Aquinas on Perceiving, Thinking, Understanding, and Cognizing Individuals

Among Thomas Aquinas's 13th and 14th century critics, some of them targeted his Aristotelian view that the human intellect does not cognize individuals of a material nature. To many of his readers, Aquinas's stance on this point seems to be indefensible for it is an obvious fact that we think about individuals. In this essay, I argue Aquinas's view has been misunderstood, both by his critics and by many Thomists that have come to his defense. I distinguish two important aspects of Aquinas's approach to this problem. First, I highlight the co-operative function different cognitive powers perform with respect to the unified cognitive operations of the human being. Second, I examine in detail Aquinas's account of human sensing, perceiving, understanding, reasoning, thinking, and cognizing individuals by the co-operative cognition of their external senses, the cogitative power (*vis cogitativa*), and the possible intellect—among other powers. I show that a proper understanding of the coordinated operations of the possible intellect and cogitative power reveals that Aquinas in fact has a complex and coherent account of how the human being—but not the possible intellect—perceives, thinks, understands, and reasons about individuals.

1. Introduction

Given the complexities of Aquinas's account of cognition and his sometimes flexible terminology, a few introductory points on this front will be helpful. First, I employ the English term "cognition" and its cognates in much the same way that Aquinas uses the term *cognitio* and its cognates, namely, as an analogical term that captures diverse forms of apprehension including sensation, perception, imagination, memory, thought, understanding, and reasoning.[1] Second, for Aquinas, there are two different problems concerning human intellectual cognition of individuals. This is because humans can cognize two different kinds

[1] Unlike Peter King and other exegetes of medieval thinkers, I am suspicious of interpretations of medieval accounts of *cognitio* that emphasize or even suggest there are broad similarities between *cognitio* and contemporary computational and information processing accounts of *cognition*, which are characteristic of cognitive science and cognitive psychology. Cf. P. King, "Thinking about Things: Singular Thought in the Middle Ages," in: *Intentionality, Cognition, and Representation in Medieval Philosophy*, ed. G. Klima, New York: Fordham University Press, 2014, 104–122.

of individuals. Humans cognize individuals that are pure immaterial entities and they cognize individuals that are form-matter composites by their very essence. This essay is about the second problem and so I employ the terms "individual" and "singular" to mean individuals that are form-matter composites by their very essence.

Aquinas's position on human intellectual cognition of individuals is crystal clear.

> Our intellect abstracts intelligible species from individuating principles; hence the intelligible species of our intellect cannot be a likeness of the individual principles. And for this reason our intellect cannot cognize singulars.[2]

These individuating principles are bound up with the materiality of form-matter composite entities. The natural operation of the human intellect requires abstracting the principle of its operation from the materiality that is needed to cognize an object as an individual. The human intellect does not have cognition of form-matter composite individuals *qua* individuals. Elsewhere Aquinas distinguishes the aforementioned two kinds of individuals that can be cognized, and makes this point perfectly pellucid.

> A singular thing is not opposed to being intelligible insofar as it is singular, but insofar as it is material, because nothing is [intellectually] understood except [what is] immaterial. And therefore if something singular is immaterial, as is the intellect, this is not opposed to being intelligible.[3]

It is not individuality that is an impediment to intellectual cognition, it is materiality. Aquinas develops at length and in many works a fuller explanation for why materiality individuates and is an impediment to intellectual cognition, but we do not have space to rehearse these points here.[4] With these terminological stipulations and doctrinal caveats in mind, let us proceed to Aquinas's approach to Aristotelian psychology.

2. Aquinas's Approach to Aristotelian Psychology

[2] *Summa theologiae* (= *STh*), I.14.11, ad1. Rome: Editiones Paulinae, 1962. All translations are my own unless noted otherwise.
[3] *STh* I.86.1, ad3. See also *Questiones disputatae de veritate* (= *DV*) 2.6, ad1 ; 10.5, ed. Leonina XXII.1-3. Rome: Commissio Leonina, 1970–1976.
[4] See John F. Wippel, *The Metaphysical Thought of Thomas Aquinas*, Washington, D.C.: The Catholic University of America Press, 2000, IX, 4, 351–375.

Aquinas endorses the Aristotelian view that theoretical inquiry begins with what is more known with respect to us and transitions from there to knowledge of what is more known in itself. Following Aristotle, the application of this distinction to the investigation of human psychology is specified by two additional principles. First, what is more known to us are the *objects* of psychological *operations*, and it is through an adequate analysis and differentiation of them that we arrive at what is more known in itself, namely, the psychological *powers* that ground these operations, and the substantial *nature* that is the ground (*radix*) of these different psychological powers.[5] Second, even though this mode of theoretical analysis lends itself to forms of synecdoche—such as vision sees, memory recalls, and the intellect understands—it is more accurate to say the human being sees, recalls, and understands in virtue of their powers of vision, memory, and intellect.[6] In short, Aquinas's philosophical anthropology begins and ends with the unity of human psychological experience enabled through different psychological operations and powers grounded in the unity of the rational animal that is hylomorphically constituted from a rational soul and organic body. We must keep in view Aquinas's point of departure from the unity of psychological experience that is more known to us, as we follow his theoretical analysis or decomposition of this unity into its different objects, operations, and powers of a unified nature, which are more known in themselves.

Thus far I have summarized a few of the moves Aristotle makes in *De anima* I-II and which Aquinas adopts that are relevant to our investigation of Aquinas's account of human sensation, perception, thought, understanding, reasoning, and cognition of individuals of a material nature. A few more points are relevant before we move forward, and the first concerns the many levels of analysis at which Aquinas might approach a problem.

It is crucial to appreciate the varieties of levels of analysis at which Aquinas might describe in a more coarse-grained or fine-grained manner the relevant operations and powers to the topic at hand. In some cases, a topic requires great precision on a fine-grained issue so Aquinas employs a very technical vocabulary to demarcate between different powers and

[5] See *STh* I.77.8.

[6] See *DV* 2.6, ad3; 10.9, ad contra 3; 22.13, ad7; *STh* I.75.2, ad2; 75.4; I-II.17.5, ad 2; II-II.58.2;
Sentencia libri De anima (= *In DA*), I.10, ed. Leonina XLV/1, Rome: Commissio Leonina, 1984;
Quaestiones disputatae de anima (= *QDA*), 12, ad13, ed. Leonina XXIV/1, Rome: Commissio Leonina, 1996.

operations. On other occasions, a topic at a few levels higher, as it were, might permit looser forms of metonymy, or require technical terms that refer to an assembly of powers functioning in co-operation instead of mentioning each power and its distinctive contribution. For instance, on most occasions Aquinas employs the terms practical reason, imagination, phantasia, and phantasm in this last way. Contrary to what many readers suppose, practical reason rather rarely refers exclusively to the operations of the possible intellect.[7] Strictly speaking, "practical reason" in Aquinas denotes the co-operative coordination of at least two powers: the cogitative power as *particular reason*, which supplies the minor, and the possible intellect as *universal reason*, which supplies the major of the practical syllogism.[8] Practical reason is partially universal and is partially particular (*Ratio autem practica quedam est uniuersalis et quedam particularis*).[9] Similarly, while Aquinas does on rare occasions employ the terms imagination, phantasia, and phantasm to denote the power of imagination and the terminus of its operation in contradistinction to the internal senses of cogitation and memory. Aquinas more typically follows the practice of many medieval Aristotelians and employs these terms generically in order to capture some combination of the powers of imagination, cogitation, and memory.[10] It is important to keep these points in mind when examining a

[7] See *STh* I.79.11 for *intellectus practicus*.

[8] "Alio modo secundum quod motus qui est ab anima ad res incipit a mente, et procedit in partem sensitivam prout mens regit inferiores vires, et sic singularibus se immiscet mediante ratione particulari quae est potentia quaedam sensitivae partis componens et dividens intentiones individuales, quae alio nomine dicitur cogitativa, … universalem enim sententiam quam mens habet de operabilibus non est possibile applicari ad particularem actum nisi per aliquam potentiam mediam apprehendentem singulare, ut sic fiat quidam syllogismus cuius maior sit universalis quae est sententia mentis, minor autem singularis quae est apprehensio particularis rationis, conclusio vero electio singularis operis, ut patet per id quod habetur in III De anima." *DV* 10.5 (Leon., 309: 81-99). See also *STh* I.81.3; 86.1, ad2; *In DA* III.10 (Leon., 251: 128-133, ad 434a16).

