

Perception and the *Vis Cogitativa*:

A Thomistic Analysis of Aspectual, Actional, and Affectional Percepts

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Abstract. This paper aims to establish some of the taxonomical groundwork required for developing a robust philosophy of perception on the basis of the Thomistic doctrine of the cogitative power (*vis cogitativa*). The formal object of the cogitative power will be divided into aspectual, actional, and affectional percepts. Accordingly, the paper contends that there is an internal sense power capable of a non-conceptual and pre-linguistic perceptual estimation of *what* some particular is, what *could* be done with respect to it, and what *is* to be done with respect to it. The argument begins with a synopsis of Thomas Aquinas's philosophical anthropology. It then presents an extensive taxonomical analysis of three different kinds of cogitative percepts. This analysis is followed by a short exegetical defense of the threefold division of percepts. Finally, the essay concludes with a comparison of the Thomistic doctrine of the cogitative power with recent work in the philosophy of perception.

“I can only see, not hear, red and green,
– but sadness I can hear as much as I can see it.”¹
Wittgenstein

This paper aims to establish the taxonomical groundwork required for developing a robust philosophy of perception on the basis of the Thomistic doctrine of the cogitative power (*vis cogitativa*).² The formal object of the cogitative power will be divided into

¹ Ludwig Wittgenstein, *Philosophical Investigations* (Blackwell: Oxford, 1953), IIxi, 209.

² All citations from Thomas Aquinas are taken from following editions: citations from books I–III of Thomas's commentary on the *Sentences* are from *Scriptum super libros sententiarum* ed. P. Mandonnet and M. F. Moos, 4 vols. (Paris: Lethielleux, 1929–1947), quotations from book IV are taken from the Parma edition (Parma: Typis Petri Fiaccadori, 1852–1873) (=In Sent.); *Summa theologiae*, (Rome: Editiones Paulinae, 1962) (=ST); *Liber de veritate catholicae Fidei contra errores infidelium seu Summa contra Gentiles*, t. 2–3. ed. P. Marc, C. Pera, P. Caramello (Rome: Marietti Editori, 1961) (=SCG). In *Duodecim Libros Metaphysicorum Aristotelis Exposito*, ed. M.-R. Cathala and R. M. Spiazzi (Rome: Marietti Editori, 1950) (=In Meta.); *Quaestiones disputatae*, t. 2, *Quaestiones disputatae de potentia*. ed. P. M. Pession (Rome: Marietti Editori, 1965) (=de Pot.). I have used the following Leonine editions (=Leon.): *Sancti Thomae de Aquino Opera omnia* (Rome, 1882–). Vol. 1*.2, *Expositio Libri Posteriorum* (=In Post. Anal.); Vol. 22. 1–3, *Questiones disputatae de veritate* (=DV); Vol. 24.1, *Questiones disputatae de anima* (=QDdA); Vol. 24.2, *Quaestio disputata de spiritualibus creaturis* (=QDSC); Vol. 25.1-2, *Questiones de quolibet* (=Quod.); Vol. 45.1, *Sentencia libri De anima* (=In DA); Vol. 45.2, *Sentencia libri De sensu et*

aspectual, actional, and affectional percepts. In other words, the paper contends that there is an internal sense power in both human and nonhuman animals that is capable of non-conceptual and pre-linguistic perceptual estimations of *what* some particular is, what *could* be done with respect to it, and what *is* to be done with respect to it.³ The essay begins with a brief synopsis of Thomas Aquinas's philosophical anthropology followed by a series of important general qualifications that situate a properly Thomistic approach to the problem of perception. It then presents an extensive taxonomical analysis of three different kinds of cogitative percepts. This analysis is followed by a short exegetical defense of this threefold division of cogitative percepts. The rest of the paper is dedicated to a comparison of this study's Thomistic account of the cogitative power with recent work in the philosophy of perception. To be clear, the aims of this study are principally philosophical, and so the detailed conclusions of various exegetical studies will not be addressed at any length in my philosophical treatment of perception and the cogitative power.⁴ This study is concerned with the fruitful application of Thomas's philosophical

sensato (= *In DS*) (incl. *De memoria et reminiscencia* (= *In DM*)); Vol. 47.1–2, *Sententia libri Ethicorum* (= *In Ethic*). In a number of citations I have also included in parentheses references to the Marietti edition (*Sententia libri De anima*, edited by A. M. Pierotta (Rome: Marietti Editori, 1959) of Aquinas's commentary on Aristotle's *De anima* whenever there are major differences between its divisions of the text from that of the Leonine edition.

³ For similar treatments of perception as pre-linguistic, pre-logical, pre-predicative, or pre-categorial, see Alasdair MacIntyre, *Dependent Rational Animals: Why Human Beings Need the Virtues* (Chicago: Open Court, 2002), ch. 4; *in passim*; Robert Sokolowski, *Phenomenology of the Human Person* (New York: Cambridge University Press, 2008), 53–67; 205–224; *in passim*.

⁴ See the following extended studies of the cogitative power in Thomas Aquinas: George Klubertanz, *The Discursive Power: Sources and Doctrine of the Vis Cogitativa According to St. Thomas Aquinas* (St. Louis: Modern Schoolman, 1952); Leo White, *The Experience of Individual Objects in Aquinas*, Unpublished doctoral dissertation, The Catholic University of America (Ann Arbor: UMI Microforms, 1997); Mark Barker, *The Cogitative Power: Objects and Terminology*, Unpublished doctoral dissertation (Houston: University of St. Thomas, Center for Thomistic Studies, 2007). See also the following articles: Mark Barker, "Aquinas on Internal Sensory Intentions: Nature and Classification," *International Philosophical Quarterly* 52, 2 (2012): 199–226; *idem*, "Experience and Experimentation: The Meaning of *Experimentum* in Aquinas," *The Thomist* 76 (2012): 37–71; Deborah Black, "Imagination and Estimation: Arabic Paradigms and Latin Transformations," *Topoi* 19 (2000): 59–75; Daniel De Haan, "Linguistic Apprehension as Incidental Sensation in Thomas Aquinas," *Proceedings of the American Catholic Philosophical Association* 84 (2010): 179–96; Cornelio Fabro, "Knowledge and Perception in

doctrine of the cogitative power to the reality of perception, rather than the also important exegetical task of uncovering in detail what Thomas knew about the reality of perception.

A robust Thomistic doctrine of perception is valuable for its own sake, but it also has implications for epistemology and moral psychology. Thus, my Thomistic account of the cogitative power's formation of aspectual, actional, and affectional percepts bears directly upon Elizabeth Anscombe's and Alasdair MacIntyre's exhortations to develop a cogent philosophical anthropology as a necessary prerequisite to engaging foundational problems in moral psychology and moral philosophy.⁵ Though my focus here is perception *simpliciter*, I will point out various features of perception and the cogitative power that especially pertain to issues addressed in moral psychology.

I.

The Philosophical Anthropology of Thomas Aquinas

Individual intentions (*individuales intentiones*) are the formal or proper object of the cogitative power and they admit of a threefold division into *aspectual*, *actional*, and *affectional* intentions or percepts. Arguably, this taxonomical division is found implicitly within various texts of Aquinas. Yet because Aquinas never explicitly formulates such a division, many of his readers understandably overlook its presence and significance.⁶

Aristotelico-Thomistic Psychology," *The New Scholasticism* 12 (1938): 337–65 (Henceforth: Knowledge and Perception); Thomas V. Flynn, O.P., "The Cogitative Power," *The Thomist* 26 (1953): 542–63; Anthony Lisska, "A Look at Inner Sense in Aquinas: A Long-Neglected Faculty Psychology," *Proceedings of the American Catholic Philosophical Association* 80 (2006): 1–19; Cyrille Michon, "Intentionality and Proto-Thoughts" in *Ancient and Medieval Theories of Intentionality*, ed. Dominik Perler, (Leiden: Brill, 2001), 325–42; Julien Peghaire, "A Forgotten Sense, The Cogitative According to St. Thomas Aquinas," *Modern Schoolman* 20 (1943): 123–40, 210–29; Michael Stock, "Sense Consciousness According to St. Thomas," *The Thomist*, 21, 4 (1958): 415–86.

⁵ G.E.M. Anscombe, "Modern Moral Philosophy," *Philosophy* 33 (1958): 1–19; reprinted in *Ethics, Religion and Politics, The Collected Philosophical Papers of G. E. M. Anscombe*, Vol. 3, (Minneapolis: University of Minnesota Press, 1981), 26–42; MacIntyre, *Dependent Rational Animals*.

