten categories: substance, quantity, quality, relation, somewhere, sometime, being in a position, having, acting, and being acted upon (Avicenna, *Categories* II.1, 57, lines 15–20; *Metaphysics* of *Philosophy for ʿAlāʾ-ad-Dawla* X, 36, lines 10–12). Each of these categories is in turn divided into its sub-categories, and its sub-categories are further divided into lower sub-categories until we reach the lowest divisions, namely, species. Of course, Avicenna did not claim certainty with respect to these divisions. In his view, it is an empirical matter (*al-ʾistiqṣāʾ*) what the real categories are. So, although he took his divisions to be the most empirically supported among the available alternatives, he left it open that someday new empirical evidence might indicate the correct divisions to be otherwise (Avicenna, *Categories* I.1, 6, line 15; II.5, 86, lines 13–17). At any rate, he believed that there is a *correct* categorization of beings, which, to use Plato's phrase, carves the world at its joints (Plato, *Phaedrus*, 265e), and so the categorization and its categories are objective.[2]

But how does Avicenna explain the objectivity of a categorization and its categories? What, in his view, makes it the case that beings objectively fall into the categories into which they fall, and not into other categories? The first and most salient response that presents itself is *common natures* (*al-māhīyyāt al-mushtarika*). According to this response, members of a category objectively fall into one category because they share a common nature. All individual humans, for example, fall into one category, the category of human being, because they share rational animality as their common nature (Avicenna, *De Anima* II.2, 58, lines 10–11). Or all particular accidents of, say, whiteness fall into one category, the category of whiteness, because they share *being the colour that disperses the vision (al-lawn al-mufarriq li-l-baṣar)* as their common nature (Avicenna, *Categories* I.3, 26, line 13).

For this explanation to work, common natures must be shared in a real sense of the word by their instances. For if common natures are shared, say, merely in the sense that mental concepts, or language expressions, of them apply to all of their instances, then the categories would turn out mere projections of our mind or language onto the world. However, it is not clear at all in what real sense Avicenna takes common natures to be shared by their instances. On the one hand, he repeatedly and emphatically rejects both Platonic and Aristotelian realisms about common natures, the

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[1]According to Avicenna, the Necessary Being (i.e. God) transcends the categories. For an analysis of Avicenna's notion of Necessary Being, see M. Morvarid, "Varieties of Avicennian Arguments", Sections 1–2.
[2]Note that I am not using 'categories' in a theory-laden way – e.g. as laden by its Aristotelian connotations – but rather simply in the sense of the divisions into which things are classified.

two main accounts of how common natures are shared by their instances. On the other hand, it is not clear that his alternative account(s) of common natures would render common natures genuinely common.

One grave difficulty with his alternative account of common natures is its obscurity and even inconsistency; he says various things about common natures, which suggest opposing views about them and their ontological status (more on this in Section 7). This obscurity is perhaps the main reason why his account of common natures received radically different interpretations in later medieval philosophers. Thus, some medieval philosophers, such as Henry of Ghent and Duns Scotus, had realist interpretations of Avicenna's common natures, while others, such as William Ockham, interpreted them in a purely conceptualist way. Some of these interpretations had obscurities of themselves, and so they were in turn interpreted in different ways. This situation has resulted in a wide range of interpretations of Avicenna's common natures and their ontological status.

The primary goal of this paper is to examine whether Avicenna's common natures can perform the function designated for them, namely, explaining the objectivity of the categories. I begin, in Sections 2 and 3, with reviewing Avicenna's arguments against Platonic and Aristotelian accounts of common natures. In Sections 4–8, I examine different interpretations of Avicenna's account of common natures and argue that either they are not correct interpretations of Avicenna's view, or they do not render common natures genuinely common. I conclude, in Section 9, with proposing to look elsewhere in Avicenna's system to find the ground of the objectivity of the categories. I identify two ideas in his system that might provide the ground. The first one is his conception of the Active Intellect (al-ʿaql al-faʿāl) and its relation to concrete individuals and human minds. The second one is his idea that there is an objective resemblance among the particular natures that exist in individuals of the same kind. The first idea suggests a type of divine conceptualism, while the second idea implies a version of resemblance nominalism.

Before starting our discussion, some terminological notes are in order. As you probably have noticed, I attribute common natures to both particular substances and particular accidents – what are nowadays called 'tropes'. In some traditions, the expression 'common nature' normally indicates universals in the category of substance, and it is rarely, if at all, used to refer to universals in accidental categories (see, e.g. Brower, "Aquinas on Universals").[3] However, I use 'nature' interchangeably with 'quiddity', 'essence', and other synonymous terms. According to Avicenna, not only do particular substances have common quiddities, but particular accidents, or tropes, also have common quiddities. For example, the common quiddity of particular

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whitenesses that exist in white objects is *colour that disperses the vision* (Avicenna, *Categories* I.3, 26, line 13), or the common quiddity of particular triangle shapes that exist in triangular objects is *figure bounded by three sides* (*Logic* of *Pointers* I.5, 139). Hence my attribution of common natures to both particular substances and particular accidents. Relatedly, although the focus of my discussion will be on common natures of entities in the category of substance, what I will say will apply, *mutatis mutandis*, to common natures of entities in the categories of accident, too.

Also note that different authors use 'universal', 'realism', 'nominalism', and their cognates in different ways, and the verbal disagreements sometimes lead to confusions and misunderstandings. So, it is prudent to fix their meaning from the outset. In this paper, by 'universal' I mean an extramental entity that is shared by multiple individuals in the following particular way: it is numerically one and the same across the individuals. This definition of 'universal' is intended to be silent on the ontological concreteness or abstractness of universals. Thus, Platonic Forms, which are outside the concrete world, are universals just as Aristotelian universals, which are parts of the concrete world, are. For both of them are shared in the foregoing way. When talking about universals, I use 'realism' to refer to the view that there are universals in the extramental world, and I use 'nominalism' to refer to the view that there are no such entities in the extramental world. On this usage, conceptualism is a version of nominalism. On the other hand, when talking about common natures, I use 'realism' to refer to the view that common natures are in some real sense common among their individuals, and I use 'nominalism' to refer to the opposite view. On this usage, one way to be a realist about common natures is to hold that they are universals (i.e. numerically one and the same across their individuals), but it is not the only way. For there might be other ways of being genuinely common than being a universal (more on this in Sections 6 and 7).

2. Avicenna against Platonic realism

Plato held that members of a category fall into one category because they share the same nature or essence (Plato, *Meno* 72c-d; *Phaedo* 74a-5d). Furthermore, he held that the essence is *separate* from its concrete instances (Plato, *Phaedo* 75c11–d2, 100b6–7; *Republic* 476b10, 480a11). He called the separate essence '*idea*' or '*eidos*', which are usually translated into English respectively as 'Idea' or 'Form'.[4] Taking the Forms to be separate from the concrete world, Plato's view is sometimes called *transcendent* realism.

Plato attributed different functions to the Forms. As mentioned above, he claimed that the Forms are the shared essences of individuals. But he also

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[4]Following the common practice, I capitalize 'Form' to indicate that it refers to Platonic *eidos.*

claimed – at least on one interpretation – that the Forms are the perfect instances of their kinds (Plato, *Phaedo* 74–6, 100c-d), and that they are causes of the imperfect instances of the visible world (Plato, *Phaedo* 100b-3a, 103c-5c; *Euthyphro* 5d, 6d-e. See also Aristotle, *Metaphysics* M 5 1080a1). In his criticism of Plato's theory of Forms, Avicenna raised arguments against all of the foregoing claims. In this paper, I focus on his arguments against the first claim, as his arguments against the latter two are not pertinent to the topic of the paper.[5]

Avicenna's arguments against the Platonic account of common natures are of two types. One type of arguments only purports to show that the Platonist's arguments do not work. This type of arguments does not argue that Platonism is false, but rather merely argue that the Platonist is not justified in their belief. The other type of arguments purports to show that Platonism is false, thereby providing justification for the negation of Platonism. In what follows, I only review an argument of the latter type, which has received little attention in modern Avicenna scholarship.[6]

The argument is a semantic argument, and it is raised in the following oft-neglected passage:

> [Text 1] If there were a separable animal here, as they [i.e. Platonists] believe, this would not be the animal we are seeking and discussing. For we seek "animal" that is predicated of many, in that each of the many is identical with it (*huwa huwa*). As for the separate [thing] that is not predicated of these, since none of them is identical with it, [this is something] we have no need for in what we are seeking.
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> (Avicenna, *Metaphysics of Healing* V.1, 156, lines 2–5)
> [Marmura's translation; slightly modified]

Here Avicenna argues from a semantic view about predication against the ontological separation of common natures. According to the semantic view, what is truly predicated of an individual cannot be separate from the individual in the way that Platonic Forms are. Either it inheres in the individual, such as when we predicate an accident of a substance, or it has an even more intimate relation with the individual than inherence, such as when we predicate a common nature of its individual.[7]

In fact, Avicenna uses a strong term to describe what predication of a common nature of its individuals signifies: 'identical' (*huwa huwa*). Although the semantic view that essential predication signifies identity between

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[5]For Avicenna's arguments against the latter two claims, see the *Metaphysics* of *Healing* VII.2, 247–9 and VII.3. See also Marmura, "Avicenna's Critique of Platonists"; Uluç, "Al-Suhrawardī's Critique of Ibn Sīnā", sec. 1; Zarepour, "Avecinna against Mathematical Platonism".