[9] *In DA* III.10 (Leon., 251: 128-29). See also *In DA* III.10 (Leon., 251: 128-145, ad 434a16–21); *DV* 14.5, ad 11.

[10] "… sed a virtutibus in quibus sunt phantasmata, scilicet imaginativa, memorativa et cogitativa …" *Summa contra Gentiles* (= *SCG*), II.73, ed. by C. Pera, Turin & Rome: Marietti 1961. "... in viribus sensitivis, scilicet imaginativa, cogitativa et memorativa ... Actus autem intellectus ex quibus in praesenti vita scientia acquiritur, sunt per conversionem intellectus ad phantasmata, quae sunt in praedictis viribus sensitivis." *STh* I.89.5. Despite the view of most recent interpreters of Aquinas, many medieval Aristotelians and all the major Thomist commentators held that the typical meaning of phantasia was generic and included a number of internal sense powers, not just imagination. "Nomine phantasiae intelligit Aristoteles tres vires animae interiors excepto sensu communi. Est enim phantasia nomen

particular passage from Aquinas.[11] The questions we must keep in mind are: What level of analysis is his investigation working on? Is he addressing the way a human achieves something through the coordinated exercise of different powers? Or, is he investigating what a single power's distinct contribution is to the human being's activities that are comprised of the coordinated exercise of different powers?

We will return to these questions later on in our examination of *STh* I.86.1 and similar texts wherein Aquinas addresses cognition of singulars—or *singular cognition*, as many contemporary exegetes call it. At this point we can turn to Aquinas's philosophical approach to the differentiation of objects, operations, and powers, which follows and expands Aristotle's own approach in *De anima*, II.6.

3. Aquinas on *per se* and *per accidens* sensibles in *De anima* II.6

Aristotle held all knowledge begins in the senses. Accordingly, his first division of the polymorphic object cognized by humans starts with sensible reality as differentiated into *per se* sensibles and *per accidens* sensibles.[12] Aquinas's interpretation of Aristotle's division of sensibles and their corresponding cognitive operations and powers owes much to Avicenna's

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genericum, quod distinguitur in tres species, quarum una propter penuriam nominum remansit nomine generis, sicut aepe contingit." Domininus Báñez, *Commentaria in Primam Partem Angelici Doctoris S. Thomae*, Lugduni : sumpt. P. Borde et L. Arnaud, P. Borde et G. Barbier, 1663-1666, *In STh* I.78.5.dub.5, p. 279 (a); John of St. Thomas, *Cursus Philosophicus Thomisticus*, ed. by P. Beatus Reiser, Taurini: Marietti, 1930, 3 Vols., *Phil. Nat*., IV. P., Q. 8. A. 2., Reiser, T. III, 252b-253a. See also Alexander of Hales, *Summa theologica*, Pars Ia, lib. 2, inq. 4, tract. 1, sect. 2, quaest. 2, tit. 1, memb. 2, cap. 2, 358, Quaracchi, Florence: Collegium S. Bonaventurae, 1924–1948, p. 435; Albertus Magus, *De anima,* ed. Clemens Stroick, vol. 7.1 of *Opera omnia,* ed. B. Geyer, Münster i. Westfalen: Aschendorff, 1968, III.1.3, p. 168b, 72-76.

[11] Another illustration is provided by the way the agent intellect and possible intellect both concurrently contribute to an act of understanding. See *QDA* 4, ad 8: "Ad octauum dicendum quod duorum intellectuum, scilicet possibilis et agentis, sunt due actiones. Nam actus intellectus possibilis est intelligibilia recipere; aetio autem intellectus agentis est abstrahere intelligibilia. Nec tamen sequitur quod sit duplex intelligere in homine, quia ad unum intelligere oportet quod utraque harum actionum concurrat." (Leon., 36–37: 255–262).

[12] See Perler (###) and Rubini (###) in this volume.

innovative developments.[13] Indeed, it is on the basis of Avicenna's amplifications to Aristotle's psychology of the apprehensive or cognitive powers that Aquinas will articulate his own doctrine of the five external senses (vision, audition, olfaction, gustation, tactility), four internal senses (*sensus communis*, imagination, cogitation in humans or estimation in other animals, and memory), and the possible and agent intellects.[14] Let us examine in detail the way Aquinas works out his own account of cognizable objects and cognitive operations on the basis of the Aristotelian division between *per se* and *per accidens* sensibles in his commentary on *De anima* II.6.

Like Aristotle, Aquinas distinguishes *per se* sensibles into proper and common sensibles. Proper sensibles differentiate sensible objects that are uniquely apprehended by one sense power—color by vision, sound by audition, odors by olfaction, flavors by gustation, and tangibles by tactility. These proper sensibles are contrasted with the common sensibles of movement, rest, number, shape, and size.[15] Common sensibles, like proper sensibles, are also *per se* sensibles, but they are apprehended by more than one sense power. For instance, visible shaped movement is cognized by vision just as audible movement and tangible movement are cognized by audition and tactility, respectively. Aquinas employs this account of *per se* sensibles to present his own account of the objects and operations of the five external sense powers and that of the *sensus communis*, the first internal sense power. Contrary to some interpretations of Aristotle, Aquinas maintains that the proper object of the *sensus communis* is not the *per se* common sensibles, but the *per se* sensibles as such, that is, the essentially sensible manifold of proper and common sensibles presented to the sensing animal.[16] The *per se* sensible manifold cognized by the *sensus communis* is then received and retained by the internal sense power of imagination, which is able to re-present isomorphic and novel combinations of retained *per se* sensible imagery. These *per se* sensibles are, by definition, essentially sensible; they are sensible forms in themselves and constitute the third species of the Aristotelian category of quality. Sensible forms sensed by the external senses and *sensus communis* or imagined by the power of imagination are all individuated by the

[13] For the details of Avicenna's and Aquinas's interpretations of Aristotle on this front, see Deborah Black, "Imagination and Estimation: Arabic Paradigms and Latin Transformations," *Topoi* 19 (2000): 59-75.
[14] See *STh* I.78–79; *QDA* 13.
[15] See *In DA* II.13 (Leon., 119: 44-54, ad 418a17).
[16] See *In DA* II. 13. (Leon., 119–120: 71-59); *STh* I.78.3–4.

material substances in reality they inhere within, or remain under the conditions of matter insofar as the power of imagination is itself embodied in one of the ventricles of the brain.[17]

After clarifying the division of *per se* sensibles into proper and common sensibles, the remainder of *De anima* II.6 concerns the nature of *per accidens* sensibles, which Aquinas expands into one of his most detailed treatments of the way the intellect and cogitative power in humans can be intimately bound up with the *per se* sensation of *per se* sensibles. Said otherwise, Aquinas's commentary on the doctrine of *per accidens* sensibles in *De anima* II.6 presents arguably his most thorough investigation of empirical cognition in humans and nonhuman animals. Since the focus of this essay is especially concerned with Aquinas's view on cognition of individuals, including empirical cognition of singulars, this text warrants close attention. Given the length of Aquinas's commentary on *per accidens* sensibles in *De anima* II.6, I will divide his commentary into parts and examine each in turn.

> [Aristotle] says that something is said to be sensible *per accidens*, for example if we were to say that Diares or Socrates is sensible *per accidens* because it is accidental to him to be white. For that is sensed *per accidens* that is accidental to the thing sensed *per se*. It is, however, accidental to white (which is sensible *per se*) that it belongs to Diares. Hence Diares is sensible *per accidens*. Thus [the sense] is not at all affected by Diares as such.[18]

The individual man, Diares, is just as real as his being white; the *white* skin—but neither *skin* nor *Diares*—is apprehended by the power of vision since the color white is a *per se* sensible. *Diares*, a human, is concurrently apprehended but not by any of the external senses because they only apprehend *per se* sensibles, and *Diares*, *qua* object of cognition, is a *per accidens* sensible. Aquinas will provide some additional examples of *per accidens* sensibles beyond that of *Socrates* and *Diares*, but it is not difficult to expand the inventory of *per accidens* sensibles; it includes all the objects of cognition that are apprehended concurrently with our sensation of *per se* sensibles, but which are not *per se* sensibles. It is worth emphasizing how far-reaching the category of *per accidens* sensibles is; it comprehends the full ambit of objects cognized through the external senses which are of central concern in our everyday lives. It is rare that our conscious attention is merely focused on the color, sounds, tangibles, size,

[17] See *STh* I.78.3–4.
[18] *In DA* II.13 (Leon., 119: 56-63). (Pasnau, 205, mod. trans.).

shape, and movements of extra-cognitive objects. Ordinary empirical cognition is far richer than awareness of *per se* sensibles. What we primarily cognitively attend to are the *per accidens* sensibles objects that are potables, edibles, humans and other animals, and the range of affordances these and other objects in the environment have for us.[19] The relevance of *per se* sensibles to an animal are dependent upon the kind of things these *per se* sensibles belong to; bright colors can be indicative of ripe fruit that afford consumption, but they can also be indicative of toxic plants or animals that afford avoiding and not consuming. It is therefore surprising how many exegetes of Aquinas have completely overlooked the role these *per accidens* sensibles have in Aquinas's account of human cognition of individual material things, especially for his general account of empirical cognition of individuals.