⁶ This threefold division will be explained later, but I should note here some similar divisions and characterizations of the objects of perception or the cogitative power that have been made by others working on Aquinas or topics related to philosophy of perception. It is the aim of this study to provide a

systematic and unified order to these diverse accounts of the formal object of the cogitative power. George Klubertanz writes, “in St. Thomas, the *vis cogitativa* is the human estimative, concerned with the singulars of action (*operabilia*) as standing under the intelligible light of reason.” (*op. cit.*, 278–9). In his criticism of Klubertanz’s restrictive identification of cogitative intentions with *operabilia*, Tony Lisska deploys a chorus of terms like “primary substance,” “individual as individual,” and “concrete individual” to describe the intentions of the cogitative power that he distinguishes from *operabilia* (*op. cit.*). Mark Barker distinguishes between “factual intentions” and “action-oriented intentions” of the cogitative power (Barker, “Aquinas on Internal Sensory Intentions,” at 203 and 214). Following John Haldane and Alfred White, Barker develops at length the idea of a cogitative sortal as an interpretation of the doctrine of experience (*experimentum*) and the proto-universal in Aristotle and Aquinas (See John Haldane, “Rational and Other Animal,” *Royal Institute of Philosophy*, Supplement 41 (1996): 17–28; Alfred White, “Instinct and Custom,” *The Thomist*, 66 (2002): 577–605; Barker, *The Cogitative Power*, ch. 8). In Robert Pasnau, *Thomas Aquinas on Human Nature: A Philosophical Study of Summa Theologiae, 1a* 75–89 (New York: Cambridge University Press, 2002), Pasnau describes *per accidens* sensation as “seeing things as individuals” (*ibid.*, 271) and makes a suggestion that is similar to the notion of a sortal found in Haldane and Barker when he notes, “Aquinas is relying on a distinction between sorting individuals by means of the intellect’s concepts and conceiving of those individuals as members of a broader class. We do the latter when we use language, and this requires intellect. The former occurs whenever we perceive the world for what it is. There seems no reason not to count this as a form of conceptualization. But it is not conceptualization in the fullest sense, and so it is possible to ascribe this role to the cogitative power.” (*ibid.*, p. 272). Pasnau also refers to the estimative power’s ability to recognize and respond “to certain sensory patterns: the smells-like-a-wolf pattern ...” (*ibid.*, 253). Cyrille Michon calls the objects of the estimative and cogitative powers, “non-sensible intentions,” “non-sensible characteristics,” “proto-thoughts,” and “proto-concepts” (*op. cit.*, esp. 330–40). Mark Drost, “Intentionality in Aquinas’s Theory of Emotions,” *International Philosophical Quarterly* 31, 4 (1991): 449–60, refers to the intentions of the estimative power and intellect that specify the passions as “aspects.” In her erudite studies on the internal senses in medieval Arabic and Latin philosophers, Deborah Black takes note of Avicenna’s doctrine of the “vague individual” and what Averroes describes as “this ostensible individual.” Black also characterizes this phenomena using such notions as “a complete individual” and “integral individual.” (*op. cit.*) In his detailed study of the *De anima* in Arabic and Latin medieval thinkers, Dag Hasse describes intentions as “connotational attributes,” see Dag Hasse, *Avicenna’s De Anima in the Latin West*, (London/Turin: The Warburg Institute–Nino Aragno Editore, 2000), 2, 127–53. Alasdair MacIntyre observes that nonhuman animals, such as dolphins, exhibit, “not only powers of perception, perceptual attention, recognition, identification and reidentification, but also of having and exhibiting desire and emotion, of making judgments, of intending this and that, of directing their actions towards ends that constitute their specific goods and so having reasons for acting as they do.” *Dependent Rational Animals*, 27. James Gibson distinguishes between perceptual “identification” and “orientation of behavior” and provides a host of other descriptions for his very influential notion of “affordances,” which in Aristotelian terms are *per accidens* sensible features of the reality, see James J. Gibson, *The Senses Considered as Perceptual Systems* (Westport: Greenwood Press, 1983) (Henceforth: *Perceptual Systems*), 147. In his treatment of emotions, Robert Roberts describes emotions as “concern-based construals,” which are specified by some cognitive construal. He also explores the texts of Wittgenstein that we will examine later on, see Robert Roberts, “What an Emotion Is: A Sketch” *The Philosophical Review*, 183–209. The phenomenologist Drew Leder contrasts what he calls the “hermeneutical moment” from the “pragmatic moment,” see Drew Leder, *The Absent Body* (Chicago: University of Chicago Press, 1990), ch. 3. Also, Tim Crane, following John Searle, takes note of the “aspectual shapes” of intentionality. Tim Crane, “The Intentional Structure of Consciousness,” in *Consciousness: New Philosophical Perspectives*, ed. Quentin Smith and Aleksandar Jokic (Oxford: Clarendon Press, 2003) 33–56 and John R. Searle, *The Rediscovery of the Mind* (Cambridge: The MIT Press, 1992), 155. See also, Edward Feser, “Kripke, Ross, and the Immaterial Aspects of Thought,” *American Catholic Philosophical Quarterly* 87 (2013): 1–32, at 6–7.

Since this doctrine is difficult to understand unless placed within the full context of Aquinas's philosophical anthropology, a brief rehearsal of his philosophical psychology in terms of powers and their operations and proper objects is required.⁷

The threefold division of sensibles found in Aristotle's *De anima* II, 6 establishes the central taxonomical principle employed in Aquinas's account of the internal senses. Aquinas's presentation of this Aristotelian division establishes a taxonomical schema that will be paradigmatic to the myriad of taxonomical distinctions developed throughout this study. Aristotle differentiates *per se* or essential sensibles from concurrent *per accidens* or incidental sensibles.⁸ Note well, this division of sensibles marks a sharp distinction between the terms "sensation" and "perception."⁹ This paper does not use the terms sensation and perception or any of their respective cognates synonymously. Sensibles (i.e. *per se* sensibles) and perceptibles (i.e. *per accidens* sensibles or *per se* particular intentions) both denote a distinct range of extracognitive formal objects, just as sensations (i.e. acts of the external senses and the *sensus communis*) and perceptions (i.e. acts of the estimative or cogitative power) denote distinct cognitive acts of distinct powers. The apprehension of perceptibles by perception presupposes a cooperative apprehension that is integrated with the apprehension of sensibles by sensation, but

⁷ The fluid terminology that Aquinas deploys when describing the diverse acts of the internal senses makes the exegete's work particularly difficult. For the purposes of this paper I assume that Aquinas does have a unified doctrine despite any appearances of inconsistency or doctrinal development. A number of exegetical studies have defended the unity of Aquinas's doctrine and my interpretation will be availing these erudite studies. See *supra* n. 4.

⁸ See *In DA* II.13; *In IV Sent.* d. 49.2.2; *DV* 1.11; *ST* I.17.2; 78.3–4; *QDdA* 13.

⁹ See Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith, (New York: Humanities Press, 1962), ch. 1; Gibson, *Perceptual Systems*, Introduction.

sensation and perception are distinct.¹⁰ The notions perceptible, perception, percept will be clarified later on.

For Aquinas, *per se* sensibles subdivide into proper and common sensibles. *Proper sensibles* are the unique sensory qualities of reality, such as color, sound, flavor, odor, and tangible objects. These qualities of reality differentiate the unique external sensory modalities and powers of vision, audition, olfaction, gustation, and tactility. Aristotelian taxonomy primarily differentiates powers by the principle that formally unique objects specify distinct operations, which reveal different operational capacities, i.e. powers or faculties.¹¹

Given in and through proper sensibles are the various combinations of the *per se* common sensibles, such as number, figure, magnitude, motion, and rest. These are the subjects of the proper sensibles and are apprehended through proper sensibles. While all of these qualities are essential sensibles, none of them serve to differentiate unique sensible modalities. Vision and tactility, for example, both cognize, in a visual or tactile way, number, shape, and magnitude as colored shaped bodies of such a size, or as warm, hard, dense, and round shaped bodies. Further, in some minimal way all five external

¹⁰ N.B. The term “sensation” is also ambiguous. For Aquinas, sensation indicates a conscious and intentional act of seeing, hearing, smelling, tasting, or touching. It does not essentially mark out the nerve stimulation that might be involved at the physiological order. Contemporary philosophers and psychologists ambiguously use sensation to mean the “sense impression” of, e.g., sound and/or the mechanical energy that stimulates the nerves in the cochlea. I follow Aquinas’s use of term “sensation,” and refer to the concomitant stimulation of sensory organs and afferent nerves in terms of physiological stimulation. Like Aristotle, Aquinas, James Gibson, Peter Hacker, Robert Sokolowski, Alva Noë and many others, I hold that the stimulation of nerves do not help us individuate sensible modalities, i.e., specify the way to differentiate the formal objects of our powers of sensation, and that the study nerve stimulation only teaches us about the necessary conditions and material causes involved in psychological acts. In other words, the electromagnetic, chemical, and mechanical energy involved in the stimulation of our nervous system is not essential to understanding philosophical psychology. Its relevance to philosophical anthropology is far more incidental than many contemporary philosophers, psychologists, and cognitive neuroscientists mistakenly assume. See M.R. Bennett and P.M.S. Hacker, *The Philosophical Foundations of Neuroscience*, (Malden: Blackwell, 2003), ch. 4.