[6]For Avicenna's arguments of the former type, see the *Metaphysics* of *Healing* VII.2, 247–9. See also Marmura, "Avicenna's Critique of Platonists"; Zarepour, "Avicenna against Mathematical Platonism". For a survey and analysis of Avicenna's two types of anti-Platonist arguments, see H. Morvarid, "Avicenna on Essence", Chapter 1.

[7]For Avicenna's theory of predication and its various divisions, see *Categories* I.3, 18–27.

(the entities signified by) subject and predicate might look strange to the contemporary philosopher, it was quite common in the Aristotelian tradition (see, for instance, Aristotle, *Categories* 5, 3b10–18; Post Anal. I, 24, 85a31, 83a24; Owens, "Common Nature", 6; King "Duns Scotus on the Common Nature and the Individual Differentia" 65; Tweedale, "Avicenna Latinus", 125, ft. 11; Benevich, "Avicennian essentialism", 15). I leave it open whether what Avicenna, and other philosophers in the Aristotelian tradition, meant by 'identity' in this context is the same relation that we nowadays mean by the term. What is important for our purposes is that whatever relation Avicenna meant by the term, the relation is an intimate one which does not hold between individuals and separate Platonic Forms. Using the relation of identity, we may articulate the semantic argument as follows:

(1) Common natures are truly predicated of individuals.
(2) The predication signifies identity between (the entities signified by) subject and predicate.
(3) Therefore, common natures are identical with their individuals.
(4) Platonic Forms are not identical with their individuals.
(5) Therefore, Platonic Forms are not common natures.

3. Avicenna against Aristotelian realism

According to Aristotelian realism, members of a category fall into one category because there is a concrete, universal nature in all of them. For example, all individual humans fall into one category, the category of human being, because there is a numerically one and the same nature in all of them. Although the view is called 'Aristotelian realism' (see, for instance, Loux and Crisp, *Metaphysics; A Contemporary Introduction*, 40), it is a matter of dispute whether Aristotle upheld such a view. For instance, Muslim Peripatetics, including Avicenna, did not have such an interpretation of Aristotle. Taking universal natures to be part of the concrete world, the view is also called *immanent* realism.

As we saw in the preceding section, Avicenna rejected the view that common natures are transcendent, Platonic entities. So, he agreed with the Aristotelian realist that common natures are within the concrete individuals. But he disagreed with the Aristotelian realist that the concrete natures are universals, namely, numerically one and the same across their individuals. Here is Avicenna's main argument against the universality of immanent natures:

> [Text 2] It is not possible for one specific *maʿnā* [lit., meaning] to exist in many [things]. For, if the humanity in ʿAmr ([taken as an entity] by itself, not in the sense of [a] definition) exists in Zayd, then whatever occurs to this humanity

> in Zayd would necessarily occur to it when in ʿAmr, … From [the supposition that a nature exists as an entity in many], it then necessarily follows that contraries would have combined in one entity (*dhāt*) … No one with a sound temperament can rationally perceive that one humanity is embraced by the accidents of ʿAmr and that this very same [humanity] is embraced by the accidents of Zayd.
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> (Avicenna, *Metaphysics of Healing* V.2, 158–9)
> [Marmura's translation; slightly modified][8]

Before unpacking the argument, two points about the text and its translation are in order. First, by 'maʿnā' on the first line, Avicenna means nature. This should be obvious from the example that immediately follows it, namely, humanity. *Maʿnā* – just like *nature* and other cognate notions – is one of those multifaceted notions in Avicenna's philosophy that links language, the mind, the physical world, and the divine realm with one another. Exploring different facets of *maʿnā* lies beyond the scope of the present paper. It suffices for our purposes to bear in mind that in the above passage, 'maʿnā' refers to nature.[9] Second, Marmura has translated 'dhāt' on line 6 as 'essence', which can be misleading here. 'Essence' means quiddity or nature. Whereas 'dhāt' is used in Avicenna's texts in, at least, two senses. In one sense, it means quiddity or nature. But in another sense, it simply means entity or existent (see, e.g. *Metaphysics* of *Salvation* II.4, 263, line 19; 264, line 4; *De Anima* V.4, 228, line 12). On line 6, Avicenna uses 'dhāt' in the latter sense since what he wants to say is that if ʿAmr's humanity and Zayd's humanity were numerically one and the same, then one entity (i.e. their shared humanity) would have contrary properties. So, I have replaced Marmura's 'essence' on line 6 with 'entity'.

In the passage, Avicenna argues that if the nature that exists in a concrete individual is numerically identical with the natures that exist in other individuals of the same kind, then given that the individuals have incompatible properties the nature would have incompatible properties. The consequent is obviously false. Therefore, the antecedent is false, too. For instance, individual humans have incompatible properties. Some are knowledgeable, while some others are ignorant. Some are witty, while some others are dull. So, if the humanity that exists in them were numerically one and the same, then the humanity would be both knowledgeable and ignorant, and both witty and dull. Nothing can be both knowledgeable and ignorant, and both witty and dull. Therefore, the humanity that exists in different individual

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[8]For similar formulations of the same argument, see *Metaphysics of Salvation* I.18, 257, lines 3–5; *Metaphysics of Philosophy for ʿAlāʾ ad-Dawla* XII, 41, lines 2–9; *Metaphysics* of *Springs of Wisdom* V, 56; *Metaphysics* of *Guidance* I.11, 248–9.

[9]For the notion of *maʿnā* in Avicenna, see Mousavian, "Avicenna on the Semantics of maʿnā". For a discussion of the notion of *maʿnā* with respect to Avicenna's theory of essence, see Janos, *Avicenna on Pure Quiddity*, Chapter II, 1.3 (pre-print pagination). For a helpful bibliographical information on the notion of *maʿnā* in Islamic philosophy in general, and Avicenna in particular, see Janos, *Avicenna on Pure Quiddity*, chapter II, 1.3, ft. 272.

humans is not numerically one and the same, which is to say that it is not a universal.

At first glance, it might seem puzzling why Avicenna thinks that whatever occurs to an individual occurs to the nature that exists in the individual, too. Why should we think that if Zayd is knowledgeable then his humanity is knowledgeable, too? To be sure, this is not how contemporary realists – of both Platonist and Aristotelian stripes – view things. For them, properties that occur to an individual human do not thereby occur to their humanity. It should be obvious why the Platonist realist should think in this way. Being outside individuals, abstract humanity cannot be the subject of properties that occur to them. But even the Aristotelian realist, who takes humanity to reside in the individual, does not hold that properties occurring to an individual human thereby occur to the humanity inside them.[10] So, why does Avicenna think that any property that occurs to an individual human occurs to their humanity, too?

The answer becomes clear once we note that for Avicenna, the nature of an individual is either identical with the individual or constitutes the core part of the individual. Sometimes he says that "the nature of each thing is its form" (*Physics* of *Healing* I.6, 46, lines 10–11), and sometimes he suggests that the nature of a thing is the combination of its matter and form.[11] If the nature of an individual is the hylomorphic composite of its matter and form, then the nature will be identical with the individual and will be the subject of every accident that occurs to the individual. But even if the nature of an individual is only the form of the hylomorphic composite, then, given the close union between matter and form, the nature will still be the subject of accidents that occur to the composite or to the matter of the composite.[12] Interestingly, one of the terms that Avicenna used for nature, i.e. *dhāt*, meant 'possessor' in ordinary language. The lexical background corroborates that the nature of an individual was regarded as the underlying subject which possesses the individual's accidents. Thus, the relation between an individual and

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[10]For contemporary Aristotelian realism, see Armstrong, *Universals: An Opinionated Introduction*, 75–82.
[11]In the *Metaphysics* of the *Healing* V.3 (162–8), Avicenna says that the difference between a genus and the corresponding matter is merely in consideration. For example, if we consider animality as a complete, determined entity, then it is matter. If, on the other hand, we consider it as an incomplete, determinable thing, which can be determined as rational animal or neighing animal, then it is genus (*Metaphysics* of *Healing* V.3, 164, lines 5–11). He applies the same analysis to the relationship between a difference and the corresponding form (*Metaphysics* of the *Healing* V.3, 164, lines 12–15). Coupling this analysis of genus-matter relation and difference-form relation with Avicenna's idea that the quiddity, or nature, of an individual is the combination of its genus and form, we may conclude that for him the nature of an individual is the hylomorphic composite of its matter and its form.
[12]In the *Physics* of the *Healing* IV.13 (500–1), Avicenna says that the form of a body is the subject of (spatial as well as non-spatial) motions that occur to its matter. Thus, "if the soul is a certain form that resides in the matter of the body, then, when the body happens to undergo accidental motion, the soul accidentally follows. The same also holds for the rest of the changes that happen to that part alone in which the soul resides" (*Physics* of *Healing* IV.13, 501, lines 5–7) On the union of form and matter, see also *Metaphysics* of *Healing* V.7, 182, lines 10–13.

the nature existing in the individual is intimate enough to make the following conditional true:

for all individuals x, and for all properties F, if x has F, then x's nature has F.