Aquinas provides the following criteria for *per accidens* sensibles.

> [I]t is important to know that for something to be sensible *per accidens*, the first thing that is required is that it be an accident of something sensible *per se*. For example, being a human being applies accidentally (*accidit*) to what is white, as does being sweet. The second thing required is that it be apprehended by the thing that is sensing. For if there were some accident of the sense object that was hidden from the thing sensing, that would not be said to be sensed *per accidens*. It must then be cognized *per se* by some other cognitive power belonging to the thing sensing; this will, of course, be either another sense, intellect, or the cogitative power, or the estimative power.[20]

Aquinas presents two conditions for *per accidens* sensation of *per accidens* sensibles. First, all *per accidens* sensibles necessarily belong to and are presented concurrently with *per se* sensible objects. Second, these *per accidens* sensibles must be cognized by the same animal concurrently with its sensation of the *per se* sensibles of the same cognizable object. If while sensing the colored shapes of a painting I *recollect* an amusing episode from the last time I visited this museum, this act of remembering concurrent to my sensation of *per se* sensibles does not qualify as a kind of *per accidens* sensation. Significantly, the *per accidens* sensing animal must be deploying some cognitive power other than the external senses or *sensus communis* (or imagination and memory) to cognize these *per accidens* sensibles. It must be a

[19] "The *affordances* of the environment are what it *offers* the animal, what it *provides* or *furnishes*, either for good or ill." James Gibson, *The Ecological Approach to Visual Perception*, Boston: Houghton-Miffliin, 1979, 127.
[20] *In DA* II.13 (Leon., 120: 164-174.) (Pasnau, 207-208, mod. trans.).

cognitive power of the animal that can operate concurrently with the animal's sensation of *per se* sensibles to cognize other cognizable features of the present *per se* sensible object. What are these *per accidens* sensible objects in their own right, that is, what kind of cognizable objects are they essentially or *per se*? And, what cognitive powers have these present cognizable objects as their *per se* or essential object? Aquinas addresses this last question first.

Aquinas mentions four cognitive powers whose *per se* operations apprehend these *per accidens* sensibles and so have them as their *per se* object; he lists another sense, the intellect, the cognitive power, and the estimative power. He immediately qualifies the first.

> I speak of "another sense" as if we were to say that sweet is visible *per accidens* insofar as sweet is accidental to white, which is apprehended by sight, whereas sweet is apprehended *per se* by taste. But, to speak strictly, this is not something altogether sensible *per accidens*, but rather something visible *per accidens* and sensible *per se*.[21]

Given the criteria for being a *per accidens* sensible, the color of an object that is seen is a *per accidens* sensible with respect to the same animal hearing a sound produced by the object that is colored. In this instance, color can be understood as being a *per accidens* sensible with respect to sound; however, since both color and sound are *per se* sensibles Aquinas distinguishes them from a still stricter meaning of a *per accidens* sensible, which only includes cognizable objects that are *not per se* sensibles. Aquinas seems to introduce here a third criterion for being a *per accidens* sensible, namely, the cognizable objects that are *per accidens* sensibles cannot also be *per se* sensibles. This entails that *per accidens* sensibles in this strict meaning of the term cannot be the *per se* object of the external senses, *sensus communis*, imagination, or memory. This leaves the three other cognitive powers Aquinas listed: intellect, cogitative power, and estimative power. Let us consider Aquinas's account of *per accidens* sensation by the intellect.

> What is not cognized by a proper sense is, if it is something universal, apprehended by intellect. Still, not everything that can be apprehended by intellect in something that has been sensed can be called sensible *per accidens*, but [only] that which is apprehended by intellect right when [*statim*] the thing that has been sensed is encountered. For example, right when [*statim*] I see someone speaking or moving,

[21] *In DA* II.13 (Leon., 120–121: 175-181) (Pasnau, 208, mod. trans.).

> apprehending through intellect his being alive, I can say on this basis that I see that he is living.[22]

If the object cognized as a *per accidens* sensible concurrently with the external sensation of the *per se* sensibles of the same object is a *universal*, then the act of *per accidens* sensation of the *per accidens* sensible is achieved by the intellect. Again, note well the conditions obtained here for *per accidens* sensibles and *per accidens* sensation. Not all apprehensions of universals through the cognitive operations of the intellect are forms of *per accidens* sensation of *per accidens* sensibles. Only intellectual cognition of the universal features of the cognizable object that is also immediately (*statim*) and concurrently being cognized by the external senses meets the conditions for being a form of *per accidens* sensation of *per accidens* sensibles. How does this form of intellectual *per accidens* sensation differ from the form of *per accidens* sensation Aquinas attributes to the cogitative and estimative powers?

> If, however, [the object] is apprehended as an individual—e.g., when I see something colored I perceive *this* human being or *this* animal—then this sort of apprehension in a human being is produced through the cogitative power. This is also called particular reason (*ratio particularis*), because it joins individual intentions (*intentionum individualium*) in the way that universal reason joins universal concepts (*rationum*). But all the same, this power is in the soul's sensory part. For the sensory power, at its highest level, participates somewhat in the intellective power in a human being, in whom sense is connected to intellect. In an irrational animal, on the other hand, the natural estimative power brings about the apprehension of an individual intention. It is in virtue of this that a sheep, through hearing or sight, recognizes its offspring or anything of that sort.[23]

If a human or other animal cognizes an *individual* while concurrently apprehending by *per se* sensation that individual's *per se* sensible qualities, then its act of *per accidens* sensation of the *per accidens* sensible *qua* individual is achieved by the cognitive power or estimative power. Notice the way Aquinas contrasts *per accidens* sensation of individuals by the cogitative power from *per accidens* sensation of a universal by the intellect. I can attend to the object I apprehend by *per se* sensation either *qua* individual or *qua* universal. The colored, shaped object in motion I see can be concurrently cognized *qua* this individual man via the cogitative power or *qua* a universal human via the intellect. Aquinas presents a similar

[22] *In DA* II.13 (Leon., 121: 182-190) (Pasnau, 208, mod. trans.).
[23] *In DA* II.13 (Leon., 121-122: 191-205) (Pasnau, 208, mod. trans.). See also *DV* 14.1, ad9.

account in his commentary on the *Sentences*, which references Aristotle's example from this passage in *De anima* II.6.

> A *per accidens* [sensible] that is sensed does not affect the sense, neither inasmuch as it is a sense, nor inasmuch as it is this sense, but as conjoined to those things that affect the sense *per se*. As [for example] "Socrates," and "the son of Diares," and "friend," and other similar things, which are *per se* cognized in the universal by the intellect, and in the particular [they are *per se* cognized] by the cogitative power in human[s], and by the estimative in other animals. In this way then the external sense is said to sense, although *per accidens*, when from that which is sensed *per se*, the apprehensive power, whose [capacity] it is to cognize *per se* this thing cognized, apprehends it immediately without hesitation or discursion (*statim sine dubitatione et discursu apprehendit*). As [for example, when] we see that someone is alive from the fact that he speaks.[24]

In his commentary on *De anima* II.6, Aquinas introduces another name for the cogitative power. He says it is sometimes called the "particular reason" because, even though it is a sensory power, the cogitative power in humans is connected with the intellectual power. This dynamic connection enables the cogitative power to perform operations that share or participate in operations similar to the rational operations of the intellect. Just as the intellect collates (*collativa*) universal intentions or notions (*rationum*), the cogitative power *qua* particular reason collates (*collativa*) individual or particular intentions. We have here in one text Aquinas's answer to both of our earlier questions. Particular intentions are the *per se* object of the *per se* operations of the cogitative power and universal intentions are the *per se* object of the *per se* operations of the intellect, and both particular and universal intentions can be *per accidens* sensibles that are cognized concurrently with the sensation of *per se* sensibles. Aquinas rehearses this comparison in many passages, including in the *locus classicus* for Aquinas's *ex professo* treatment of the internal senses, including the cogitative power, in *STh* I.78.4. Here he again takes note of the reason why the cogitative power is sometimes called the particular reason, for it collates or compares individual intentions, just as the intellectual reason collates or compares universal intentions (*Unde etiam dicitur ratio particularis, … est enim collativa intentionum individualium, sicut ratio intellectiva*