¹¹ See DV 15.2; *In DA* I.1; II.6; *ST* I.77.3; 78.3–4; *QDdA* 13.

senses are able to cognize the dynamic shifts from presence to absence, i.e. the movement of their formal objects. These essential sensibles are called *common sensibles* because they are common to more than one proper sensible.

For the qualities that are the proper objects of the senses are forms in a continuum, and so the continuum itself, inasmuch as it is the subject of these qualities, must move the sense-power not accidentally, but as the *per se* common subject of all sensible qualities. And all the so-called common sensibles do in some way pertain to the continuum: whether with respect to the measure of it, in the case of size; or with respect to the division of it, in the case of number; or with respect to the limitation of it, in the case of shape; or with respect to distance and nearness, in the case of motion.¹²

Aristotle called the concomitant *perceptible* objects *per accidens* or incidental sensibles, because they are non-sensible features of realities that are apprehended concurrently with the essential sensibles grasped by acts of external sensation. Multistable or ambiguous objects provide some of the best illustrations for contrasting *per se* sensibles from *per accidens* sensibles. For example, the Necker cube, the duck-rabbit, and the Rubin vase are all illustrations that display one sensible gestalt, which affords distinct perceptible gestalts. One is able to perceive distinct aspectual percepts within the same *per se* sensibles of the Rubin vase illustration, that is, the color, shape, and size remain the same, but the aspectual percepts of *these two faces* and *this vase* can shift. With respect to the *per se* sensibles, the aspectual percepts of *this duck* or *this rabbit* are *incidental* objects to the sensation of the essential sensibles of the illustration.

¹² Thomas Aquinas, *Commentaries on Aristotle's "On Sense and What Is Sensed" and "On Memory and Recollection,"* trans. Kevin White and Edward M. Macierowski (Washington, D.C.: The Catholic University of America Press, 2005), *In DS*, 1 (437a5), p. 29.

While such perceptible objects are incidental to essential sensibles, when taken in themselves these *per se* perceptible and potentially intelligible features of reality were called particular intentions (*intentiones*) by Avicenna and Thomas Aquinas, and were often called non-sensed intentions (*intentiones nonsensatae*) by various Scholastics. These *per se* particular intentions specify a formal object that belongs to the spectrum of cognitive operations that Aquinas used to differentiate an internal sense power called “natural instinct” or the “estimative power” in nonhuman animals, and the “cogitative power,” “particular reason,” and the “passive intellect” in human beings.¹³ Our task is to establish a detailed taxonomy of the formal object of the cogitative power.

In addition to the five external senses and the cogitative power, Aquinas argues for three other internal senses, namely, a gestalt sense (*sensus communis*), imaginative power, and memory. In addition to these sensory cognitive powers found in many animals, Aquinas also argues for immaterial intellectual powers that are proper to humans. Finally, complementing these numerous apprehensive powers are the various appetitive powers such as the sensory appetites or passions, which are divided into the concupiscible and irascible powers, as well as the intellectual appetite or will which belongs to humans. For Aquinas, the formal objects and operations of cognitive powers specify the activities of appetitive powers. This is because appetites receive their proper object from some object cognitively intended as good or evil, suitable or unsuitable.

¹³ For the *vis aestimativa* in Thomas Aquinas, see *In IV Sent.* d. 49.2.2; *DV* 1.11; 15.1; *In VI Ethic* 7; 9; *ST* I.78.4; 81.2, ad2. For the *vis cogitativa*, see *In IV Sent.* d. 49.2.2; *DV* 1.11; 10.5; 15.1, ad9; *SCG* II.60; 73; 76; *ST* I.78.4; 81.3; *In DA* II.13; *QDdA* 13. For the *intellectus passivus*, see *In IV Sent.* 50.1.1, ad3; *SCG* II.60; 73; *ST* I.79.2, ad2; *QDdA* 13; *QDSC* 9. For the *ratio particularis*, see *In IV Sent.* 50.1.1, ad3; *DV* 2.6; 10.5; 14.1, ad9; 15.1; *SCG* II.60; *In VI Ethic* 7; 9; *ST* I.78.4; 79.2, ad2; 81.2, ad3; I–II.30.3, ad3; 51.3. For the historical background to Aquinas’s doctrine, see Black, “Imagination and Estimation.”

The objects, operations, and powers of Aquinas's philosophical anthropology could be expounded at length. For our purposes, this digest of the panoply of powers is sufficient. Before moving on to the principal task we should take note of a few general qualifications concerning the different internal senses and how they interact with other powers. These general considerations will help frame our Thomistic analysis of perception and the cogitative power.

First, the doctrines of the Gestalt school of psychology should not be confused with my technical use of the terms sensible gestalt (i.e. a unified *per se* sensible of proper and common sensibles) and the gestalt sense (i.e. the *sensus communis*). The gestalt sense, like the five external senses, is only capable of being exercised when some *per se* sensible thing in the extracognitive world is presently acting upon the sense powers, which is why even though it is an *internal sense* it is a part of the *external sensorium*—I will return to this distinction. The proper object of the gestalt sense is the phenomenal unity of the *per se* sensibles.¹⁴ This phenomenal unity is a given gestalt of *per se* sensibles; it is *phenomenal*, but not subjective, for sensible features of reality admit of a variety of real appearances. There is an important ambiguity in the notion of *per se* sensibles that can be clarified by the Aristotelian distinction between things in relation to us and things in relation to themselves. This distinction helps us to contrast sensibles as qualitative properties of things from the multitudinous ways these sensibles actually radiate through a medium and disclose themselves to us via acts of sensation.¹⁵ What is often overlooked is that there are many objective facts concerning the ways in which

¹⁴ “Sicut obiectum sensus communis est sensible, quod comprehendit sub se visibile et audibile: unde sensus communis cum sit una potentia, extendit se ad omni obiecta quinque sensuum.” *ST* I.1.3, ad2. Also see *DV* 15.1, ad3.

¹⁵ Aquinas addresses these distinctions in *In DA* II.12–24, esp. *In DA* II.16, and in *In DS* 1–18.

sensibles are displayed vis-à-vis an observer. These facts are often articulated in terms of the laws of “perspective” within visible, audible, and other modalities, and these are real and objective features of the world. For example, from certain visual perspectives a circular figure always *really appears* elliptical.¹⁶ These perspectival features are further characteristics of the sensible gestalt, for the sensible gestalt manifests the apparent unity of the *per se* sensible presentations of any object as it is sensed from a certain perspective. This phenomenal unity might be more than apparently real, but this requires additional acts of sensation, perception, intellectual insight and judgment to differentiate the real from the apparently real and the mere illusion. To be clear, sensible gestalts are *not* internal representations, qualia, sense-data, or sense impressions as conceived by Locke or Hume. A sensible gestalt is an Aristotelian essential sensible and as such it is a qualitative feature of things independent of sentient beings.

The essential sensibles of the sensible gestalt are displayed as a phenomenal unity by virtue of their unified presence and/or unified source. It is not the common sensibles that constitute the sensible gestalt, but the dynamic manifold of present *per se* sensibles, i.e. the polymorphic unity of proper and common sensibles. The sensible gestalt and its present phenomenal unity are grasped by virtue of the concurrent operations of the external senses and the gestalt sense (*sensus communis*). The sensible gestalt as such, however, is principally the formal object of the gestalt sense.

In contrast to the position held by some Gestalt psychologists, Thomists would hold that many of the distinct moments¹⁷ of the sensible gestalt are not resistant to

¹⁶ Alva Noë, *Action in Perception* (Cambridge: The MIT Press, 2004), 84.

¹⁷ N.B. The term “moment” is used throughout this paper in a technical sense of a part of a whole that cannot be really separated from the whole, unlike a “piece” which can. “Moments” are, nevertheless, sometimes really distinct parts even though they are inseparable from the whole (see *ST I–II*.17.4). E.g. In

differentiation by intelligent reflection; the phenomenal unity of diverse sensible modalities are able to be examined and focal attention can be directed to different modalities. Focal advertence to a single sensible modality within the whole sensible gestalt, say, color, permits other *per se* sensibles of the sensible gestalt, say, sound and shape, to recede into the periphery or background of one's focal attention. In other words, I can attend to the color of Socrates without adverting to his shape or the sounds he makes.