Assuming such an intimate relation between an individual and its nature, we may articulate Avicenna's argument as follows:

(1) For all individuals x, and for all properties F, if x has F, then x's nature has F.
(2) Different individuals of the same kind have contrary properties.
(3) Therefore, the natures existing in the individuals have contrary properties.
(4) Numerically one and the same entity cannot have contrary properties
(5) Therefore, the natures existing in the individuals of the same kind are not numerically one and the same.

Let me summarize the discussion so far. While the Platonic realist regards natures as residing in an abstract realm, the Aristotelian realist takes them to inhabit the concrete world. Avicenna sided with the Aristotelian realist on the concreteness of natures. However, Avicenna disagreed with the Aristotelian realist on the universality of concrete natures: the Aristotelian realist takes the concrete natures to be universals, whereas Avicenna rejected their universality. Thus, on Avicenna's view, there is no numerically one and the same nature – whether transcendent or concrete – that is shared by instances. Rather, there are numerically as many natures as instances, each nature belonging to (or rather, identical with) one instance. As Avicenna sometimes put it, the relation of a common nature to its instances is not like the relation of one father to his many sons; rather, it is like the relation of many fathers to their sons (Avicenna, *Metaphysics of Healing* VII.2, 247, line 19; *Metaphysics of Philosophy for ʿAlāʾ ad-Dawla* XII, 40, line 1).

But if natures are as particular as their instances, then what is common among the instances? If there are numerically as many humanities as individual humans, then how can humanity be shared, in a real sense of the word, by individual humans? In the following sections, I review various attempts at answering this question, and I argue that they are wanting.

4. Common nature as definitionally common

As we saw in the last section, Avicenna rejects that the humanity existing in Zayd is numerically one and the same as the humanity existing in ʿAmr; in his view, the humanities are as particular as the human individuals. On the other hand, he admits that the particular humanities are one and the same in some sense (*Metaphysics* of *Healing* V.1, 155–6; *Metaphysics* of *Pointers and*

Reminders IV.1, 9; *Notes*, 58; *Letter*, 79–83). In some places, he explicates the oneness as *definitional* oneness or oneness in *definition*: "I say that the meaning of the existing animalities' being one is that they are one in definition (*wāḥidan bi l-ḥadd*)" (*Letter*, 83, lines 9–10; see also *Physics* of *Salvation* VI.9, 208, line 2; *Metaphysics* of *Healing* VII.2, 247, line 14; *De Anima* II.2, 58, line 11). So, at least in these places, Avicenna suggests that the objectivity of the categories is to be explained in terms of the definitional oneness of the particular natures. On this account, members of a category fall into one category because their particular natures are definitionally one.

But what does it mean to say that two things are definitionally one? Avicenna would probably respond that two things are definitionally one if and only if they have one definition (*ḥadd*). So, the question becomes 'What is a definition?' Avicenna has offered two nearly equivalent answers. According to one answer, "The definition is a phrase signifying the quiddity of a thing" (The *Logic* of *Pointers* II.7, 61, line 10). According to the other answer, "Every definition is an intellectual conception where it would be true to predicate it of the thing defined" (*Metaphysics* of *Healing* V.8, 189, line 10). Thus, a definition is either a language expression or its corresponding mental concept. For example, the definition of humanity is either the phrase 'rational animal' or the mental concept of rational animal. Thus, to say that two things are definitionally one is just to say that a specific language expression or mental concept applies to both. However, this would not explain the objectivity of the categories because language expressions and mental concepts are not mind-independent items. If what brings the members of a category together in one category is merely the fact that the same language expression or mental concept applies to all of them, then, the categories would turn out to be mere projections of our mind or language onto the world. (For other construals of oneness of particular natures, see Sections 7 and 8).

5. Common nature as unconditioned essence

In Book V.1 of the *Metaphysics* of his *Healing*, Avicenna distinguishes between (1) essence with the condition of *being* with other things (*māhīyya bi-sharṭi shayʾin ākharin*), (2) essence with the condition of *not* being with other things (*māhīyya bi-sharṭ lā shayʾin ākharin*), and (3) essence *without* the condition of being with other things (*māhīyya lā bi-sharṭi shayʾin ākharin*).[13]

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[13]While the names of the last two alternatives were given by Avicenna himself (*Metaphysics* of *Healing* V.1, 155, lines 11–12), the name of the first alternative was given by later Muslim philosophers (see, for instance, al-Taftāzānī, *Sharḥ al-maqāṣid*, 403; Quṭb al-Dīn al-Rāzī, *Blazing Secrets*, 256; Ṭabāṭabāʾī, *Bidāya al-ḥikma*, 5.2). Although in Avicenna's texts no name has been given to the first alternative, the idea is clearly there. Here is one passage where the first alternative is mentioned: "As for the universal animal, the particular animal, animal insofar as it is potentially either universal or particular, animal insofar as it exists in the concrete individuals or insofar as it is intellectually apprehended in

"Essence with the condition of *not* being with other things" refers to ontologically separate natures. Avicenna calls them as such because they are ontologically detached from any matter and uncovered by any particularizing accident. These ontologically separate natures amount to Platonic Forms (Avicenna, *Metaphysics* of *Healing* V.1, 155, lines 12–13), whose existence Avicenna has rejected (see section two). So according to Avicenna, this notion has no reference in the extramental world. "Essence with the condition of *being* with other things" refers to the particular (as opposed to universal) natures that exist in individuals. As mentioned earlier, the particular natures constitute the core parts of individuals. In the scientific context, they are referred to as the internal principles (*mabādiʾ*) or causal powers (*quwā*) of physical objects, as they are responsible for the natural motions of physical objects (Avicenna, *Physics* of *Healing*, I.5, 39, line 2; *Metaphysics* of *Springs* III.3, 49–51; *Metaphysics* of *Healing* IX.2. See also McGinnis, *Avicenna*, Chapter 3; McGinnis, "Logic and Science"; Dadikhuda, "Not So Ridiculous"). The particular natures are called "essence with the condition of being with other things" because they are "mingled" (*khālaṭa*) with specific matters and are covered by specific accidents. (Avicenna classifies mental essences as essence-with-the-condition-of-being-with-other-things, too. For according to him, they are essences mingled with mental concomitants such as universality and unity. For simplicity, I put this subcategory of essence-with-the-condition-of-being-with-other-things aside). Finally, "essence *without* the condition of being with other things" refers to natures inasmuch as they are what they are in themselves. In itself, a nature is neither this particular nature nor that particular nature. It is, as it were, an indeterminate entity that can be determined as this or that particular nature. In other words, all individual specifications are excluded from the definition of a nature and are added to it from outside. Thus, it is neutral to, and so compatible with, various individual specifications. It is called "essence *without* the condition of being with other things" because being with these specific matter and accidents or those specific matter and accidents is not part of what it is. Given that we will need to frequently refer to essence-with-the-condition-of-being-with-other-things and essence-without-the-condition-of-being-with-other-things, we had better pick up less cumbersome names for them. Let's call the former 'conditioned essence' and the latter 'unconditioned essence'.

Avicenna made the distinction between unconditioned essence and conditioned essence in several places of his corpus, and sometimes with different

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the soul, it is animal and a thing. It is not animal considered alone" (*Metaphysics* of *Healing* V.1, 153, lines 3–5) [Marmura's translation; substantially modified]. In this passage, Avicenna lists a number of things that fall under the first alternative; they are animal with the condition of being with other things. Universal animal is animal with the condition of being with universality, particular animal is animal with the condition of being with particularity, and so on and so forth.

terminology. For instance, in his *Isagoge* I.2 (15, lines 1–5), he made a distinction between essence considered in itself and as existing in the extramental or mental world. The former is unconditioned essence, while the latter is conditioned essence. Also he used a rich vocabulary to refer to unconditioned essence: essence in itself (*al-māhīyya fī nafsihā*), essence qua essence (*al-māhīyya min ḥaythu hīya al-māhīyya*), essence inasmuch as it is what it is (*al-māhīyya bi-mā hīya hīya*), pure essence (*al-māhīyya al-maḥḍa*), absolute essence (*al-māhīyya al-muṭlaqa*), abstract essence (*al-māhīyya al-mujarrada*),[14] unmixed essence (*al-māhīyya al-ghayr al-makhlūṭa*), natural universal (*al-kullī aṭ-ṭabī'ī*).