[24] *Scriptum super libros sententiarum* (= *In Sent*), IV. d. 49, q. 2, a. 2, book IV from Parma: Typis Petri Fiaccadori, 1852–1873. (Parma, vol. VII, pt. 2, pp. 1201–1202). See also *STh* III. Suppl. 92.2.

intentionum universalium.)[25] We will return to some of the details of this doctrine later, but it is important to point out that Aquinas is a realist about these natural *intentions* no less than he is a realist about *per se sensible forms*. Just as cognizable sensible forms are the very manifestation of the sensible qualities of a thing *in re*, so also are intentions the very manifestation of the cognizable but nonsensible features of a thing *in re*. These features can be cognized as individual intentions by the cogitative power and as cogitative experiences they are—like the images retained in imagination and intentions of *pastness* retained by memory—potentially intelligible phantasms. Once these potentially intelligible intentions are abstracted as actually intelligible universal intentions they can be cognized by the intellect.[26]

Aquinas distinguishes the enhanced abilities of the cogitative power in humans from the more limited, but still impressive, abilities of the estimative power in nonhuman animals. The estimative power in nonhuman animals, like sheep, enables sheep to apprehend the individual intentions that the cogitative power enables humans to apprehend. In other words, sheep, like humans, are not just interested in the colors, sounds, smells, flavors, and tangible qualities of moving, small or large, shaped objects in their environment, they are also concerned with concurrently apprehending individual intentions *qua per accidens* sensibles like "offspring" and "anything of that sort". Anyone who has spent time raising sheep will know, in comparison to other ungulate quadrupeds, like cows and pigs, sheep are among the most unintelligent and skittish livestock around. Nevertheless, Aquinas's "anything of that sort" includes a great deal. We should not underestimate the wide range of diverse individual intentions that sheep can estimate. Elsewhere Aquinas, following Avicenna's own treatment of sheep and wolves, mentions the way sheep apprehend particular intentions like "enemy" (*inimicum*), or "predator," and "harmful" (*noxium*) when they encounter and then flee a wolf seen or heard.[27] Interestingly, he points out that the sheep does not flee the wolf on account of the *per se* sensibles of *color* or *shape* that are sensed *per se*, but because the sheep's *per accidens* sensation *qua* estimation of the individual intentions of the wolf as being a natural

[25] *STh* I.78.4.

[26] See *Expositio Libri Posteriorum*, II.20, ed. Leonina, I*.2, Rome: Commissio Leonina, 1989; *In Duodecim Libros Metaphysicorum Aristotelis Exposito,* ed. by M.-R. Cathala and R. M. Spiazzi, Rome: Marietti Editori, 1950, I, lect., 1, n. 13-15.

[27] "Cuius ratio est, quia appetitus sensitivus in aliis quidem animalibus natus est moveri ab aestimativa virtute; sicut ovis aestimans lupum inimicum, timet." *STh* I.81.3. See also *STh* I.59.3; I-II.29.6; *DV* 25.2; *SCG* II.48; *QDA* 13.

predator. This is because sensing and "… imaging forms without any estimation of fittingness or harmfulness does not move the sensitive appetite…."[28] It is not the *per se* sensibles of *per se* sensation that move the sheep to flee the wolf. The sheep's *per accidens* sensation via estimation of the wolf's *per accidens* sensible features *qua* individual intentions of being a *predator* and *harmful* are what motivates the appetites of the sheep that cause it to flee. Aquinas also notes that birds gather straw, not because of any *per se* sensibles they sense, but because birds can estimate the individual intentions of utility in the straw, namely, that straw affords being useful for constructing a nest. But we need not restrict the inventory of individual intentions *qua per accidens* sensibles estimated by sheep to those mentioned by Aquinas. Aquinas's straightforward account of individual intentions, estimation, and their sometimes *per accidens* sensation of *per accidens* sensibles, can be expanded to include a variety of individual intentions and operations performed by clever critters like dogs, dolphins, cephalopods, corvids, and great apes. What distinguishes the way individual intentions are cogitated by humans from the way they are estimated by nonhuman animals? Aquinas provides some clarification to this question in his final remarks taken from his treatment of *per se* and *per accidens* sensibles within his commentary on Aristotle's *De anima*.

> The cogitative and estimative powers stand differently in this regard. For the cogitative power apprehends an individual as existing under a common nature. It can do this insofar as it is united to the intellective power in the same subject. Thus it cognizes this human being as it is *this* human being, and this piece of wood as it is *this* piece of wood. But the estimative power apprehends an individual, not in terms of its being under a common nature, but only in terms of its being the end point or starting point of some action or affection. It is in this way that a sheep recognizes the lamb not inasmuch as it is *this* lamb but inasmuch as it can nurse it. It recognizes *this* grass inasmuch as it is its food. Thus its natural estimative power in no way apprehends any individual to which its acting or being affected does not extend. For the natural estimative power is given to animals so that through it they are directed toward the proper actions or affections that should be pursued or avoided.[29]

This rich text adds important clarifications to the differences between human and nonhuman animal cognition of individual intentions, but it also leaves ambiguous one significant point. What the text clarifies is that the union of the cogitative power with the intellect in the human enables the cogitative power to apprehend, not only individual intentions, but to apprehend

[28] *STh* I-II.9.1, ad2.
[29] *In DA* II.13 (Leon., 122: 205-222) (Pasnau, 208–209, mod. trans.).

individual intentions as falling under the universal intentions of a common nature. Children first learn to apprehend and discriminate between individual humans and individual dogs, as well as between an individual human and another individual human, between Socrates and Diares. In this respect, the human child's use of the cogitative power to apprehend individual intentions does not differ from the dog's use of its estimative power to discriminate between the individual intentions afforded by individual humans or individual dogs. But eventually the child's cogitative power will be transformed through its participation and co-operation with the child's intellect, and this will enable the child to employ the cogitative power to appreciate individual intentions *qua* instances of universal intentions. That is to say, the human child will become able to exercise both powers together—the cogitative power and intellect—to form propositions like "This individual man is an animal" or "Socrates is a human," which combine a singular subject with a universal predicate.

Aquinas clearly contrasts this intellectual transformation of the cogitative power's ability to apprehend individual intentions with the natural range of abilities that belong to the estimative power in nonhuman animals. Nonhuman animals, lacking intellectual powers, cannot use their estimative power to apprehend individual intentions as being under a common nature. The scope of the individual intentions apprehended by the estimative power in nonhuman animals is fixed by their relevance to being the aim (*terminus*) or starting point (*principium*) of some action or passion of the animal. A hungry nonhuman animal, like a scrub-jay, might employ its estimative power, albeit not as a *per accidens* sensation, to cognize the *aim* of retrieving food from one of its distant caches. A rabbit fleeing a fox might encounter a burrow that it estimates as affording safety which serves as starting point of action to achieve the aim of escaping the predator.