These *per se* sensibles of the gestalt sense can also be retained and then re-presented in a variety ways by our imaginative power.¹⁸ Here it is important to recognize the difference between the limited range of activities attributed to the power of “imagination” by Aquinas, and the wide range of cognitive capacities we attribute to the abilities enlisted by the English terms, “imagination” and “fantasy.” For Aquinas, imagination is limited to the re-enacting or creative conjuring of retained bare *per se* sensibles, or more properly, imaginable species. Any sort of aspectual construal given to our visual or audible images comes from another cognitive power and not from imagination itself. In short, just as there is incidental sensation when the cogitative power operates in tandem with sensation, so also there is incidental imagination when the cogitative power provides the aspectual identification of the images we form by fantasy.¹⁹

Aquinas's account of human action, *imperium* is really distinct from *usus* though the two are both inseparable parts as moments of the “execution” phase of a whole human action (See *ST* I–II.16–17). In scholastic terms, *imperium* and *usus* admit of a real minor distinction. See Robert Sokolowski, *Introduction to Phenomenology* (Cambridge: Cambridge University Press, 2000), 22–7; George Klubertanz, *Introduction to the Philosophy of Being*, 2nd ed. (Appleton-Century Crofts, 1963), 80–3; Joseph Owens, *An Elementary Christian Metaphysics* (Houston: Center for Thomistic Studies, 1985), 37–8, n. 17.

¹⁸ See *ST* I.78.4; *In DA* II.28–30 (Marietti, III.4–6); *Quod.* VIII.2.1 [3]; *QDSC* 10, ad17.

¹⁹ I partially agree with Barker and also hold that in acts of incidental sensation or incidental imagination, the material object of the cogitative power is the sensible or the imaginable, respectively; however, there are intentions formed by the cogitative power, say, in practical reasoning, and memory as well, which do not always have sensibles or imaginables as material objects. See Barker, “Aquinas on

Finally there is memory. Memory receives its objects from the aspectual intentions of the cogitative power, but unlike the cogitative power, memory retains these intentions under the *ratio* or formality of “pastness.”²⁰

Second, it is well known that Aquinas distinguishes between the five external senses and the four internal senses of the gestalt sense (*sensus communis*), imagination, cogitative power, and memory.²¹ Following Anthony Lisska, I also distinguish the external sensorium and internal sensorium from Aquinas’s distinction between external and internal senses.²² While the gestalt sense (*sensus communis*) is technically an internal sense, it is not a power of the internal sensorium. This is because unlike the powers of the external sensorium (i.e. the five external senses and the gestalt sense), the powers of the internal sensorium (i.e. imagination, cogitation, and memory) can be exercised without the extracognitive presence of their proper object in the world.²³

- External senses: Five external senses
- Internal senses: Gestalt sense, imagination, cogitation, memory

- External sensorium: Five external senses and gestalt sense
- Internal sensorium: Imagination, cogitation, memory

This distinction also helps clarify why acts of the cogitative power that are exercised without attendance to an object simultaneously sensed in the world, cannot be called acts of *per accidens* or incidental sensation. Incidental sensation only marks out those acts of the cogitative power which are concurrent with the same subject’s acts of *per se* external sensation; incidental sensation is a cooperative apprehension that must be simultaneous,

Internal Sensory Intentions,” 204–5; 218–24. Peter Hacker develops at length a similar point with respect to the role of images in recognition and memory; he argues that images are neither necessary nor sufficient for recognition or remembering. See P.M.S. Hacker, *Wittgenstein: Mind and Will* (Blackwell: Oxford, 1996), essay VI.

²⁰ See *ST* I.78.4; *In DM* 1.

²¹ See *ST* I.78.3–4; *QDdA* 13.

²² See Anthony Lisska, “A Note: Aquinas’s Use of Phantasia,” *The Thomist* 40 (1976): 294–302.

²³ See *ST* I.78.4, esp. ad1–ad2; 81.3ad3; I–II.17.7, ad3; *Quod.* V.5.2 [9] ad2.

immediate, and without inquiry, hesitation, or discursive inference.²⁴ It is important to notice the function “presence” plays within Aquinas’s psychological taxonomy. I will return to the significance of presence and absence later on.

Third, with these qualifications in hand, we can now formulate the meaning of the notions “perceptible,” “perception,” and “percept.” “Perceptibles” are the particular *per accidens* sensibles or *per se* particular intentions that are initially found in the world. Perceptibles are real features of real things that, like the essential sensibles we sense, actualize and determine what we perceive. Similar to the sensible gestalt discussed above, there is also a perceptible gestalt. Perceptible gestalts consist in the unified dynamic presentation of the object as perceivable here and now. Since the perceptible gestalt is the whole identified within any particular apprehension of incidental sensibles, there cannot be a perceptible gestalt apart from a sensible gestalt, just as there cannot be incidental sensibles apart from essential sensibles. Finally, we must not forget that the demarcation between sensible gestalts and perceptible gestalts is an intellectual abstraction; in the lived experience of concrete acts of sensory-perception sensible and perceptible gestalts are features of the world that are given and displayed in an integrated unity.

There are a host of potential distinctions available within any perceptible gestalt; I shall mention a few general distinctions here, and will postpone more specific distinctions for the time being. Any perceptible object displays a variegated unity of perceptible identities within a manifold; this unified kaleidoscope of perceptible identities

²⁴ “Per accidens autem sentitur illud quod non infert passionem sensui neque inquantum est sensus, neque inquantum est hic sensus; sed conjungitur his quae per se sensui inferunt passionem; sicut Socrates, et filius Diarii, et amicus, et alia hujusmodi: quae per se cognoscuntur in universali intellectu; in particulari autem in virtute cogitativa in homine, aestimativa autem in aliis animalibus. Hujusmodi autem tunc sensus exterior dicitur sentire, quamvis per accidens, quando ex eo quod per se sentitur, vis apprehensiva, cujus est illud cognitum per se cognoscere, *statim sine dubitatione et discursu apprehendit*; sicut videmus aliquem vivere ex hoc quod loquitur. Quando autem aliter se habet, non dicitur illud sensus videre, etiam per accidens.” *In IV Sent.* d. 49.2.2 (My emphasis). See also *In DA* II.13.

constitutes a perceptible gestalt. Just as any sensible gestalt includes the dappled variety of *per se* sensibles like colors, sounds, textures, shapes, and movements, so also any perceptible gestalt includes all the potential mereological perceptible identities one might discern and attend to within any perceptible whole. For example, *this* dog is a perceptible gestalt that includes the manifold of perceptible canine body parts, dynamic activities, and other aspectual, and even actional, determinations displayed and afforded by the reality of some particular dog. James Gibson's notion of an affordance and perceptible invariant is very similar to my notion of a perceptible gestalt.

There is much evidence to show that the infant does not begin by first discriminating the qualities of objects and then learning the combination of qualities that specify them. Phenomenal objects are *not* built up of qualities; it is the other way around. The affordance of an object is what the infant begins by noticing. The meaning is observed before the substance and surface, the color and form, are seen as such. An affordance is an invariant combination of variables, and one might guess that it is easier to perceive such an invariant unit than it is to perceive all the variables separately. It is never necessary to distinguish *all* the features of an object and, in fact, it would be impossible to do so. Perception is economical. "Those features of a thing are noticed which distinguish it from other things that it is not—but not *all* the features that distinguish it from *everything* that it is not."²⁵

Perceptible gestalts also admit of additional characteristics that are not salient to sensible gestalts. The aspect determinations or construals *under which* we incidentally sense or incidentally imagine an object are not entirely determined by the thing in the world. Aspect construals are constituted out of the apperceptive convergence of two poles of determination, the world and our acquired cognitional dispositions and *habitus*. This point requires some explanation.

All knowledge begins in the senses, which is to say that all cognitional determinations initially come through acts of sensation, but we do not continue to sense, perceive, and understand the world afresh in every interaction we have with the world.

²⁵ James J. Gibson, *The Ecological Approach to Visual Perception* (New York: Psychology Press, 1986), 134–5.

We are only virgin knowers once; subsequent to our nascent encounter with reality we cease to be purely passive perceptual and intellectual agents. Not only do we acquire *habitus* within our internal sensorium and intellect, but even the material substrate of our sensory powers admits of a limited scope of alteration, such as the neural plasticity involved acquiring more or less sensitive visual, auditory, olfactory, gustatory, and tactile capacities. Let us note that these contentions do not contradict Aquinas's statements that cognitive powers are passive, for these caveats are perfectly consistent with his doctrine that passive powers and their material substrate acquire dispositions and *habitus* by being exercised.²⁶ The world continues to fecundate our sensations, perceptions, and intellections, but it is no longer the only pole of determination for the vital acts of cognitive and appetitive powers. Despite such ambiguities in the discriminating among all of the influences on our cognitive acts, the world remains the principal determinate and source of all cognitive acts and it never ceases to be the measure of truth. All cognitive acts must be sized up to and judged against their proportional conformity to the world. Later on I will return to the topic of perceptible aspect determinations, especially in my treatment of the way "perceptual perspectives" factor into the constitution of our perception of perceptible gestalts.