Now one might think that unconditioned essence is the common nature in virtue of which members of a category fall into one category. After all, some passages in Avicenna's corpus strongly suggest that an unconditioned essence is shared by all instances of the essence and does not reduce to the instances. Here is one passage:

> [Text 3] … this animal with this condition [i.e. unconditioned animal], even though *existing in every individual [instance]*, is not [rendered] by this condition a certain animal.
>
> (Avicenna, *Metaphysics of Healing* V.1, 153, lines 13–14)
> [Marmura's translation; slightly modified] [emphasis mine]

Here Avicenna is stressing that unconditioned animal exists in every individual animal and does not reduce to the individual animal in which it exists. At another passage, he says:

> [Text 4] The fact that the animal existing in the individual is a certain animal [i.e. a particular nature] does not prevent animal inasmuch as it is animal … from existing in it. [This is] because, if this individual is a certain animal, then a certain animal exists. Hence, animal [inasmuch as it is animal] which is part of a certain animal exists.
>
> (Avicenna, *Metaphysics of Healing* V.1, 153, lines 16–18)
> [Marmura's translation; slightly modified]

Like the previous passage, Avicenna is here distinguishing between particular or conditioned animal and unconditioned animal, and he is insisting that the latter exists as a common component in individual animals.

In the foregoing two passages and similar passages,[15] Avicenna strongly suggests that unconditioned essence exists as a common component in concrete individuals. So, one might think that the objectivity of the categories is to be explained in terms of unconditioned essences. On this view, members

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[14]Avicenna distinguished between two types of abstractness: definitional abstractness and ontological abstractness (*Metaphysics* of *Healing* V.1, 155, lines 10–16). In his view, while unconditioned essence is not ontologically abstract, it is definitionally abstract. Thus, by calling it "abstract essence", he means to connote its definitional, rather than ontological, abstractness.

[15]For similar passages, see *Metaphysics* of *Healing* V.1, 155–6; *Metaphysics of Pointers* IV.1, 263–4.

of each category fall into one category because they share one and the same unconditioned essence.

However, before we can ground the categories in unconditioned essences, we must determine their exact ontological status and the exact sense in which they are shared by multiple individuals. And it is indeed not clear at all what exactly Avicenna took their ontological status to be and in what sense he took them to be shared by multiple individuals. One the one hand, they cannot be Platonic or Aristotelian universals, namely, (extramental) abstract or concrete entities that are numerically one and the same across multiple individuals. For, as we saw in Sections 2 and 3, Avicenna emphatically rejected the existence of Platonic and Aristotelian universals. On the other hand, Avicenna did not clarify what kind of entities unconditioned essences are, if they are not universals, and he did not elucidate in what sense they are shared, if they are not shared in the sense of being numerically one and the same across multiple individuals. So, although there are realist remarks about unconditioned essences in Avicenna's corpus – such as Texts 3–4 – in the absence of a clear account of what exactly unconditioned essences are and how they are shared by multiple individuals, one is left wondering how to understand such realist remarks. What makes the matter even more puzzling is that there are passages in Avicenna's corpus that are incompatible with any realist interpretation of unconditioned essences (more on this in Section 7). These obscurities about unconditioned essences and their ontological status are perhaps the main reason why later medieval philosophers interpreted Avicenna's unconditioned essences in radically different ways. Thus, while some medieval philosophers had realist interpretations of Avicenna's unconditioned essences (see next two sections), others interpreted them in a purely conceptualist way (see, for instance, William Ockham, *Summa Logicae*, Book I, Chapters 8, 14, 15). At any rate, to objectively ground the categories, unconditioned essences must be more than mental concepts. So, to see if a realist account of unconditioned essences is tenable, I examine, in the following two sections, two prominent realist interpretations of Avicenna's unconditioned essences, namely, those of Henry of Ghent and Duns Scotus. In each case, I investigate (1) whether they are correct interpretations of Avicenna, and (2) if yes, whether unconditioned essences thus interpreted will be able to ground the categories.

Before we move to these two interpretations, a recent attempt at analysing Avicenna's unconditioned essence deserves some comments. In his *Avicenna on Pure Quiddity* (235–51; pre-print pagination), Janos has offered a mereological analysis of the ontological status of unconditioned essence – or 'pure quiddity', as he calls it – and its relation to conditioned essence. According to his analysis, "pure quiddity should be regarded as a part (*juz'*) of a larger, composite entity, which is composed of quiddity and other things (*ashyā'*) that derive from it and are related to it *qua* accidents and

concomitants" (244). Thus, "animal in itself exists as 'a part' of each concrete animal" (243). The mereological analysis does not, however, much analyse the ontological status of unconditioned essence, or even its relation to conditioned essence. For it is compatible with a wide range of views about unconditioned essence. An Aristotelian realist about unconditioned essences, who takes them to be concrete universals, would certainly agree with the mereological construal, as Aristotelian universals are parts of individuals. But a Scotistic realist about unconditioned essences would also agree with the mereological construal because for them, too, a less-than-numerically one unconditioned essence is a part of its individuals (more on this in Section 7). A Platonist bundle theorist, who takes an individual to be a bundle of Platonic universals, would also embrace the mereological characterization (see, for instance, Russell, *Inquiry into Meaning and Truth,* 93). Even a trope theory of unconditioned essence, according to which unconditioned essence is nothing over and above particular natures existing in individuals, is compatible with the mereological description, as long as the description does not entail that unconditioned essence is a universal, or in some other way a common, part of individuals. So, the proposed mereological analysis does not by itself cast much light on the ontological status of unconditioned essence.[16]

6. Common nature as possessing a third kind of existence: Henry of Ghent on Avicenna

As discussed in the last section, Avicenna distinguished between essence in itself – what we called 'unconditioned essence' – and as existing in the extramental or mental world – what we called 'conditioned essence'. There was a historically influential interpretation of Avicenna in the Latin medieval

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[16]In fact, Janos attributes various ontological statuses to unconditioned essence, which are incompatible with one another. In one chapter, he offers a conceptualist reading of unconditioned essence, according to which "pure quiddity exists distinctly in the intellect, but not in the concrete world" (156; see also 98, 157, 171). In another chapter, he ascribes some form of Aristotelian or immanent realism to Avicenna, on which unconditioned essence "remains an ontologically constant and irreducible part within" concrete individuals (244; see also 287, ft. 764, 346–7). In the same chapter, he argues that Avicenna "identifies [extramental] form with the pure quiddity" (252). Given that for Avicenna extramental forms are particular (as opposed to universal), the last attribution makes Avicenna an advocate of a form of trope nominalism. In a later chapter, he attributes a distinctive mode of existence to unconditioned essence that is different from mental and extramental modes of existence. Thus, he says "a certain mode and sense of existence [is] to be attributed specifically to pure quiddity … which … would correspond neither to God's mode, nor to the ontological mode associated with complex mental and concrete entities" (379; see also 245). This is actually how Yaḥyā ibn ʿAdī and Henry of Ghent construed unconditioned essence. As Pickavé has pointed out, this construal is a type of Platonic or transcendent realism (Pickavé, "Henry of Ghent on Individuation", 201) (more on this in the next section). Finally, in the last chapter of his book, Janos presents Avicenna as a proponent of a peculiar form of divine conceptualism, according to which "quiddities are identical and one with the divine essence Itself" (532). (More on Avicenna's divine conceptualism in Section 9.) Setting aside the problems facing each of these interpretations, they are mutually exclusive, and so cannot be true at the same time.

philosophy, mainly associated with Henry of Ghent, according to which essence in itself possesses a distinctive kind of existence that is different from both its concrete existence and its mental existence. Thus, at least on one interpretation, Henry of Ghent took Avicenna to assign a kind of being to essence in itself – which he referred to as the *esse essentiae* (essential being) of essence – that is different from the existence of essence in the concrete world – its *esse naturae* (natural being) – and its existence in the intellect – its *esse rationis* (rational being) (Wipple, "The Reality of Non-Existing Possibles", §II, esp. 747).[17] According to Henry, an essence has its *esse essentiae* in virtue of an eternal relation of participation in, or imitation of, an exemplar idea in the divine mind. Note that the *esse essentiae* of essences is not their existence in the divine mind. Rather, their *esse essentiae* is an existence outside the divine (as well as human) mind, which is grounded in their participation relation with their respective divine ideas. As Henry puts it, the divine ideas act as the *formal* cause of the *esse essentiae* of essences (*Quodlibet* I, q. 9. See also Pickavé, "The Controversy", 23–51). It is only in virtue of this participation relation that essences can also come into actual existence – or *esse existentiae* (existential being), as he calls it – which signals a new relation between essences and God, the latter now as their *efficient* cause (Wippel, "The Reality of Non-Existing Possibles", 744–6. See also Porro, "Henry of Ghent", §6; Pickavé, "Henry of Ghent on Individuation", §III). Thus, according to Henry, the *esse essentiae* of an essence is prior to its *esse existentiae*.