Aquinas states that the estimative power is unable to apprehend any individual intentions that fall outside the range of actions or reactions required for the animal to survive by pursuing or fleeing some object. Said otherwise, and again using the language of the ecological psychologist James Gibson, if the individual intentions of an object do not *afford* any action or reaction for the animal, then the animal will not estimate those intentions. Aquinas's contrast between apprehending individual intentions under a common nature and merely apprehending individual intentions as they are relevant to the aims or initiation of action or passion suggests a difference between "theoretical" and "practical" pursuits. The estimative power in nonhuman animals only apprehends individual intentions that fall within

a "pragmatic" horizon of action and passion, but, due to the intellectual transformation of the cogitative power in humans, the cogitative power can go beyond this "practical" horizon to apprehend individual intentions that need not be relevant to any action or passion on the part of the human. The human cogitative power can be employed both to apprehend individual intentions pertinent to human action or passion, and to apprehend individual intentions in a disinterested way that is required for theoretical forms of apprehension. Theoretical cognition necessitates not merely apprehending individuals *qua* individuals relevant to action, but also *qua* connected to universals that transcend the *hic et nunc* of action and passion.[30]

Even though this passage does clarify Aquinas's contrast between the apprehension of individual intentions by the estimative and cogitative powers, it nevertheless leaves unresolved an important feature concerning the way the estimative power apprehends individual intentions. Aquinas states that "a sheep recognizes the lamb not inasmuch as it is *this* lamb but inasmuch as it can nurse it. It recognizes *this* grass inasmuch as it is its food."[31] There are two ways we might interpret this statement. Given Aquinas's emphasis on the relevance of action and passion that surrounds this statement, we might read Aquinas as excluding from the estimative power the ability to apprehend individual intentions *qua* individuals, by restricting the estimative power to the apprehension of individual intentions *qua* the principles or aims of action or passion. On this reading, sheep do not apprehend individuals like *this* lamb, but only apprehend individual actions or passions to be pursued with respect to *this* lamb. Alternatively, given the contrast Aquinas makes between apprehending individual intentions as falling under a common nature versus their being apprehended without any connection to universals—qualifications which also surround this passage—we might read Aquinas as simply claiming nonhuman animals can only estimate individual intentions *qua* individuals relevant to action or passion.

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[30] This contrast between theoretical and practical requires some qualification with respect to Aquinas's doctrine. As we will see later, unlike the "practical" activities of nonhuman animals, human practical reason requires, like theoretical reason, the application of universal principles to particulars. In short, the ascription of "practical" to nonhuman animals does not involve the apprehension and application of universal intentions, whereas both practical and theoretical human endeavors require the apprehension of universal and individual intentions.

[31] *In DA* II.13 (Leon., 122: 215-217) (Pasnau, 209, mod. trans.).

There are two interconnected problems with the first reading of this passage. First, it suggests that the reason the estimative power cannot apprehend *this* lamb or *this* grass is because these individual intentions can be connected with universals, which would undermine Aquinas's contrast between the estimative power and the cogitative power. But this is no less true of individual intentions that afford actions or passions, like being nursed or being edible; these too can be connected with universals. Accordingly, I take Aquinas's qualification of "can nurse it" over "*this* lamb" and "food" over "*this* grass," to be emphasizing that the sheep cannot estimate *this* lamb and *this* grass as falling under a common nature or as instances of a universal. The sheep's estimation of *this* lamb and *this* grass is restricted to them as individual objects that afford some action or passion.

Second, the first reading would exclude from Aquinas's quite nuanced view of nonhuman animal estimation a rather obvious feature of nonhuman animal behavior, namely, that the estimated relevance of the same individual to the action or passion of an animal frequently changes. In different circumstances a body of water affords drinking, cooling off, and swimming across. In some situations, a mare estimates her colt or filly as affording being nursed, but, at least typically, not another mare's foal as affording being nursed. In fact, some mares can be quite aggressive towards the foals of other mares. If a predator is encountered, a mare will estimate her own foal as requiring protection. Despite different contexts that require estimations of different actions or passions, the mare apprehends the same individual, its offspring, as affording these distinct actions or passions. Why would we conclude that Aquinas intended his already subtle account of nonhuman animal estimation to exclude these more obvious examples of nonhuman animal behavior?

It is for these reasons that I endorse a version of the second interpretation. Nonhuman animals can estimate individual intentions like *this* offspring, *this* lamb, and *this* grass, but they are always apprehended *qua* individuals-to-be-acted-on or individuals-to-be-affected-by, that is, as relevant to some behavioral aim; they are never apprehended as being connected to universals. Aquinas's texts do not explicitly resolve this issue, but I think this interpretation provides the best reading of the text, insofar as it harmonizes all of his qualifications about nonhuman animal estimation and it does not render his account incapable of explaining some obvious features of nonhuman animal behavior.

Let us conclude this examination of Aquinas's treatment of *per se* and *per accidens* sensibles and sensation with a consideration of its relevance for Aquinas's account of

cognition of individuals. Despite the technical and idiosyncratic features of Aquinas's treatment, the phenomenon captured by the doctrine of *per se* and *per accidens* sensibles and sensation is utterly quotidian. His example of intellectual *per accidens* sensation consists in a human simultaneously sensing the *per se* sensibles of an object—its color, sounds, movements, etc.—and also intellectually apprehending that this object is a living thing. Our daily life is replete with ordinary forms of discourse and intellectual recognition of the objects we sense in which we identify the universal characteristics of these objects. This is no less true of our cognition of the individual intentions of things that Aquinas ascribes to the cogitative power in humans. Indeed, our primary focus in these cases is rarely directed to the colors, shapes, sounds, or movements of these objects, but to the universal or individual characteristics of these objects that are simultaneously being sensed. We attend to the universal and individual *meanings* of words read or spoken, not to their colors, sounds, shapes, size, or movement. The deep interfusion and confluence of our *per accidens* sensation of *per accidens* sensibles bound up with our concurrent *per se* sensation of *per se* sensibles lends itself to forms of expression that unite in words the unity of the human's cognitive apprehension that consists in the coordinated exercise of their intellectual and sensory powers. Hence, I can say that I see that he is alive (*unde possum dicere quod video eum vivere*). But neither the universal nor the singular characteristics of *life* are *per se* sensibles and so they cannot be *seen* strictly speaking. Here *seeing* means both the *per se* sensation of visual sight (which is *seeing* properly speaking) and the concurrent apprehension of *life* as universal by the intellect or as singular by the cogitative power, both of which are *seeing* in the extended sense as *per accidens* sensation.

I think it is helpful to draw attention to the way Aquinas's treatment of this topic is similar to Wittgenstein's brief reflections on seeing an aspect; indeed, they seem to be discussing the same phenomenon. Similar to the account given by Aquinas, Wittgenstein distinguishes two uses of the world "see" and provides a number of illustrations of each that track phenomena akin to Aquinas's example. "I contemplate a face, and then suddenly notice its likeness to another. I see that it has not changed; and yet I see it differently. I call this experience "noticing an aspect"."[32] The different aspects under which we can see, i.e., *per se*

[32] Ludwig Wittgenstein, *Philosophical Investigations*, trans. G.E.M. Anscombe, ed. G.E.M. Anscombe and R. Rhees, 2nd ed., Oxford: Basil Blackwell, 1958., p. 193, xl.

sense, the same *per se* sensibles is equivalent to the phenomenon Aquinas describes as *per accidens* sensation of *per accidens* sensibles. These different aspects are the individual and universal intentions Aquinas ascribes to the cogitative power and intellect. We can streamline our language about these two ways of seeing without sacrificing any clarity by stipulating a sharp distinction between "sensation" and "perception." I call all acts of *per se* sensation of *per se* sensibles acts of "sensation," and call all acts of *per accidens* sensation of individual or universal *per accidens* sensibles by the cogitative power and intellect acts of "perception."

4. Aquinas's Approach to Singular Cognition

The central contention of this essay is that a proper understanding of Aquinas's doctrine of human cognition of individuals requires first and foremost grasping the central framing role this account of sensation and perception has for his treatment of human thought, understanding, reasoning, and knowledge of individuals. For Aquinas, all cognition begins in the senses, and as we have seen Aquinas distinguishes sensibles objects into *per se* and *per accidens* sensibles which are sensed and perceived, respectively. This distinction and account of empirical cognition of sensibles, individual meanings, and universal meanings, frames the point of departure for Aquinas's own division of different forms of cognition of individuals, and so also for any adequate interpretation of Aquinas on the problem of singular cognition. The approach adopted here is therefore radically different from the approach common to Aquinas's many of defenders and critics on the problem of cognition of singulars, which read Aquinas's texts on cognition of singulars in isolation from the way Aquinas, following Aristotle, works out the differentiation of psychological objects, operations, and powers, in his commentary on *De anima* II.6.

Peter King's essay on singular thought in Aquinas, Scotus, and Ockham nicely illustrates what I mean by the common approach to Aquinas. King summarizes Aquinas's reception of Aristotelian psychology before turning to early criticisms and defenses of Aquinas's claim that the human intellect does not cognize individuals. Following his brief examination of *STh* I.86.1—which is the *locus classicus* in the *Summa theologiae* for Aquinas's view on human intellectual cognition of individuals—King states: "There are reasons to be skeptical that an account of singular cognition is available to Aquinas—at least, singular

thought of material composite substances."[33] King's skeptical contention would be reasonable if he, and others, had mentioned, addressed, and raised problems with Aquinas's account of *per accidens* sensation of *per accidens* sensibles and his nuanced doctrine of the cogitative power and its apprehension and collation of individual intentions. But there is no mention of these topics by King—nor by many of Aquinas's other critics and defenders. However, as we have seen, Aquinas himself clearly took these topics to be central to the issue of human cognition of singulars.[34] Furthermore, King and others seem to assume that the only cognitive power Aquinas attributes "thought" and "thinking" to is the intellect. Already our examination of Aquinas's commentary on *De anima* II.6 and other related passages show this

[33] King, "Thinking about Things," 110.