For the purposes of this paper the term "perception" denotes a particular kind of operational orientation of the estimative or cogitative power, namely, acts of incidental sensation of incidental sensibles, i.e., essential perceptibles, that are simultaneously apprehended with *per se* sensibles by acts of the external sensorium. In other words,

²⁶ See *ST* I.79.2; I-II.22.1–3. For Aquinas's account of dispositions and *habitus* in passive powers, see *ST* I.79.6–7; 79.10; 85.7; 89.5; I-II.50.3; 51.3.

perception is just one among many acts or operational orientations that belong to the cogitative power. A comparison with the possible intellect will be instructive.

Even though the possible intellect only has one formal object, it nevertheless exercises a variety of operational orientations. For example, Aquinas distinguishes acts of the possible intellect that are exercised (*actus secundus*) from those retentive acts that constitute a *habitus* (*actus primus*). These further divide into insight (*intelligentia*) and reason (*ratio*), higher and lower reason, speculative and practical reason, as well as synderesis and conscience.²⁷ Like the possible intellect, the cogitative power also has a range of operational orientations; perception is just one of them. Analogous to acts of incidental sensation the cogitative power also exercises a function called *incidental imagination* that is concurrent with acts of imagination. Like imagination, memory, and the intellect, the cogitative power also retains its proper objects in the form of a retentive *habitus*, which Aquinas calls an *experience* (*experimentum*) or a *first universal*, and which I call a *cogitative sortal*.²⁸ Aquinas also ascribes a number of cooperative acts to the cogitative power and intellect. For example, when the cogitative power is involved in concert operations with the intellect, Aquinas often calls the cogitative power the passive intellect (*intellectus passivus*) or particular reason (*ratio particularis*), while referring to the possible intellect as universal intellect or reason.²⁹

Unlike the restriction of the terms perceptible and perception to cogitative acts of incidental sensation, I use the term “percept” synonymously with any *particular intention* formed by acts of the cogitative power. In other words, the term perceptible indicates a

²⁷ See *ST* I.79.6–13.

²⁸ See *In Post. Anal.* II.20 (100a3, 244:144–151); *ibid.*, (100a14, 246:240–256); *In I Meta.* lect. 1, n.15; *SCG* II.73.1512–1513; *In DM* 3 (450b20); *ST* I.54.5; I–II.50.3; 51.3. See also the studies on the cogitative sortal by Haldane, White, and Barker, *supra* n. 4.

²⁹ See *supra* n. 13.

kind of impressed species (*species impressa*) that is an extracognitive principle of the cogitative power's acts of perception, in contrast to the percept which is a kind of cogitative expressed species (*species expressa*) or term of any operation of the cogitative power.

Finally, I should explain why I call the expression of the cogitative power's operations a "percept," instead of "particular intention," which is Aquinas's term. The term *intention* has numerous meanings in Aquinas, such as the intentional being found apsychically as an intentional sensible form in the medium, as the cognoscible principle or object intended by any sensitive, imaginative, cogitative, memorative, or intellective act, as the particular or universal intentions of the cogitative power or intellect, and as the volitional act of the will with respect to an end.³⁰ Since this paper is discussing the cogitative power in conjunction with many of these other doctrines I use the term *percept* in place of cogitative *intention* to keep distinct these specifically cogitative aspectual percepts, actional percepts, and affectional percepts, from the numerous other meanings of intention found in Aquinas.

Fourth, we should take note of some general qualifications concerning the relationship between cognitive and appetitive powers in Aquinas's anthropology, since they are pertinent to the distinction between actional and affectional percepts. A great deal of effort has been wasted and confusions have been generated over the question of whether Aquinas's doctrine of human action is intellectualist or voluntarist. It is neither. In nearly every question in the *Prima Secundae* on the distinctive cognitive and appetitive moments of human action, Aquinas has an article on whether *fruitio*, *intentio*,

³⁰ See *de Pot.* 5.8; *ST* I.78.3; 78.4; I-II.12, respectively.

electio, consilium, consensus, usus, or imperium are cognitive or appetitive.³¹ Aquinas's answer always clearly concludes in favor of one or the other, but not without first explaining that the two are inextricable from each other, and that to indicate one involves the intelligibility of the other. The cognitive specifies by final causality what the appetitive exercises by efficient causality; they mutually interlock as act and potency within irreducibly diverse, yet inseparably reciprocal, orders of causality. This dialectical confluence of the cognitive and appetitive also admits of a symmetrical hylomorphic analysis, i.e. both are, in a sense, form or matter for the other depending upon the manner in which they are considered. Aquinas's nuanced application of the four causes to the interlocking moments of practical reason and will also applies, with appropriate qualifications, to the confluence of the cogitative power and the two sensitive appetites, i.e. the concupiscible and irascible powers. How this integrated operation of diverse powers is manifested within nonhuman animals, in contrast to rational animals, is a complicated question; this study's threefold division of particular percepts aims to bring some clarity to this problem.

There is sufficient evidence to indicate that dogs, horses, apes, dolphins, and other nonhuman animals both naturally and through training can and do behave in ways that merit distinguishing estimative acts of perception and the formation of aspectual, actional, and affectional percepts. Thomists should also remember that St. Thomas thought that the comparison between the imperfect and perfect voluntary activities of nonhuman animals and humans merited rehearsing in most of the questions he raised about the distinctions found in human action.³² It would require an exegetical study of its

³¹ See *ST* I.83.3; I-II.6.1; 9.1; 11.1; 12.1; 13.1; 14.1, ad2; 15.1; 16.1; 17.1.

³² See *ST* I-II.6.2; 9.1ad2; 10.3, ad3; 11.2; 12.5; 13.2; 15.2; 16.2; 17.2, ad3.

own to bring into relief the significance of all the analogs that he affirms, denies, and qualifies as obtaining between human acts and the complexity of behavior found in the acts of irrational animals (*actus brutorum animalum*), some of which might even be genuine analogs to human actions (*actus humanus*) and would be more aptly described as irrational animal actions (*actus bruti animala*). There are at least two ways to interpret Aquinas's repeated appeal to instinct or the estimative power in each of these questions. Is he repeating the same answer in each question, or does each reply tell us something new about the pragmatic behavior of nonhuman animals?

The first and most common interpretation would understand Aquinas to be providing the same answer in every question. Where there is a great diversity in the stages of human action, we do not find any analogs in nonhuman animals similar to the distinctions between fruition, intention, choice, and command. In short, the imperfect voluntary activities of nonhuman animals do not admit of further demarcations; instinct is a sufficient univocal catchall explanatory principle in nonhuman animals for each of these distinct potential phases within human action.

An alternative interpretation would understand Aquinas to be teaching us something new about instinct in each question, and that each answer provides us with one more nuanced distinction concerning the range of acts he attributes to the estimative powers of irrational animals and their analogs with the phases of human action. I do not have space to defend this second interpretation; nevertheless, I presume that it conforms more to the thought of Thomas Aquinas, a student familiar with the zoology of Aristotle and Albertus Magnus. Furthermore, this interpretation of Aquinas's account nonhuman animal capacities provides a much richer understanding of the similarities and

dissimilarities of rational and other animals that corroborates many of the points developed in MacIntyre's *Dependent Rational Animals*.

Fifth, the Thomistic elaboration of different powers might lend itself to a kind of departmentalized theory of human beings, a theory which gives the impression that humans perform their acts of seeing, hearing, cogitative perception, intellectual judgment, emotion, intention, and decision in isolation from one another. This atomized picture of cognitive and appetitive acts and powers into disparate realities could not be further from philosophical anthropology of Thomas Aquinas. The human person is a hylomorphic unity that acts and is acted upon by virtue of its integrated conscious operations. The delineation of powers makes precise the variety of ways different powers can be involved or exercised within human activities. This delineation presupposes the existential unity of the subject as a person with a nature, powers, acts, and objects. The delineation and categorization of objects, acts, and powers is a reflexive intellectual act that presupposes the given unity of all conscious operations. The demarcation of formal objects is achieved by submitting the polymorphic unity of consciousness to formal analysis. We begin with the unity, which we distinguish in order to unite in intellectual understanding. It is very important then that we keep in mind the Aristotelian adage that we are speaking synecdochically when we say that vision sees, the cogitative power perceives, or the intellect understands. More properly it is the human person that sees, perceives, and understands through their powers of vision, cogitation, and intellect.³³

³³ "Actiones autem sunt suppositorum et totorum, non autem, proprie loquendo, partium et formarum, seu potentiarum: non enim proprie dicitur quod manus percutiat, sed homo per manum." *ST* II–II.58.2. "... non enim proprie loquendo sensus aut intellectus cognoscant sed homo per utrumque." *DV* 2.6, ad3. See also *DV* 10.9, ad contra 3; *QDSC* 10, ad15; *In DA* I.10 (Marietti, n. 152); *ST* I.75.2, ad2; I–II.17.5, ad2; Daniel De Haan and Geoffrey Meadows, "Aristotle and the Philosophical Foundations of Neuroscience," *American Catholic Philosophical Association* vol. 87 (*Forthcoming*).