Enjoying a separate existence of themselves, essences in themselves now look sharable by their concrete instances. For instance, all individual humans can now share one and the same essence of humanity, which has an existence distinct from its concrete and mental existences. Thus construed, essences in themselves would explain the objectivity of the categories.

There are a number of passages in Avicenna's corpus that prima facie lend support to Henry's interpretation. One of the main passages is the famous passage from the *Metaphysics* of the *Healing* I.5, where Avicenna talks about the proper existence (*al-wujūd al-khāṣṣ*) of essences:

> [Text 5] … to everything there is a reality (*ḥaqīqa*) by virtue of which it is what it is. Thus, the triangle has a reality in that it is a triangle, and whiteness has reality in that it is whiteness. It is that which we should perhaps call "proper existence," (*al-wujūd al-khāṣṣ*) not intending by this the meaning given to affirmative existence (*al-wujūd al-ithbātī*); for the expression "existence" is also used to denote many meanings, one of which is the reality a thing happens to have. Thus, [the reality] a thing happens to have is, as it were, its proper existence.
>
> (Avicenna, *Metaphysics of Healing* 1.5, 24, lines 9–13)
> [Marmura's translation]

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[17] For a different, anti-realist interpretation of Henry's *esse essentiae*, see Pickavé, "Henry of Ghent on Individuation", esp. 201–2 and Porro, "Possibilità ed esse essentiae", 204–5.

By "reality" (*ḥaqīqa*), Avicenna means essence. As Henry understands it, the passage attributes a distinctive kind of being – *esse proprium* in Latin – to essences in themselves, and it contrasts this kind of being to the common being – *esse affirmative* – that we predicate of things when we say that they exist (*Quodlibet* I, 9 and III, 9; *Quaestiones ordinariae (Summa)*, art. XXI, q. 4, fol. 127$^{\text{rO–vP}}$). This understanding of the passage became quite widespread in the Latin medieval tradition, and it was historically influential (see, for instance, Owens, "Common Nature", 4).

Another passage that similarly seems to attribute a distinctive kind of being to essences in themselves and probably played an important role in forming Henry's interpretation is the passage from the *Metaphysics* of the *Healing* V.1, where Avicenna talks about the divine existence of essences:

> [Text 6] Animal, then, taken with its accidents, is the natural thing. On the other hand, what is taken in itself is the nature, of which it is said that its existence is prior to natural existence. … This is [the thing] whose existence is specified as being divine existence because the cause of its existence, inasmuch as it is animal, is the providence (*ʿ*ināya) of God, exalted be He.
>
> (Avicenna, *Metaphysics of Healing* V.1, 156, lines 6–8)
> [Marmura's translation; slightly modified]

This passage, too, attributes a distinctive kind of being to nature in itself, and it describes the being as "prior to natural existence" and "divine". The latter part of the passage, where Avicenna identifies the cause of the being to be divine providence, is particularly reminiscent of Henry's identification of divine ideas as formal causes of essences in themselves.

However, Henry's interpretation of Avicenna's account of essence runs counter to some fundamental principles of Avicenna's ontology. First, Avicenna holds that everything that exists exists either in the extramental world or in the mind. Of course, each of these two kinds of existence has its own divisions. For example, an extramental existent can be material, such as hylomorphic objects, or immaterial, such as Separate Intellects (*al-ʿuqūl al-mufāriqa*). Or a mental existent can be in the human mind or in the divine mind. However, no matter in which of these divisions, an essence has no being outside the two main kinds of existence. In fact, one of Avicenna's motivations for putting forward his theory of mental existence was precisely to avoid a common view of his time that was very much like Henry's view, namely, the Muʿtazilī theory that there are things that do not exist. Some Muʿtazila postulated such Meinongian nonexistent beings to make sense of knowledge and talk of things that do not exist. According to them, such knowledge and talk refer to things that do not exist but have some sort of subsistence. Avicenna vehemently rejected their view and explained such knowledge and talk in terms of mental existence. On his account, such knowledge and talk are possible because their subjects exist in the mind

(Avicenna, *Metaphysics of Healing* I.5, 25–7).[18] The second fundamental principle of Avicenna's ontology with which Henry's interpretation conflicts is Avicenna's anti-Platonism. As Pickavé has pointed out, (the realist reading of) Henry's theory of *esse essentiae* is a sort of Platonism (Pickavé, "Henry of Ghent on Individuation", 201). For it attributes an eternal existence to essences that is separate from their concrete individuals. Therefore, all of Avicenna's arguments against the Platonist account of common natures apply to Henry's theory of *esse essentiae* as well.

Hence, the passages quoted from Avicenna suggesting Henry's interpretation should be re-interpreted in light of the two foregoing fundamental principles. In fact, a closer inspection of the passages reveals that they do not support Henry's interpretation in the first place. Let's start with text 5. First, note that Avicenna rejects the Muʿtazila's theory of nonexistent beings in the same chapter. Actually, the rejection occurs on the next page. So, it would be highly uncharitable to interpret text 5 as asserting a view that is very similar to the view he rejects on the next page. Furthermore, the passage does not say that essences possess a proper existence. Rather, it says that an essence may be called "proper existence". In other words, the passage equates an essence with a proper existence. At the end of the passage, it is even more explicitly said that what possesses the proper existence is not essences in themselves, but the things that have the essence, namely, concrete individuals. Therefore, the best interpretation of the passage is that Avicenna is expressing the familiar, Aristotelian idea that instances of each essence have a particular mode of (extramental) existence. For instance, the mode of existence that individual humans possess is different from the mode of existence that their colours do. Thus, each essence is associated with a distinctive mode of existence, and so it may be called a "proper existence".[19]

Let's now turn to text 6. This passage is more difficult to re-interpret, as it explicitly attributes a distinctive kind of existence to nature in itself, which is "prior to natural existence" and is caused by "the providence of God". There are two ways to deal with the passage. First, we might say that Avicenna is referring here to the existence of natures in the divine mind, which is prior to its existence in the natural world, and depends merely on divine knowledge. After all, Avicenna has discussed this mode of existence of essences in other places, such as the *Isagoge* I.12. However, like existence in the human mind, existence in the divine mind would bring mental concomitants,

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[18]For the Muʿtazila's view, see Wisnovsky, *Avicenna's Metaphysics in Context*, Chapter 7.
[19]For a different interpretation of the passage, see Black, "Mental Existence in Thomas Aquinas and Avicenna", 26. For helpful discussions of this passage and the chapter where it occurs, see Bertolacci, "The Distinction", sections 2–5; De Haan, *Necessary Existence*, chapter 6; Lizzini, "Order of Possibles", section II; Marmura, "Avicenna on Primary Concepts"; Rahman, "Essence and Existence in Avicenna", 4–9; Wisnovsky, "Notes on Avicenna's Concept of Thingness". For Avicenna's discussion of modes of existence, see *Categories* I.2, 10–11; *Metaphysics* of *Philosophy for ʿAlāʾ ad-Dawla* XI, 36–9.

such as universality and unity, to the essences. So, strictly speaking, existence in the divine mind cannot characterize essences in themselves as opposed to mixed with concrete or mental concomitants.