[34] King is not alone in this respect. But it is noteworthy that in one of his earlier articles King draws attention to the relevance of the cogitative power to Aquinas account of the emotions, wherein he presents a very rich and accurate account of the way the cogitative power or particular reason cognizes individual intentions and forms singular propositions. King writes, "it is a fundamental thesis of Aquinas's philosophy of mind that sense deals with particulars and intellect with universals; reason joins universal concepts together in propositional judgment. But singular propositions can follow from universal ones, and particular reason is the faculty that draws such inferences. Furthermore, particular reason may supply singular propositions that are combined with other propositions, singular or universal to draw conclusions." Peter King, "Aquinas on the Passions," in *Aquinas's Moral Theory*, ed. by Scott MacDonald and Eleonore Stump, Ithaca: Cornell University Press, 1999, 101-132, p. 129. Given the accuracy of King's own presentation of Aquinas's view that singular propositions are formed and reasoned with by virtue of the particular reason, it makes it all the more peculiar that in his later article on singular thought in Aquinas, Scotus, and Ockham King omits any mention of the cogitative power and individual intentions in his summary of Aquinas, and even endorses William de la Mare's view, who "charges Aquinas with not being able to provide a mechanism that allows singular thought to take place." King, "Thinking about Things," 109. There are many readers of Aquinas, both defenders and critics, who either entirely omit or neglect the role the cogitative power clearly plays in Aquinas's account of cognition of singulars. See, for instance, Giorgio Pini, "Two Models of Thinking: Thomas Aquinas and John Duns Scotus on Occurrent Thoughts" in *Intentionality, Cognition, and Representation in Medieval Philosophy*, ed. by G. Klima, New York: Fordham University Press, 2014, 81-103; Stephen Boulter, "Aquinas and Searle on Singular Thoughts" in *Analytical Thomism: Traditions in Dialogue*, ed. by Craig Paterson and Matthew S. Pugh, Burlington, 2006, ch. 4, 59-78; Anthony Kenny, *Aquinas on Mind*, New York, 1993, chs., 3, 7, & 9; Norman Kretzmann, "Philosophy of Mind" in *The Cambridge Companion to Aquinas,* ed. by Norman Kretzmann and Eleonore Stump, Cambridge, 1993, 128-149; Herbert McCabe, *On Aquinas*, ed. Brain Davies, New York, 2008, chs. 10-11; Calvin G. Normore, "The Invention of Singular Thought" in *Forming the Mind: Essays on the Internal Senses and the Mind/Body Problem from Avicenna to the Medical Enlightenment* ed. by Henrik Lagerlund,, Dordrecht: Springer, 2007, ch. 6, 109-128; Eleonore Stump, *Aquinas*, New York: Routledge, 2003, 244–276.

assumption is mistaken. Aquinas unequivocally ascribes to the cogitative power the ability to perceive and apprehend individual intentions of things as under a common nature as well as to collate these individual intentions and form singular propositions. It would be difficult to imagine a more straightforward account of "singular cognition" than this, but Aquinas in fact has a great deal more to say about the diverse ways in which the cogitative power enables the human to have singular cognition. In the remaining sections of this essay I present a digest of Aquinas's account of the diverse ways the cogitative power performs operations of thinking, understanding, and reasoning with respect to singulars, beginning with a re-reading of the text from *STh* I.86.1. I hope this arsenal of textual evidence helps put to rest the charge that Aquinas does not provide any explanation for how human singular thought takes place.

5. Re-reading *Summa theologiae* I.86.1

It is important to be clear about both Aquinas's overt aim in *STh* I.86.1 and the way his aim in this article fits within his treatment of human nature in the *Prima pars* of the *Summa theologiae*. The problem addressed in *STh* I.86.1 is not about whether humans or even whether the cogitative power can cognize or achieve "singular thought of material composite substances," but whether the human intellect *qua* intellectual power can cognize individuals. The query in *STh* I.86.1 is: "It seems that our intellect cognizes singulars." (*Videtur quod intellectus noster cognoscat singularia*.).

Consider the context of this question. *STh* I.86 belongs to Aquinas's treatment of the nature of humans in *STh* I.75–89. Aquinas states that these questions *de homine* are approached from a theological order instead of the philosophical order of the *De anima*.[35] In other words, theology sets forth a re-ordered appropriation of the inquiry and conclusions from philosophy. The intelligibility of the *Summa*'s theological presentation of human nature (*STh* I.75-76), powers (*STh* I.77-83), and investigation of intellectual operations and objects (*STh* I.84–89), presupposes the intelligibility of the philosophical order of inquiry which proceeds from a differentiation of objects, to operations, to powers, and then an understanding of the nature that grounds them.[36] Understanding the theological order of the

[35] See *STh* I.75, proem.
[36] See *STh* I.77.3; *In DA* II. 6; *QDA* 13.

Summa requires an appreciation of its appropriation and transformation of the philosophical inquiry followed in the *De Anima*. This inquiry begins in earnest with the division of cognizable objects into *per se* and *per accidens* sensibles in the text we examined above, namely, *De anima* II.6. It is in his commentary on *De anima* II.6 where Aquinas's shows how to appreciate that all of the operations of the cognitive powers are rooted in the sensible objects in one way or another. All cognition, not just sensation, truly begins with the diverse ways in which we empirically cognize *per se* and *per accidens* sensible objects—a point developed at length in *STh* I.84. So where does *STh* I.86.1 fit within this theological presentation of human nature?

Aquinas presents his division of vegetative, sensory, and intellectual cognitive powers in *STh* I.78–79, but in *STh* I.84-89 he focuses exclusively on the cognitive operations and objects of the intellect. This unit of questions commences with a surprisingly extended prologue.

> We have to consider, first, how the soul has intellective understanding when it is conjoined to the body (questions 84-88), and, second, how the soul has intellective understanding when it is separated from the body (question 89). The consideration of the first topic will have three parts: We will consider, first, how the soul has intellective understanding of corporeal things, which are below it (questions 84-86); second, how it has intellective understanding of itself and of what is contained within itself (question 87); and, third, how it has intellective understanding of immaterial substances, which are above it (question 88). As for the cognition of corporeal things, there are three matters to be considered: first, by what means (*per quid*) it has cognition of them (question 84); second, in what manner and order (*quomodo et quo ordine*) it has cognition of them (question 85); and, third, what (*quid*) it has cognition of in them (question 86).[37]

It is noteworthy that *STh* I.84–89 treats the different objects cognized by the power of *intellect*, not the way these objects are cognized by *human*s or other human cognitive powers. Given everything Aquinas has said from *STh* I.75-85, including his division of eleven cognitive powers that contribute to human cognition, it is clearly contrary to Aquinas's aim to read *STh* I.86.1 as King and others do, namely, as presenting Aquinas's view on the way "human cognition" or even "cognition in general" apprehends singulars of a material nature. The total package of what the other cognitive powers along with the intellect contribute to human

[37] *STh* I.84, proem. (Freddoso, mod. trans.).

cognition is precisely what Aquinas says *STh* I.84-89 leaves out, for these questions are concerned with what the intellect uniquely contributes to human cognition.

In *STh* I.84–85 we learn, among other things, that the objects of intellectual knowledge are acquired through abstraction from the senses and complete knowledge of truth requires that the intellect turn to the phantasms. Given the dependency of all intellectual cognition on the cognition of the external and internal senses—a point reiterated in *STh* I.84 and which is the hallmark of Aquinas's empirical psychology—his extended presentation and near exclusive focus on intellectual cognition in *STh* I.84-89 presupposes Aquinas's broader account of the objects and cognitive operations of sensory powers that provide intellectual cognition with its object—an account that we find worked out in his commentary on the *De anima* but that Aquinas explicitly states he is leaving out in the *Summa*.[38] Hence, to read *STh* I.86.1 within the wider context of Aquinas's psychology requires appreciating what Aquinas himself states needs to be supplemented in *ST* I.86.1, namely, an account of human empirical cognition akin to what we find in his commentary on the *De anima* and elsewhere. With these contextual caveats in mind, let us proceed to re-read *STh* I.86.1

In *STh* I.86 Aquinas investigates what our *intellect* cognizes in material things (*Deinde considerandum est quid intellectus noster in rebus materialibus cognoscat*).[39] The first article concerns whether our intellect can cognize singulars. Aquinas presents four objections that all contend the human intellect can cognize individuals. Aquinas's *sed contra* cites Aristotle as holding that reason cognizes universals and sense cognizes singulars. As for whether the human intellect *qua* intellectual power can cognize individuals, Aquinas's own answer could not be clearer.