This survey of Aquinas’s philosophical anthropology should be sufficient to provide us with an adequate context for understanding the taxonomical division between aspectual, actional, and affectional percepts formed by the cogitative power. The next section brings this threefold division into relief.

II.

Aspectual, Actional, Affectional Percepts.

Thus far I have set forth a number of general taxonomical distinctions concerning Aquinas’s philosophical anthropology. The rest of this study focuses on establishing a variety of specific taxonomical distinctions that apply to perceptibles, perception, percepts and other features of the cogitative power. The point of departure for these distinctions is the more known to us. We have seen how Aquinas’s philosophical anthropology begins with the *priora quoad nos*, that is, our conscious engagement with a polymorphic world. Beginning with the more known to us, Thomas proceeds to demarcate the formalities of the unified polymorphic object of consciousness so as to differentiate the operations and powers that constitute the cognitive and appetitive spectrum of the human person. We must now turn our attention to an analysis of the formal object of the cogitative power, that is, to *per se* particular intentions. This section begins with a brief abstract analysis of the division of cogitative particular intentions into aspectual, actional, and affectional percepts. I then introduce each of these percepts and their relation to each other before providing a number of different illustrations aimed to clarify and set in relief the importance of this threefold distinction.

A Threefold Schema of Cogitative Particular Intentions

Aspectual Percepts	Particular intentions that target, register, identify, and connote individual things, substances, and their features	<i>this</i> surface, man, tree, apple, as stable, sitting, swaying, rolling
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Actional Percepts	Behavioral intentions that specify a spectrum of active and passive operational affordances available to the animal vis-à-vis things and events in the world as they are aspectually perceived	<i>this</i> stable surface is walk-on-able, <i>this</i> sitting man is greet-able, <i>this</i> swaying tree is climb-able, <i>this</i> rolling apple is edible
Affectional Percepts	Catalytic intentions that register the aspectual-cum-actional perception of an operational orientation to a thing as something to be performed; an impulse to operate which activates the sensitive appetites	aspectual-cum-actional percepts of a thing registered as beneficial, detrimental, an arduous good or a difficult evil

Particular intentions, the formal object of the cogitative power, admit of a threefold ordered division into aspectual, actional, and affectional percepts. They are ordered because each subsequent percept is specified by the prior percept in the sequence; however, through experience percepts begin to mutually condition each other. Percepts can be distinguished from each other in a variety of ways that depends upon the way in which they are considered, such as in different animal subjects, as distinct parts of a unified whole, or as intentions that are distinct from each other. For example, different animals have different perceptual capacities, and so admit of differences in their ability to register and form distinct percepts. While some lower animals cannot discern distinct aspectual, actional, and affectional percepts, many other animals, e.g., humans, dolphins, and canines, can form a variety of different actional percepts on the basis of the same aspectual percept. Since this paper is principally concerned with Aquinas's philosophical anthropology, I only make passing references to the differences between the higher and lower cognitive capacities of various nonhuman animals.

Aspectual, actional, and affectional percepts can also be considered as distinct parts within a unified whole, i.e. a gestalt percept, whose parts could be potentially separated into independent wholes. For example, a given gestalt percept (or a gestalt percept sublimated into a judgment of practical reason) might consist in an ordered unit

of aspectual and actional percepts (such as *this* swimmable water), though similar aspectual or actional percepts could be formed independently from this particular whole (such as *this* water or *this* drinkable water). This is an example of an intrinsic major virtual distinction. It is an intrinsic virtual distinction because there is a real basis for this conceptual distinction in reality, and it is a major virtual distinction because while each of these parts are actually constituents of a whole, they are themselves potentially independent wholes, that is, at least one of the parts can be separated from the other parts of the whole.

Finally, aspectual, actional, and affectional percepts can also be considered as distinct independent intentions or wholes with respect to each other. In this way they admit of a minor real distinction, like that between form and matter or an essence and its powers. It is a minor real distinction because while aspectual, actional, and affectional percepts are really distinct intentions, they are not really distinct things, like the major real distinctions found within numeric, specific, and generic orders, like between Plato and Socrates, humans and dolphins, and animals and plants, respectively.³⁴

Aspectual Percepts

I begin with aspectual percepts because they are both more known to us, and they specify the scope of actional and affectional percepts. The term “aspectual” is taken from Wittgenstein’s well known discussion of “seeing as,” “aspect changes,” and ambiguous shapes like Necker cubes, the duck-rabbit, and other multistable figures. His brief discourse provides a variety of examples of seeing an aspect that nicely parallel the doctrine of *per accidens* sensibles found in Aristotle and Aquinas, and especially illustrates the different ways the cogitative power can perceive and alter the aspect

³⁴ See *supra* n. 16.

determinations or construals under which it perceives an identity within a sensible manifold, e.g., now as a duck, now as a rabbit.³⁵ Aristotle applies the division between *per se* and *per accidens* sensibles to the example of seeing a thing as white, or as the son of Diares, respectively. Aquinas appropriates Aristotle's example of the son of Diares as an instance of the cogitative power apprehending a particular perceptible, "Diares's son," which is a *per accidens* sensible to the *per se* sensible characteristic of his being white.³⁶ This is an illustration of the cogitative power perceiving what I call an *aspectual percept*. Other examples of estimative or cogitative aspectual judgments include perceiving some particular thing as *this* man, *this* stranger, *this* prowler, *this* dark street, *this* sturdy blunt instrument, and that *that* building is far away. The aspectual identification of a sensible manifold involves a perceptual apprehension of an individual as an individual, that is, the apprehension of the sensible gestalt as more than just bare *per se* sensibles. In perception one is able to discern, register, or become acquainted with a superficial identity or aspect determination beyond the raw *per se* sensibles, hence the term *aspectual percept*.

Ordinarily our extroverted cognitive attention is directed towards aspectual perceptibles perceived and not bare *per se* sensibles sensed. In other words, our conscious interface with the world is principally oriented towards focusing on the perceptible identities of things and not the morass of physical and chemical stimuli or naked *per se* sensibles. Nonetheless, despite the putative evidence of our everyday experience of the more known to us, a popular philosophical charade persists which contends that we ordinarily only experience pure sensibles, or worse, physical or chemical stimuli, without

³⁵ See Wittgenstein, *Philosophical Investigations*, xl, 193–229. Robert Pasnau has also taken note of the parallels between the Wittgenstein's account of the duck-rabbit illustration and Aquinas's treatment of *per accidens* sensation in the cogitative power. (*op. cit.*, 275–8). My interpretation of both Aquinas and Wittgenstein differs from Pasnau's account.

³⁶ See Aristotle, *De anima* II.6, 418a20–5.

any aspectual perception. We would do well to disabuse ourselves of such atomist conceptions of perception, which fancy that our intuition of some philosophical given provides us with the philosophical license to treat raw sense-data as the more known to us. Such ruminations on sense-perception betray a serious descriptive negligence or else deep-seated philosophical prejudices.³⁷

Among particular intentions or percepts, aspectual percepts are the first percepts formed by the cogitative power. Aspectual percepts are often formed as a variegated unit or gestalt percept, which admits of a myriad of distinguishable perceptible “layers.” The gestalt percept “*this* chair” can be further inspected, disclosing a parade of aspectual percepts like “*this* seat,” “*this* arm,” “*this* leg,” “*this* material,” “*this* upholstery pattern,” “*this* quality of craftsmanship,” and so on. Such aspectual percepts should remind us of the important distinction between what aspectual determinations a thing in the world can display here and now, and what aspectual percepts require the wealth of acquired perceptual capacities and intellectual knowledge that we bring to our interactive engagement with the world. Some aspectual layers—and even some actional percepts or affordances—are given in the here and now and, like the sensible species of sensible things, radiate from perceptible things. Other aspectual layers, while ultimately derived from extracognitive things, are nonetheless readily accessible by virtue of our acquired perceptual repertoire of recognitional sortals, which in rational animals is imbued by a further quidditative richness on account of human persons being intellectual, social, and linguistic creatures. In short, the relata of perceptual acts do matter; both the subject of

³⁷ See the more detailed critiques by Yves Simon, “An Essay on Sensation,” in *Philosopher at Work: Essays by Yves Simon*, ed. Anthony O. Simon (Lanham: Rowman and Littlefield, 1999) ch. 5, 57–111; Merleau-Ponty, *Phenomenology of Perception*; James Gibson, *Perceptual Systems*; Hacker, *The Philosophical Foundations of Neuroscience*, ch. 4; Sokolowski, *Phenomenology of the Human Person*, ch. 14; Alva Noë, *Action in Perception*.