Alternatively, following Menn, we may say that in this passage Avicenna is giving voice, not to his own view, but to a common view of his time, whose main proponent was Yaḥyā ibn ʿAdī (Menn, "Avicenna's Metaphysics", 155, ft. 25). This interpretation is supported by the wording of the passage. For it introduces the view in the passive voice: "it is said that" (*yuqālu*). On this interpretation, the complete sentence would be "it is said by Yaḥyā ibn ʿAdī and his school that … ". So, although Henry took himself to be following Avicenna on this issue, he actually followed Yaḥyā ibn ʿAdī, whose view was echoed, but not affirmed, in this passage of Avicenna.[20]

7. Common nature as less-than-numerically one: Duns Scotus on Avicenna

In the last section, I examined and assessed one prominent realist interpretation of Avicennian unconditioned essences. In this section, I examine and assess a second prominent realist interpretation of them, namely, that of Duns Scotus.[21]

Following Avicenna, Scotus held that a nature is not in and of itself this particular individual or that particular individual but is rather compatible with multiple individuals (*Ord*. II, d.3 p.1 q.1 nn.29–32). It becomes, or as Scotus puts it, is "contracted to" a particular individual by an individual differentia (or *haecceity*). So, according to Scotus, there are two principles in each (material) individual: an uncontracted nature – or, as we called it, an unconditioned essence – that is compatible with multiple individuals, and an individual differentia that contracts the nature to that particular individual. These two principles are not, however, two numerically distinct constituents of the individual. Rather, in every individual, uncontracted nature and individual differentia are numerically identical and only *formally* distinct.[22] Thus,

> These two realities [i.e. the uncontracted nature and the individual differentia] cannot be distinguished as "thing" and "thing," … Rather when in the same thing … they are always formally distinct realities of the same thing.
>
> (*Ord*. II, d.3 p.1 q. 6 n. 188)

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[20]For Yaḥyā ibn ʿAdī's view, see his *On the Four Scientific Questions*, esp. 84–5 and *On the Existence of Common Things*, 154. For other criticisms of Henry's interpretation of Avicenna, see Wippel, *The Metaphysical Thought of Godfrey of Fontaines*, 68–79.
[21]The following account is mainly based on *Ord*. II, d. 3, pt. 1, qq. 1, 6. I have relied on the translation by Spade in his *Five Texts on the Mediaeval Problem of Universals*, 57–113.
[22]For discussion of these two principles and the relationship between them, see Bates, *Duns Scotus and the Problem of Universals*, 86–112; Noone "Universals and Individuation", 112–22; Tweedale, "Duns Scotus's Doctrine on Universals", 89–93.

It is not difficult to see how this view about the relationship between uncontracted nature and contracting haecceity entails that uncontracted nature is not numerically one and the same across multiple individuals. If, as Scotus says, in Socrates uncontracted humanity is numerically identical with Socrates, and in Plato uncontracted humanity is numerically identical with Plato, then, given that Socrates and Plato are numerically distinct, uncontracted humanity will also be numerically distinct across the two individuals. Therefore, like Avicenna, Scotus also held that uncontracted nature is not a universal, namely, an entity that is numerically one and the same across multiple individuals. However, unlike Avicenna, Scotus was quite explicit that uncontracted natures are still the objective grounds of our categorizations. Thus, without uncontracted natures,

> … all things would be equally distinct. In that case, it follows that the intellect could not abstract something common from Socrates and Plato any more than it can from Socrates and a line. Every universal [concept] would be a pure figment of the intellect.[23]
>
> (*Ord*. II, d.3 p.1 q. 1 n. 23)

The question then arises: How can uncontracted natures objectively ground the categories, if they are not numerically one and the same across their individuals? To objectively ground the categories, uncontracted natures must be shared in a real sense of the word by their individuals. But in what other real sense of the word are they be shared, if they are not shared in the sense of being numerically one and the same constituent of individuals?

It was in response to such a question that Scotus developed his infamous thesis that "there is some real unity … less than numerical unity – that is, less than the proper unity of a singular. This lesser unity belongs to the nature by itself" (*Ord*. II, d.3, p.1, q. 1, n. 30). On this thesis, although unconditioned essence is not numerically one and the same across its individuals, it is less-than-numerically one and the same across them. And although this less-than-numerical unity is weaker than numerical unity, it is still a real unity, and so it can provide an answer to the foregoing question: uncontracted natures can objectively ground the categories because they are shared in a real sense of the word by their individuals, namely, in the sense of being less-than-numerically one and the same across their individuals. Following the medieval principle of the convertibility of being and unity, Scotus also attributed a distinctive existence to unconditioned essence that is proportionate to its unity (*Ord*. II, d.3, p.1, q.1, n.34 and q. 6, n. 169).[24]

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[23]See also *Ord*. II, d.3 p.l qq.5–6 nn.l 84–86.

[24]For discussion of less-than-numerical oneness of common natures in Scotus, see Bates, *Duns Scotus and the Problem of Universals*, 61–77; Noone, "Universals and Individuation", 107–12; Tweedale, "Duns Scotus's Doctrine on Universals", 89–93.

This notion of less-than-numerical identity has always been puzzling to philosophers (for a contemporary instance, see Armstrong, *Nominalism and Realism*, 112). Hence, some Scotus scholars

If, as Scotus's account has it, unconditioned essences have a real unity and being of themselves, then they can objectively ground the categories. On this account, members of a category objectively fall in the same category because there is (less-than-numerically) one and the same unconditioned essence in all of them. So, the main question is: can such an account of unconditioned essence be attributed to Avicenna?

The fact is that Avicenna is ambivalent about existence and unity of unconditioned essence, if not incoherent. In some places, he attributes a sort of existence and unity to unconditioned essence, while in other places he rejects that unconditioned essence has any existence or unity over and above individuals. For example, in Texts 3–4 (in Section 5), he says that unconditioned essence exists in concrete individuals but does not reduce to the individuals in which it exists. Or at the beginning of the *Metaphysics* of *Pointers and Reminders*, where he set out to refute the materialist claim that everything that exists in the extramental world is sensible, he presents unconditioned essences as counterexamples, arguing that they exist in the extramental world and are not sensible but intelligible. There are passages attributing a kind of unity to unconditioned essence, too. For example, following the last existential claim about intelligible unconditioned essences, he says "human, inasmuch as his reality is *one*, rather inasmuch as his primary reality has *no diverse multiplicity*, is not sensible but purely intelligible" (*Metaphysics* of *Pointers and Reminders* IV.1, 9). Or in the *Metaphysics* of the *Healing*, talking about unconditioned animality, he says "Thus, within the bounds of its *unity* by virtue of which it [i.e. unconditioned animality] is *one* in that collection, it is pure animal, without the condition of [being with] other thing" (*Metaphysics* of *Healing* V.1, 155–6). Or in the *Notes*, he says "every *maʿnā*, such as humanity, is, in itself and in every respect, *one* rather than multiple. It multiplies in virtue of something else, namely, matter" (*Notes*, 58; see also *Letter* for similar remarks). Thus, in contrast to what Joseph Owens ("Common Nature: A Point of Comparison", 3–4), Martin Tweedale ("Duns Scotus's Doctrine on Universals", 90–1), Timothy Noone ("Universals and Individuation", 105), and Todd Bates (*Duns Scotus*, 59–60) have said, Avicenna did accord, at least in these passages, a sort of unity to unconditioned essence. He did not, of course, call it "less-than-numerical" unity, but he did distinguish it from numerical unity.

There are, however, other passages scattered throughout his corpus that deny any sort of existence and unity of unconditioned essence. For example, in multiple places, Avicenna emphasizes that "there is no

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have tried to render it comprehensible by analysing it in other, less-puzzling terms. See, for instance, Brower, "Aquinas on the Problem of Universals", 732, ft. 31; Hawthorn, "Scotus on Universals"; King, "Duns Scotus on Common Nature". These analyses will have to be discussed elsewhere as I do not have the space to examine them here. Thus, in this paper, I take the notion for granted, limiting myself to what Scotus himself has said about it.

[extramental] existence but that of particulars" (*Physics* of *Healing* I.7, 51, line 4), and "there is nothing in [extramental] existence, as you know, but … individual entities" (*Categories* I.4, 33, line 7). He is also quite emphatic that "when a specific nature (*aṭṭabīʿa an-nawʿīyya*) exists in the concrete world it is a certain individual" (*Physics* of *Healing* I.1, 5, lines 13–14), that "it is a necessary concomitant of [unconditioned] animal to be either particular [individual] or general [concept]" (*Metaphysics* of *Healing* V.1, 155, lines 3–4), and that "it is impossible to say that the intelligible form exists in the external world abstracted from its concomitants" (*De Anima* V.2, 214; see also *Isagoge* I.2, 15). According to these passages, when realized in the extramental world, unconditioned essence is a particular individual; and when realized in the mental world, it is a universal concept. Therefore, in the extramental world, unconditioned essence is nothing over and above its particular individuals.

This nominalist view about unconditioned essence is confirmed by Avicenna's theory of concept-formation. According to the theory, a universal concept does not correspond to any one entity in the extramental world but is rather *constructed* by intellect from comparing and contrasting multiple particulars, in the following way: human soul takes particular forms from concrete individuals and stores them in the retentive imagination (*khayāl*) (*De Anima* II.2, 58–62). Then human intellect compares and contrasts the particular forms in the retentive imagination, and on the basis of the similarity (*tashābuh*) that human intellect notes among a group of particular forms, it unifies the multiple forms (*De Anima* V.5, 236). For instance, human intellect notes the similarity among particular forms of humanity that the soul has taken from particular human beings, and on the basis of the similarity human intellect unified the particular forms of humanity under one single idea, namely, the general idea of humanity. Thus, "the multiple ideas (*al-maʿānī*), which are numerically distinct in the imagined … become one idea" (*De Anima* V.5, 236, lines 8–10). There are, of course, complexities in Avicenna's theory, which need not concern us here. For instance, Avicenna gives a significant role to the Active Intellect in the process of concept-formation. He says that the unification of multiple forms is only a preparatory step for human intellect to ultimately receive the universal concept from the Active Intellect (*De Anima* V.5, 234–5). Thus, universal concepts originate in the Active Intellect (or some higher Separate Intellect) rather than human intellect, and they emanate from there to human intellects (more on this in the final section). There is disagreement among Avicenna scholars on how exactly this double-process account of concept-formation should be understood. However, the disagreement does not affect our discussion here. For no matter whether Avicenna takes universal concepts to originate in human intellect or in a Separate Intellect, it remains true that for him there is nothing in the extramental world other than particular natures, to which universal concepts correspond.