> Our intellect cannot have a direct and primary cognition of the singular in material things. The reason for this is that the principle of singularity in material things is individual matter (*materia individualis*), while, as was explained above (q. 85, a. 1), our intellect has intellective understanding by abstracting the intelligible species from individual matter. But it is the universal that is abstracted from individual matter. Hence, our intellect has direct cognition only of the universals (*directe est cognoscitivus nisi universalium*). However, our intellect can have cognition of the singular indirectly and, as it were, by a sort of turning back (*indirecte et quasi per quandam reflexionem*). For as was explained above (q. 84, a. 7), even after it has abstracted intelligible species, it cannot have actual intellective understanding except

[38] See also *DV* 10.5.
[39] *STh* I.86. proem.

> by turning itself to the phantasms, in which it has intellective understanding of the intelligible species, as *De Anima* 3 says. So, then, our intellect understands the universal itself directly through the intelligible species, whereas it indirectly understands the singulars that the phantasms are phantasms of. And it is in this way that it forms the proposition 'Socrates is a man'.[40]

In this text, and in many others, Aquinas straightforwardly denies that the human intellect can cognize individuals. His reasons for doing so are also perfectly clear. As was detailed before, individual matter is the principle of singularity in material things, the human intellect understands by abstracting its intelligible species from this individual matter, and so the very nature of human intellectual cognition precludes its cognition of individuals that are individuated by matter. We must be cautious if we are to understand accurately what Aquinas has stated so clearly here and elsewhere. Many of Aquinas's readers conflate the question of whether there can be cognition, thought, understanding, or reasoning about individuals with the question of whether the human intellect *qua* intellectual power can have cognition, thought, understanding, or can reason about individuals. Aquinas explicitly addresses the latter question in *STh* I.86.1, but he does not tackle the former here. Nevertheless, given the preceding questions on the internal senses in *STh* I.78.4 and the presentation of the way the estimative and cogitative powers cognize individual intentions—which are also relevant to the way the sensual concupiscible and irascible appetites obey reason (See *STh* I.81.3)[41]—it is clear that Aquinas does maintain humans have powers that cognize individuals and so humans can cognize individuals. Indeed, he makes this point explicit in a parallel text to *STh* I.86.1 found in *De veritate* 2.6.

> Man has prior cognition of singulars through imagination and sense, and therefore can apply universal cognition which is in the intellect to a particular; for properly

[40] *STh* I.86.1 (Freddoso, mod. trans.).

[41] "Loco autem aestimativae virtutis est in homine, sicut supra dictum est, vis cogitativa; quae dicitur a quibusdam ratio particularis, eo quod est collativa intentionum individualium. Unde ab ea natus est moveri in homine appetitus sensitivus. Ipsa autem ratio particularis nata est moveri et dirigi secundum rationem universalem, unde in syllogisticis ex universalibus propositionibus concluduntur conclusiones singulares. Et ideo patet quod ratio universalis imperat appetitui sensitivo, qui distinguitur per concupiscibilem et irascibilem, et hic appetitus ei obedit. Et quia deducere universalia principia in conclusiones singulares, non est opus simplicis intellectus, sed rationis; ideo irascibilis et concupiscibilis magis dicuntur obedire rationi, quam intellectui. Hoc etiam quilibet experiri potest in seipso, applicando enim aliquas universales considerationes, mitigatur ira aut timor aut aliquid huiusmodi, vel etiam instigatur." *STh* I.81.3.

> speaking neither sense nor intellect cognize but man through both, as is clear from *De Anima* I.[42]

Aquinas does, however, state in *STh* I.86.1 and elsewhere that the intellect has indirect cognition of singulars through a reflection or conversion to the singulars cognized by phantasia, that is, by imagination, memory, and most importantly, the cogitative power.[43] Many defenders and critics of Aquinas have focused their attention on this indirect intellectual cognition of singulars, taking it to be Aquinas's sole explanation for the fact that *humans* cognize singulars. But as we have seen, this reading is deeply at odds with the expressed aims of *STh* I.86.1 and Aquinas's account of the cogitative power's apprehension of singulars as well as his broader understanding of what different cognitive powers contribute to the unity of human cognitive operations. It is only within this wider framework—which includes the way a human being's different cognitive powers can be coordinated to co-operate—that we can properly understand Aquinas's appeal to indirect intellectual cognition of singulars.[44]

Thus far we have seen that even though Aquinas denies that the human intellect has singular cognition, he unequivocally does ascribe to the cogitative power or particular reason the ability to perceive individual intentions, to cognize individuals, and to form propositions about singulars. Indeed, despite its frequent omission by his defenders and critics, we even find the last claim in Aquinas's reply to the second objection in *STh* I.86.1! The second objection maintained the intellect does cognize individuals because the practical intellect directs us to singular action, and this requires cognition of singulars. Aquinas's reply to this objection does not deny the need for singular cognition for practical reasoning and action.

> [T]he choice of a particular action (*electio particularis operabilis*) is, as it were, the conclusion of the practical intellect's syllogism. But a singular conclusion cannot be inferred directly from a universal proposition; rather, it is inferred by the mediation of

[42] *DV* 2.6, ad3 (Leon., 66–67: 127–133). My translation. See also *DV* 10.5.
[43] See *DV* 2.6; 10.5; Michael Stock, "Sense Consciousness According to St. Thomas," *The Thomist* 21, 4 (1958): 415–486.
[44] For more detailed studies on Aquinas's treatment of intellectual reflection and conversion on the phantasms, see Bernard Lonergan, *Verbum: Word and Idea in Aquinas*, ed. by David B. Burrell, Notre Dame: University of Notre Dame Press, 1967; George Klubertanz, "St. Thomas and the Knowledge of the Singular" *New Scholasticism* 26 (1952): 135–66; Therese Cory, "What Is an Intellectual 'Turn'? The *Liber de causis*, Avicenna, and Aquinas's Turn to Phantasms," *Tópicos* 45 (2013): 129-162.

> some assumed singular proposition. Hence, as *De anima* 3 says, the practical intellect's universal conception effects movement only through the mediation of a particular apprehension by the sentient part of the soul.[45]

We find a more developed presentation of the same claim in *De veritate* 10.5, where Aquinas touches on the dynamic conjunction among psychological powers that are grounded in the nature of the human being.

> [T]his conjunction is found in the movement from the soul to things, which begins from the mind and moves forward to the sensitive part in the mind's control over the lower powers. Here, the mind has contact with singulars through the mediation of particular reason, a power of the sensitive part, which composes and divides individual intentions, which is also known as the cogitative power, and which has a definite bodily organ, a cell in the center of the head. The mind's universal judgment about things to be done cannot be applied to a particular act except through the mediation of some intermediate power which apprehends the singular. In this way, there is framed a kind of syllogism whose major premise is universal, the judgment of the mind, and whose minor premise is singular, an apprehension of the particular reason. The conclusion is the choice of the singular work, as is clear in *De anima* III.[46]

These clear statements pertaining to the way the cogitative power cognizes individual intentions and forms singular propositions do not disappear in Aquinas's later works. Indeed, some of the clearest ascriptions of singular cognition to the cogitative power or particular reason occur in Aquinas's most mature works.

In Aquinas's treatment of prudence in his commentary on book six of the *Nicomachean Ethics* and the *Secunda Pars* of the *Summa theologiae*, he ascribes to the cogitative power a critical role to play in the virtue of prudence due to the cogitative power's capacity for *singular reasoning* and *singular understanding* (*intellectus qui est circa singularia*) whereby it forms unconditional judgments about singulars (*secundum quod habet absolutum iudicium de singularibus*) akin to the intellect's unconditional judgments about universals.[47]

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[45] *STh* I.86.1, ad2 (Freddoso, mod. trans.).