cognition and the reality cognized condition the way a thing is perceived. Both specify the cognitive operation and object perceived by the cogitative power. Dogs, cats, and children might perceive a man in Jacques-Louis David's the "Death of Socrates," but only a mature human with the prerequisite acquired knowledge can perceive a thing as a painting by Jacques-Louis David. We do not perceive things in the world without bringing the treasury of our past experiences to bear upon the realities displayed for us here and now. It would be a naïve realism indeed that found these points to be suspiciously anti-realist.³⁸

This last point brings us to the important distinction between the abilities, operations, and cognoscible objects of the estimative power in nonhuman animals, and the cogitative power in rational animals. While both humans and other animals are able to form aspectual, actional, and affectional percepts, only the rationally transformed cogitative power of humans can form categorical and axiological *percepts*, which presupposes our intellectual ability to form categorical and axiological *concepts*.³⁹ The taxonomical distinction between aspectual percepts and categorical concepts helps clarify the way in which rationality, and especially mature linguistic abilities, transforms the

³⁸ N.B. Despite my great appreciation for Tony Lisska's studies on the cogitative power, I think his suggestion that Aquinas's doctrine provides a "modified Kantian account" is an unfortunate mischaracterization. I also do not agree with many of the connections he makes between the cogitative power and various doctrines from Gestalt psychology. A distinction needs to be made between the sensible gestalt of the *sensus communis* and the perceptible gestalt of the *vis cogitativa*. Furthermore, while I agree with Lisska that the cogitative power is needed to perceive things *as* individuals, I do not agree with him that the sensible gestalt—which is the material object vis-à-vis the cogitative perceptible gestalt—is merely a "bundle" or a "unified collection of qualities" apart from operation of the cogitative power. The sensible gestalt of the external sensorium bears its own phenomenal unity proper to the dynamic manifolds of sensible things; this sensible unity is itself a potentially perceptible and intelligible platform for the higher cognitive operations of cogitation and intellection. See Anthony Lisska, "Medieval Theories of Intentionality: from Aquinas to Brentano and Beyond" in *Analytical Thomism: Traditions in Dialogue*, eds. Craig Paterson and Matthew S. Pugh (Burlington: Ashgate, 2006), ch. 8, 147–70, esp. 161–5. See Gibson, *Perceptual Systems*, ch. 13, esp. 283–6.

³⁹ A similar distinction is found in Sokolowski's contrast between precategorical perception and the human achievement of syntax, see Sokolowski, *Phenomenology of the Human Person*, ch. 4.

objects and operations of the cogitative power and provides humans with the ability to categorize the perceived individual as a primary substance or accident by way of a coordinated intellectual and cogitative operation.⁴⁰ It is through the mutual deployment of the intellect and cogitative power that humans are able to grasp perceived individuals as instances of a secondary substance or accident from the categories.⁴¹ In short, rationality transforms and sublimates the estimative aspectual percepts of nonhuman animals into the cogitative categorical percepts of rational animals. Nonetheless, we should recognize that while cogitative percepts can be integrated into propositional thinking as well as thinking linguistically through the medium of words, nonhuman animals and pre-linguistic human infants deploy aspectual, actional, and affectional percepts in a pre-linguistic, pre-conceptual, and so pre-propositional fashion that is neither absent nor lost in mature human beings. This latter point is particularly significant for moral psychology and action theory, for as Wittgenstein and his many students have repeatedly pointed out, to act intentionally does not require linguistically expressing to oneself a proposal of one's intentions or choices.⁴² Furthermore, we must be careful to distinguish what is properly rational about human action, in contrast to the quite developed abilities of other animals. As Alasdair MacIntyre has shown in his *Dependent Rational Animals*, many of the distinctions found in a detailed philosophical taxonomy of the perceptual abilities of nonhuman animals can provide invaluable sources of information for articulating a

⁴⁰ See *In DA* II.13; *DV* 10.5; *ST* I.30.3; II-II.2.1; *In VI Ethic* 7; 9.

⁴¹ See Lisska "A Look at Inner Sense in Aquinas."

⁴² See G.E.M. Anscombe, *Intention* (Oxford: Blackwell, 1972); Peter Geach, "Intention, Freedom, and Predictability" in Roger Teichmann ed., *Logic, Cause, and Action* (Cambridge: Cambridge University Press, 2000), 73–81; MacIntyre, *Dependent Rational Animals*, 24; 36–8; Hacker, *Philosophical Foundations of Neuroscience*, ch. 8; *idem*, *Wittgenstein: Mind and Will*, Vol. 4, Pt. 1, Essays (Malden: Blackwell, 1996), chs. 7–8.

cogent moral psychology.⁴³ The value of a complete taxonomy of perceptual abilities will become even more apparent in the next section's distinction between actional and affectional percepts.

Actional and Affectional Percepts

Aspectual percepts are often complemented by an *actional percept*, that is, an estimative or cogitative judgment about the behavioral orientation of an animal vis-à-vis some aspectual percepts concerning things or circumstances perceived here and now.⁴⁴ For example, not only can Socrates aspectually perceive *this* thing approaching him as a stranger on a dark street, but Socrates can also assess it to be something which affords a variety of different behavioral or actional percepts like “confronting,” “fleeing,” “hiding from,” or “ignoring” the stranger. Of course, anyone these banal examples of aspectual and actional percepts would ordinarily admit of further detailed specifications or layers, which I will not expatiate here.

If any actional percept is to be adopted by Socrates, its acceptance requires the formation of a cogitative *affectional percept* of “good,” “evil,” “fitting,” “unfitting,” “arduous good,” “arduous evil,” or some other affectional impulse to act.⁴⁵ While actional percepts specify pragmatic activities to be performed or undergone with respect to some aspectual perception of an individual, its parts, or the circumstances of the

⁴³ MacIntyre even argues—contrary to many other philosophers—that nonhuman animals can form *beliefs* about the world (*Dependent Rational Animals* chs. 1–6). It seems that a clearer distinction between beliefs and a more robust account of estimative aspectual and actional percepts could satisfy the arguments MacIntyre marshals against Norman Malcolm, Donald Davidson, Martin Heidegger, and others who deny that nonhuman animals have beliefs. In other words, a Thomistic account of the cogitative and estimative power could help us distinguish the properly human capacity for beliefs and the highly developed non-linguistic, non-conceptual, and non-doxic aspectual and actional percepts formed by some nonhuman animals, like dolphins. I hope to develop this point in a future study.

⁴⁴ Aquinas does, in fact, describe the activity of the cogitative power as apprehensive, judicative, and discursive, see *In VI Ethic* 9 (Marietti, n. 1255); *SCG* II.60; 73.

⁴⁵ See *ST* I–II.9.1, ad2; 17.2, ad3; 77.1–2; 77.5.

situation here and now, affectional percepts register these potential behavioral orientations with respect to some object as attractive or unfavorable. Hence, affectional percepts are able to affect the passions of the sensitive appetites. The distinction between actional and affectional percepts is needed because actional percepts alone are not sufficient to move the passions. This is because, like aspectual percepts, actional percepts do not intrinsically specify attractiveness or unattractiveness. Without intentionally specifying a particular aspectual-cum-actional sequence as good or evil, beneficial or detrimental the passions of the sensory appetites cannot be moved towards or away from any aspectual-cum-actional sequence formed by the cogitative power. For example, the aspectual and actional percepts “water” and “running towards,” respectively, are not in themselves percepts of attraction and so they cannot affect a concupiscible passion of love or desire. Such aspectual-cum-actional percepts must be estimatively judged as appetitible in order to activate the sensory appetites. An estimative affectional percept, like “aversion,” is, however, sufficient to specify a particular aspectual-cum-actional sequence in such way that moves the concupiscible power to the complementary appetitive passion of “aversion.” On the basis of Socrates’s aspectual-cum-actional-cum-affectional estimation and concomitant passion of aversion, he might further reasonably decide to walk across the street in order to avoid meeting *this* stranger.⁴⁶ This action would, of course, enlist its own complicated arsenal of additional aspectual, actional, and

⁴⁶ Thus far the Socrates is acting reasonably. But what if Socrates made the further aspectual, actional, and affective judgments that the *stranger* is a *prowler* and should be *fled* and *feared*? This would be an unreasonable assessment, because there is nothing in the relevant perceptible-cum-intelligible “information” to suggest the truth of these judgments. Such a judgment would be imprudent, and if this judgment involved subordinating universal reason to the cogitative power and passions then the irascible affection of fear would be an “antecedent passion.” See *ST* I–II.77.6.

affectional judgments.⁴⁷ This jejune scenario could be further complicated if we took into consideration the ways in which Socrates's intellectual and volitional abilities transform and are integrated into these sensory cognitive and appetitive acts, and allow the formation of cogitative categorical and axiological percepts. I shall continue to ignore these factors so as to present an account that could apply, with appropriate qualifications, to some nonhuman animals as well, for none of these perceptual activities require the deployment of linguistic or intellectual capacities. Anscombe notes throughout her marvelous work, *Intention*, that philosophers are often very tempted to posit fictional items or unnecessary acts of imagination or pragmatic linguistic proposals in their accounts of human action; I am arguing the same is true with respect to perception. Indeed, my entire account of perception is directed towards showing how rich and complex our pre-conceptual and pre-linguistic perceptions are. Perception is as ubiquitous as sensation, but it is also replete with pre-intelligible information available to dolphins and primates that we often confuse with the intellectual concepts of rational animals.