On this account, the difference between a conditioned essence – e.g. Zayd's particular humanity – and the corresponding unconditioned essence – e.g. humanity as such – is merely in consideration (*iʿtibār*). When considering a conditioned essence, if we attend to the individual specification that the essence has received in the individual, we are considering a conditioned essence. If, on the other hand, we do not attend to the individual specification, but rather attend only to essence inasmuch as it is what it is, we are considering an unconditioned essence. (*Isagoge* 1.2, 15, lines 1–5). Thus, it is only in the mind that unconditioned essence is distinct from conditioned essence. As it is sometimes put, the distinction is a merely mental, as opposed to real, distinction. One might legitimately ask 'What is the epistemic value of a distinction in consideration, if it does not track a real distinction in the considered?' It lies beyond the scope of this paper to address this question. What is important for our present purposes is that on this view, unconditioned essence is nothing over and above conditioned essences.

This nominalist view about unconditioned essence is further confirmed by some of Avicenna's anti-Platonic criticisms. For even though the criticisms were directed against Platonic realism, they equally apply to any sort of realism about unconditioned essence. These criticisms occur in Book V.2 of the *Metaphysics* of the *Healing*, where he sets out to bring the errors in Platonic arguments to light. One of the criticisms that he levels against Platonic realists is that they fallaciously infer from the fact that we can consider an essence in isolation from its concomitants that the essence has a distinct existence of itself. Avicenna found this inference fallacious because, as mentioned above, for him the distinction in consideration between unconditioned essence and conditioned essence does not track a distinction in the extramental reality. Avicenna directed the criticism at Platonic realism, but all stripes of realism are subject to it. For to exist as a Platonic Form is only one way of having a distinct existence; another way of having a distinct existence is to exist as, say, a Scotistic common nature. In fact, Scotus did raise such an argument from consideration for the real unity of uncontracted natures (*Ord*. II, d.3 p.1 q.1, nn.20–2). If Avicenna had been aware of Scotus' argument, he would have accused Scotus of making the same fallacy!

So, there are two sets of passages in Avicenna that pull to opposite directions. In one set of passages, he attributes a sort of (extramental) being and unity to unconditioned essence, which would make unconditioned essence somehow distinct from its individuals. In the other set of passages, he rejects that unconditioned essence has any (extramental) being and unity over and above its individuals. Given that some of these conflicting passages occur in the same work – e.g. *Metaphysics* of *Healing* – we cannot explain the tension in terms of changes in his views over time. So, any attempt at making Avicenna coherent will need to dismiss one of the two sets of passages in favour of the other set, or at least re-interpret it in light of the other. Given

the prevalence of textual evidence for the nominalist view, and its entrench-
ment in various parts of his system, I am inclined to give precedence to pas-
sages implying this view, and so to interpret Avicenna as a nominalist about
unconditioned essence.

8. Common nature as modally common: Galluzzo on Avicenna

In his "Two Senses of 'Common'", Gabriele Galluzzo identified a tension in
Thomas Aquinas' theory of individuation and proposed a resolution for it,
which involves a distinction between two senses in which a nature might be
called to be common. The tension is as follows. On the one hand, Aquinas ana-
lyses a concrete individual into essence, which accounts for the properties it
shares with other individuals of the same kind, and principle of individuation,
which is responsible for the concrete individual's being the individual it is. This
suggests that essence is a common constituent of the individuals. On the other
hand, Aquinas follows Avicenna in his account of essence, according to which
essence is common only in the intellect. Galluzzo proposed to resolve the
tension by distinguishing between two senses of 'common': (1) actually
common, and (2) modally, or possibly, common. Essence is actually common
only in the intellect; in the extramental world, it is actually non-common or par-
ticular. However, the particularity of essence is an accidental feature that has
befallen upon it; in itself, essence is free from all individuating conditions
(and mental conditions, for that matter). As Galluzzo put it, "If we could …
strip the principle of individuation away from the individuals of a certain
kind, we would be left with only one essence" (Galluzzo, "Two Senses of
'Common'", 329). In possible worlds language, in possible worlds (or more
accurately, counterpossible worlds, as Avicenna holds that essence necessarily
exists either as a concrete individual or a mental concept) where essence exists
in separation from the conditions along with which it actually exists, it would
be just one. Galluzzo called this feature of essence its "modal commonality",
and proposed to understand the commonality of essence in Aquinas'
account as modal commonality. Since the modal commonality of essence is
compatible with its actual non-commonality, the tension in Aquinas' theory
of individuation disappears.

Galluzzo has used the notion of modal commonality to resolve the
tension in Aquinas, but one might think that the notion can be used to
solve our problem too. Thus, one might think that in Avicenna's system,
the modal commonality of natures explains the objectivity of the cat-
egories. On this view, members of a category objectively fall into one cat-
egory because their particular natures would be one if stripped from the
individuating conditions.

However, the modal commonality of natures cannot solve our problem.
For to explain the objectivity of the categories, natures must be actually,

rather than merely possibly, one. A nature that is merely possibly one cannot ground the objectivity of a category just as a poker that is merely possibly hot cannot burn.[25]

One might object that modal properties are frequently appealed to to explain features of the actual world. For instance, in the problem of material constitution, some argue that an object and its constituting material are numerically distinct entities because they have different modal properties. Take a clay statue and its constituting lump of clay, for instance. Some have argued that they are numerically distinct entities because, among other things, they differ in some of their modal properties: the statue would not survive being squashed, while the lump of clay would survive being squashed. Put in possible worlds language, in possible worlds where the statue is squashed, the statue ceases to exist; whereas in possible worlds where the lump of clay is squashed, it continues its existence. Thus, the actual distinctness of two entities is explained in terms of their modal properties. So why cannot, the objection continues, the modal commonality of natures explain the objectivity of the categories in the actual world?[26]

However, the objection rests on an equivocation of 'explain', 'because', and related notions, and so it is not valid. To see the equivocation, consider the following two statements:

(1) There is smoke because there is fire.

(2) There is fire because there is smoke.

There is a sense of 'because' under which (1), but not (2), is true. Used in this sense, what follows 'because' is supposed to provide a *causal explanation* for what precedes 'because'. Fire is the cause of smoke, and so the existence of fire would explain why there is smoke, but not the other way round. We may call this sense of 'because' the causal sense. But there is also another sense of 'because' under which both (1) and (2) are true. Used in this sense, what follows 'because' is supposed to provide an *epistemic reason* for believing that what precedes 'because' holds. Both a cause can be an epistemic reason for believing that its effect exists, and an effect can be an epistemic reason that its cause exists. Let's call this sense of 'because' the epistemic sense. The present example – fire and smoke – involves contingent facts. However, we may extend the distinction between the causal and the epistemic senses of 'because' to necessary facts. (Some might not be comfortable with using causal language for necessary facts, as they might think that for something x to cause another thing y, y must be contingent. They may

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[25]One may argue that for the same reason Galluzzo's proposed solution for the tension in Aquinas would not work, either.

[26]I am grateful to a referee of the journal for drawing my attention to this possible objection.

replace 'cause' with 'ground' in the following sentences.) For instance, consider the following two statements:

(3) Zayd is capable of laughing because he is rational.

(4) Zayd is rational because he is capable of laughing.

If 'because' is used in the causal sense of the word, then (3), but not (4), is true. For rationality is the cause of the capability of laughing, not vice versa (see, e.g. Avicenna, *Isagoge* I.5, 29, lines 16–18).[27] If, on the other hand, 'because' is used in the epistemic sense of the word, then both (3) and (4) can be true, as we can both infer Zayd's capability of laughing from his rationality, and infer his rationality from his capability of laughing. Now, consider the following two claims:

(5) All human beings fall into one category because their natures are modally one.

(6) A statue and its lump of clay are distinct because they have different modal properties.