[46] *DV* 10.5. Modified English translation from Thomas Aquinas, *On Truth*, translated by R. W. Mulligan, J. V. McGlynn, and R. W. Schmidt, 3 vols., Chicago: Henry Regnery Company, 1952–1954. For the Latin text, see *supra* n. 8. See *In Sent*., IV, d. 50, 1. a. 3, ad 3 *in contrarium* (Parma ed., vol. VII, pt. 2, p. 1251).

[47] Aquinas's parallel treatment of prudence is found in his commentary on the *Nicomachean Ethics* VI, especially his seventh and ninth lectures, wherein he explicitly ascribes singular understanding and reasoning to the cogitative power. "Et, quia singularia proprie cognoscuntur per sensum, oportet quod homo horum singularium quae dicimus esse principia et extrema, habeat sensum non solum exteriorem, sed etiam interiorem, cuius supra dixit esse prudentiam, scilicet vim cogitativam sive aestimativam quae dicitur ratio

> The reasoning of prudence terminates, as in a conclusion, in the particular operable, to which it applies universal cognition… But the singular conclusion is syllogized from universal and singular propositions. Hence, the reasoning of prudence must proceed from a twofold understanding. One [kind of understanding] cognizes universals, which pertains to the intellect… But the other [kind of] understanding, as stated in book six of the *Ethics*, cognizes an extreme, that is, of some primary singular and contingent operable, namely, the minor premise, which must be singular in the syllogism of prudence… Now this primary singular is some singular end… Hence, the understanding that is posited as part of prudence is a right estimate of some particular end.[48]
>
> The right estimate concerning a particular end is called both understanding, inasmuch as it [pertains to] a principle, and sense, inasmuch as it [pertains to] a particular. And this is what the Philosopher says in book six of the *Ethics*, "Of these, namely, of singulars, [we] must have sense, and this is understanding". But this is not to be understood [as indicating] the particular sense by which we cognize proper sensibles, but [as indicating] the interior sense by which we judge of a particular (*sed de sensu interiori quo de particulari iudicamus*).[49]

This interior sense whereby humans *judge* of a particular is, of course, the cogitative power or particular reason, as the parallel texts from the commentary on the *Nicomachean Ethics* and other passages make explicit.

Thus far we have presented texts wherein Aquinas unequivocally ascribes to the cogitative power diverse forms of singular cognition including perceptions, judgments, understanding, reasoning, and the formation of singular propositions. But there are also texts in which Aquinas attributes *thinking* or *deliberative thought* to the cogitative power as well. In the *Summa theologiae* Aquinas distinguishes three meanings of thinking or to think (*cogitare*). The first is more general and denotes any act of intellectual considering. He

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particularis ; unde hic sensus vocatur intellectus qui est circa singularia, et hunc Philosophus vocat in III *De anima* intellectum passivum, qui est corruptibilis…" *Sententia libri Ethicorum* (=*In Ethic*), VI, 9, ed. Leonina XLVII.1-2, Rome: Commissio Leonina, 1969, p. 367: 178-186, ad 1143a35. "Est autem considerandum circa ea quae hic dicta sunt quod, sicut pertinent ad intellectum absolutum in universalibus iudicium de primis principiis, ad rationem autem pertinent discursus a principiis in conclusiones, ita etiam circa singularia vis cogitativa hominis vocatur intellectus, secundum quod habet absolutum iudicium de singularibus ; unde ad intellectum dicit pertinere prudentiam et synesim et gnomyn ; dicitur autem ratio particularis secundum quod discurrit ab uno in aliud, et ad hanc pertinet eubulia, quam Philosophus his non connumeravit nec dixit eam esse extremorum" *In Ethic* VI, 9 (Leon. ed., p. 368: 239-251, ad 1143b11).

[48] *STh* II-II.49.2, ad 1.

[49] *STh* II-II.49.2, ad 3.

distinguishes this from the form of thinking which is proper to the intellectual act of consideration that is characteristic of inquiry prior to arriving at any determinate understanding.

> Accordingly, the act of thinking something through is properly speaking a movement of the soul during the time in which it is deliberating and in which it has not yet been brought to perfection through a full vision of the truth. However, since such a movement can belong to the soul either (a) when it is deliberating with respect to universal intentions, which belong to the intellective part of the soul, or (b) when it is deliberating with respect to particular intentions, which belong to the sentient part of the soul, it follows that 'the act of thinking something through' (*cogitare*) is taken in the second sense for an act of the deliberating intellect, whereas 'the act of thinking something through' is taken in a third sense for an act of the cogitative power.[50]

This text demonstrates that, contrary to his many critics, Aquinas *does have* a straightforward account of singular thought of individual intentions. Why has this account been overlooked by his critics and defenders? It is because they have assumed *thought* is proprietary to the intellect. If we adopt this mistaken assumption and restrict our search for a doctrine of singular thought to Aquinas's treatments of the human intellect, then we will certainly come up empty handed. Aquinas, however, never gave the slightest impression that his account of the human intellect is where we should look for it; indeed, he presented unambiguous statements that claimed the human intellect cannot cognize individuals. But even if he had made such suggestions, this last passage from *STh* II-II.2.1—which is arguably the *locus classicus* on thinking (*cogitare*) in Aquinas—would have set the record straight for those interesting in Aquinas's doctrine of thinking, for in it they would have discovered that Aquinas does not ascribe singular thought to the human intellect, but *does* attribute singular thinking and deliberation about particular intentions to the human cogitative power.

6. Conclusion: Aquinas on the diverse forms of singular cognition in humans

[50] *STh* II-II.2.1 (Freddoso, mod. trans.). "Et secundum hoc cogitatio proprie dicitur motus animi deliberantis nondum perfecti per plenam visionem veritatis. Sed quia talis motus potest esse vel animi deliberantis circa intentiones universales, quod pertinet ad intellectivam partem; vel circa intentiones particulares, quod pertinet ad partem sensitivam: ideo cogitare secundo modo sumitur pro actu intellectus deliberantis; tertio modo, pro actu virtutis cogitativae."

In this essay I have presented extensive textual evidence from the works of Thomas Aquinas to demonstrate that Aquinas has a clear and substantive account of human cognition of singulars. This evidence undermines the well known criticism that Aquinas's psychology fails to provide any explanation for the basic fact that humans cognize and think about individuals. I argued that the root error behind this critique is the assumption that singular thought can only be achieved by the human intellect. This mistaken assumption, however, lacks any basis within the texts of Aquinas. From our detailed explication of empirical cognition in his commentary on *De anima* II.6's distinction between *per se* and *per accidens* sensibles, to our re-reading of *STh* I.86.1 and other texts on the intellect and cogitative power, a unified and coherent account of Aquinas's doctrine of singular cognition has come to light. Aquinas unequivocally maintains that there is no human *intellectual* cognition or thought about individual material objects, but he does contend that there is human *cogitative* cognition and thought about singulars. This essay's extended exegesis of Aquinas's many treatments of the cogitative power's diverse forms of singular cognition has established that, far from lacking any account of singular cognition in human beings, Aquinas has a complex account of the many ways in which the cogitative power enables the human being to perceive, understand, reason, think, and cognize singulars, that is, individuals that are matter-form composites. What unites these diverse cognitive operations of the cogitative power in humans are the individual intentions which constitute the *per se* object of the cogitative power. If we want to understand Aquinas's doctrine of singular cognition we need to look to his account of the cognitive power that cognizes these individual intentions for his own doctrine of singular cognition, and not his account of the intellect which only cognizes universal intentions. Of course, as Aquinas frequently reminds his readers, strictly speaking it is neither the cogitative power that thinks about individuals nor the intellect that thinks about universals, rather it is the human being that thinks about individuals and universals by deploying their powers of cogitation and intellection.

Granting this, one might think the real problem with Aquinas's account of singular cognition is the absence of any explanation of how the operations of these different powers are coordinated to contribute to the unified operations of the human being.[51] This essay has

[51] Aquinas does confront this issue in his treatment of human action (*STh* I-II.17.1-9) and in his many treatments of the connection of the virtues (*STh* I-II.65.1-5).

not tackled this vexing issue, which raises questions about the prospects for any powers psychology. For if the operations of psychological powers cannot be coordinated and united for the unity of a human operation, then all powers psychologies have a problem, not just Aquinas's. But even if this is a real problem for Aquinas, it is different from the problem of singular cognition addressed in this essay. And this essay has demonstrated that the problem of singular cognition is not a problem for Aquinas.

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