As you will remember, the objection argues from the plausibility of (6), where an actual distinctness is accounted for by appeal to certain modal considerations, to the plausibility of (5), where an actual fact about kind membership is explained by appeal to some modal facts. However, this analogy equivocates on two senses of 'because'. In (6), 'because' is used in the epistemic sense. That is, difference in modal properties is offered as an epistemic reason for believing that the statue and the lump of clay are distinct. For, as many philosophers have argued,[28] facts about identity and distinction are primitive, and so they cannot be grounded in more basic facts.[29] In (5), on the other hand, 'because' is used in the causal sense. That is, the modal oneness of particular humanities is presented as the ground for the fact that all human beings fall into one category. Therefore, the plausibility of (6) does not lend any support to (5). After all, the idea that modal features of the world can ground its actual features will strike many as counterintuitive; if there is an ontological dependence between modal features of the world and its actual features, it is natural to think that modal features depend on actual features rather than the other way round. That is why

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[27]For some contemporary accounts of the causal, or rather the grounding, relation between essential properties (such as Zayd's rationality) and necessary non-essential properties (such as his capability of laughing), see Fine, "Essence and Modality"; Correia, "On the Reduction of Necessity to Essence"; H. Morvarid, "Essence and Logical Properties; H. Morvarid, "Finean Essence, Local Necessity, and Pure Logical Properties".

[28]Block and Stalnaker, "Conceptual analysis", 24; Horsten, "Impredicative Identity Criteria"; Jubien, "The Myth of Identity Conditions"; Kim, "Reduction and Reductive Explanation", 102; Lowe and Noonan, *Substance, Identity and Time*, 80–1; Salmon, *Metaphysics, Mathematics, and Meaning*, 153; Williamson, *Identity and Discrimination*, 144–5.

[29]For a contrary view, see Azzano and Carrara, "The Grounding of Identities".

many theories of modality have tried to ground it in certain aspects of the actual world.

9. Conclusion and two proposals

We have so far examined various accounts of Avicennian common natures, and we have seen that either they cannot be attributed to Avicenna, or they do not render common natures genuinely common. Therefore, the upshot of our discussion is that the objectivity of the categories cannot be explained in Avicenna's system in terms of common natures. In this section, I propose to look elsewhere in Avicenna's system to find the explanation for the objectivity of the categories.

There are two ideas in Avicenna's system that might provide the explanation. The first one is his conception of the Active Intellect and its relation to the material world and to human minds. The second one is his idea that there is an objective resemblance among the particular natures that exist in individuals of the same kind. The first idea suggests a type of divine conceptualism, while the second idea implies a version of resemblance nominalism. Let's start with the first idea.

According to Avicenna, essences exist, not only in concrete individuals and human minds, but also in Separate Intellects. Separate Intellects are immaterial, mental substances that causally mediate between God and the material world. In Avicenna's cosmology, there are ten Separate Intellects, and they stand in a hierarchical order: each Separate Intellect issues from the Separate Intellect above it, with the highest one issuing from God. The lowest Separate Intellect is the Active Intellect, which is responsible for regulating the sublunar material world and human minds. In Avicenna's view, essences originate in Separate Intellects; essences are, as it were, thought up by Separate Intellects. Then essences are emanated from the lowest Separate Intellect, i.e. the Active Intellect, into the sublunar material world and human minds. Thus, the Active Intellect constantly sends extramental essences – or substantial forms – down to the sublunar material world, and any matter that is prepared to get a new substantial form receives the essence from the Active Intellect, and thereby becomes a new substance. Similarly, the Active Intellect constantly emanates mental essences – or universal intelligibles – to human minds, and those minds that are prepared, through reflecting upon essences in the sublunar material world, to get universal concepts receive the mental essences from the Active Intellect (*De Anima* V.5, 235–6).[30] Thus, both the essences in the sublunar material world and the essences in human minds have their origins in the Active Intellect. Now, given the role of the Active

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[30]The exact process of acquiring universal concepts, and the role of the Active Intellect in this process, is a complicated and controversial issue. For some recent studies, see Ogden, "Avicenna's Emanated Abstraction"; McGinnis, "Making Abstraction Less Abstract".

Intellect in shaping the sublunar material world and in giving an isomorphic conceptual scheme to human minds, one might ground the objectivity of the categories in the essences in the Active Intellect. On such a divine conceptualist account, members of a category objectively fall into one category because the Active Intellect has thought up the categories as such.

For reasons of space, I cannot fully discuss here the details of this divine conceptualism and its pros and cons. So, I raise only two points. First, this account of the objectivity of the categories would not make the categories *absolutely* objective, namely, independent of *all* minds. Rather, it would make it objective only relative to human minds. Relative to the higher minds of the Active Intellect and other Separate Intellects, the categories would still be subjective. So, the account would not satisfy someone who takes the categories to be independent of all minds. Second, although I have called it 'divine conceptualism', the account does not ground the categories in ideas in God's own mind; rather, it grounds them in ideas in the higher minds of His first creatures. Avicenna does not posit the ideas in God's own mind because he thinks that it would compromise divine simplicity (*Metaphysics* of *Healing* VIII.7, 294, line 3). To call the view 'divine conceptualism' is not, nevertheless, a misnomer. For in Avicenna's philosophy, Separate Intellects are treated as divine.[31]

Another idea in Avicenna's system that might be used to explain the objectivity of the categories is the idea that members of each category – or more precisely, the particular natures existing in members of each category – resemble one another. The objective resemblance among the particular natures would then explain why individuals possessing the particular natures objectively fall into one category.

The idea that there is an objective resemblance among particular natures is rarely alluded to in Avicenna's works. One place where this idea is alluded to is in the *Letter*, where Avicenna argues that the humanity existing in the extramental human and the humanity existing in the mental human are *mumāthil* (lit. similar) rather than numerically one and the same (*Letter*, 81, line 4). Given that Avicenna does not differentiate between extramental and mental humans in being real instances of human, we may safely extend this relation of being *mumāthil* to the humanities existing in extramental humans. Thus, the humanities existing in extramental humans are *mumāthil* rather than numerically the same. However, '*mumāthil*' has a technical sense in Avicenna's philosophy; in its technical sense, '*mumāthil*' means

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[31]For some contemporary defenses of divine conceptualism in the analytic tradition, see Welty, "Theistic Conceptual Realism"; Leftow, *God and Necessity*, esp. Chapter 16. For some challenges facing these defenses, see Craig, *God Over All*, Chapter 5. There are important differences between these versions of divine conceptualism and Avicenna's version. First, these versions are wider in scope than Avicenna's version. For they reduce, not only essences, but also propositions, sets, and possible worlds to divine ideas and thoughts. Second, they place the divine ideas and thoughts in God's own mind, whereas Avicenna places the ideas, not in God's own mind, but in the mind of the Active Intellect and other Separate Intellects.

'the same in species' (*Metaphysics of Healing* VII.1, 237, line 8). Maybe Avicenna is using the term in its technical sense here, in which case the passage would not imply resemblance nominalism.

Better textual evidence comes from *De Anima*, where Avicenna discusses how universal concepts are abstracted from particular objects. There Avicenna explains how human soul takes particular forms from concrete individuals and stores them in the retentive imagination (*khayāl*) (*De Anima* II.2, 58–62). Then human intellect works on the particular forms stored in the retentive imagination, and thereby gets prepared to receive universal intelligibles from the Active Intellect (*De Anima* V.5, 234–7). According to Avicenna, there are two types of works that human intellect does with the particular forms in the retentive imagination: it unifies the multiple and multiplies the unities. It is the first type of work that is relevant to our discussion. According to Avicenna, human intellect attends to the similarity (*tashābuh*) among the particular forms in the retentive imagination, and on the basis of the similarity it unifies the multiple forms. For instance, human intellect notes the similarity among particular forms of humanity that the soul has taken from particular human beings, and on the basis of the similarity human intellect unified the particular forms of humanity under one single idea, namely, the general idea of humanity. Thus, "the multiple ideas (*al-maʿānī*), which are numerically distinct in the imagined … become one idea" (*De Anima* V.5, 236, lines 8–10). The particular forms in the retentive imagination are exact duplicates (*mithl*) of the particular forms in extramental individuals (*De Anima* II.2, 61–2). So, although Avicenna is talking about the similarity among the particular forms in the retentive imagination, we may safely conclude that for him the extramental forms are also similar, and it is their objective similarity that explains why individuals possessing those forms fall into one and the same category. On this interpretation, Avicenna anticipated the modern resemblance nominalism.[32]

Note that divine conceptualism and resemblance nominalism are two different accounts of the objectivity of the categories. On divine conceptualism, there is no fact of the matter, beyond the divine mind, why things are categorized in the way they are. On resemblance nominalism, on the other hand, there is an objective fact of the matter – i.e. objective resemblance among particular natures – why things are categorized in the way they are. So, what I proposed are two alternative interpretations of Avicenna regarding the ground of objectivity of the categories.

I do not propose to settle the question which of these two interpretations of Avicenna is ultimately preferable here. A more thorough discussion of the interpretations and their pros and cons must wait for another paper(s).

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[32]For modern resemblance nominalism, see, for instance, Rodriguez-Pereyra, *Resemblance Nominalism*.

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