Let us suppose that Socrates executes the aforementioned simple prudent avoidance maneuver. Subsequently, he then notices that after he had passed by the stranger, the stranger altered his initial course and doubled back and is presently crossing

⁴⁷ While I do not have space to pursue it here, a deeper analysis of the confluence between cogitative affectional percepts and the passions would help to provide a more differentiated philosophical account of the abnormal instances of human reasoning, emotion, and action treated in Antonio R. Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain* (New York: Putnam, 1994). Damasio discusses patients whose brain damage impedes their ability to have certain emotions, and, so he argues, their ability to make and execute particular choices. Many of these patients can reason practically about what to do in various situations; however, they have difficulty applying such reasoning to particular choices. For a number of studies on Aquinas that examine the role of the passions in practical reasoning and human action see, Giuseppe Butera, "On Reason's Control of the Passions in Aquinas's Theory of Temperance," *Mediaeval Studies* 68 (2006): 133–60; Steven Jensen, "The Error of the Passions," *The Thomist* 73 (2009): 349–79; *idem*, "Virtuous Deliberation and the Passions," *The Thomist* 77 (2013): 193–227; Daniel De Haan, "Moral Perception and the Function of the *Vis Cogitativa* in Thomas Aquinas's Doctrine of Antecedent and Consequent Passions" (*Forthcoming*).

over to the same side of the street as Socrates. A series of additional aspectual and actional judgments are provoked by this newly perceived aspectual percept of the situation at hand. Socrates might assess the aspectual and actional circumstances of his abilities to hide or flee within an environment that affords little protection or means of escape. Let us say that Socrates also aspectually perceives that the stranger's approach is unwavering or is advancing in speed towards him. On the basis of such aspectual assessments Socrates should cogitatively re-evaluate his prior actional and affectional percepts. While the individual was at first estimated to be a "stranger" and a potential evil to be "avoided" by "walking away," the individual is now perceived to be a "proowler" that may cause "harm" and could even be "difficult to avoid." Socrates can affectionally judge this prowler as an "arduous evil" to be either "feared" or "boldly overcome." Perhaps Socrates also aspectually notices a nearby sturdy blunt object, which he actionally judges could be employed as a weapon. This cogitative judgment provides him with an affectional estimation of hope, which can lead to confidence. Our emboldened Socrates reevaluates the situation and aims to confront the prowler, and his affectional percept of confidence activates a concomitant irascible passion of audacity or daringness to overcome this arduous evil.⁴⁸ How the story ends is not pertinent to this study. What is of note for our purposes is the way the different affectional percepts of the cogitative power activate the attendant passions and can cause them to shift from the potential *evil* to be avoided (i.e. an object of the concupiscible appetite), to an *arduous impending evil* to be feared or daringly challenged (i.e. an object of the irascible appetite).⁴⁹

⁴⁸ See *ST* I-II.45.2.

⁴⁹ See *ST* I-II.23; 25; 41-5.

It is also important to recognize that actional and affectional percepts *always* presuppose some aspectual percept that specifies their frame of reference. In other words, actional and affectional percepts require the contextualization provided by the aspectual identification of objects and events within a circumstance that affords the various behavioral orientations and catalysts formed by actional and affectional percepts. Actional and affectional percepts might also incline or attract one towards entertaining additional aspectual percepts or even intensify one's attention upon the initial aspectual perceptible, by activating one's passions. In sum, actional percepts are evaluations that construe—on the basis of an aspectual assessment of oneself and one's environment—how one might interact within the circumstances of the present, and affectional percepts provide the cognitive impulse to act in this way or that way. This affectional impulse directly specifies the object of our concupiscible and irascible appetites by making a particular aspectual-cum-actional sequence appear attractive or unattractive, effortless or arduous.

The aspectual, actional, and affectional percepts formed by the cogitative power in rational and other animals is determined and conditioned by the environment and the natural or acquired “perceptual perspective” of the organism. Just as all sensory beings have various kinds of sensory perspectives, so also all perceptual beings have perceptual perspectives or natural instinctual ways of identifying and behaving with respect to the perceptible affordances of diverse things in the world. In nonhuman animals the most salient properties of their perceptual perspective is what differentiates one animal from another. The perceptual perspective found in human animals is transformed by rational and linguistic abilities, and the perfection of one's perceptual perspective and judgments

of connaturality requires the acquisition of the virtue of prudence within practical reason, which is distributed into universal and particular reason,⁵⁰ justice in the will, and the virtues of temperance and courage within the concupiscible and irascible appetites.

Thus far I have been treating aspectual, actional, and aspectual percepts as really distinct particular intentions formed by different acts of the cogitative power. Sometimes, however, there is not a minor real distinction between aspectual, actional, and aspectual percepts. This is found in animals with a more limited estimative power, such as the kind of animals Aquinas describes as acting immediately upon apprehending a thing as detrimental or threatening.⁵¹ In these cases actional percepts are sufficient to move the appetites in such a way that requires we identify the same percept with an affectional percept. In humans this would be an example of an intrinsic minor virtual distinction, because humans can form really distinct actional and affectional percepts, but it would only be an extrinsic minor virtual distinction in animals that can never form or learn to form distinct actional and affectional percepts. Finally, it is important to recognize that even though humans can form all three kinds of cogitative percepts, humans rarely intentionally and discursively think through each of these distinct percepts. Rather, they are given at once and are permeated by intellectual conceptions, and sometimes, but not always, they are enriched by the oscillating presence and absence of images and memories provided by our imagination and memory.

The distinction between aspectual and actional perceptible features of reality also finds a similar account in James Gibson's treatment of *invariant variables* and *affordances*.

⁵⁰ See *In VI Ethic* 7; 9; *ST I-II*.26.1; 50.3; 58.5; *II-II*. 45.2; 49.2; 5; De Haan, "Moral Perception and the Function of the *Vis Cogitativa*."

⁵¹ See *ST I-II*.17.2, ad3.

The *affordances* of the environment are what it *offers* the animal, what it *provides* or *furnishes*, either for good or ill. ... I mean by it [i.e. *affordances*,] something that refers to both the environment and the animal in a way that no existing term does. It implies the complementarity of the animal and the environment. ... [Let] us consider examples of an affordance. If a terrestrial surface is nearly horizontal (instead of slanted), nearly flat (instead of convex or concave), and sufficiently extended (relative to the size of the animal), and if its substance is rigid (relative to the weight of the animal), then the surface *affords support*. It is a surface of support, and we call it a substratum, ground, or floor. It is stand-on-able, permitting an upright posture for quadrupeds and bipeds. It is therefore walk-on-able and run-over-able. It is not sink-into-able like a surface of water or a swamp, that is, for heavy terrestrial animals.⁵²

Gibson's detailed work in psychology and his ecological approach to perception offers an array of empirical evidence that supports and confirms this study's distinctions among perceptibles and the doctrine that natural instinct is a kind of perceptual perspective with respect to different affordances in reality.

Gibson's term "affordance" principally signifies what I mean by an actional percept, which I distinguish from affectional percepts. I have made this additional division in an effort to avoid an inevitable ambiguity between forming an actional percept of some behavioral orientation with respect to the affordances of some thing in the world, (i) like a surface that affords standing on or (ii) food that affords eating, and the further estimative affectional percept that activates a concomitant passion of the sensitive appetite and the motile activities that initiate (i) standing on the surface that was perceived to afford standability, or (ii) eating the thing that affords edibility. Affectional percepts do not add "content" to actional percepts, but convey an impulse or an appetible specification in terms of final causality that can move the sensitive appetites.⁵³

Here we should recall the earlier remarks that were made about the confluence of cognitive and appetitive powers, which help to characterize the cooperative coordination of affectional percepts and the passions of the concupiscible and irascible appetites. My

⁵² James J. Gibson, *Visual Perception*, ch. 8, p. 127.

⁵³ See *ST* I–II.9.1, ad2; 17.2, ad3.

division of *operabilia* captures the real distinction between the “edible” and similar notions when they are taken as actional percepts or as affectional percepts. The two are obviously similar and are often two moments of one act of an estimative judgment, that is, they are often formally different but materially the same. However, there are many instances when one actionally perceives an object, say, as edible, but does not actually *desire* the edible thing. The object is actionally judged to be edible, which suggests a certain behavioral orientation to some object, namely, it affords being eaten. But in this case there is no affectional judgment to *desire* it as edible, and so there is neither a concomitant passion of desire, nor any eating behavior activities performed with respect to the thing that is edible. For example, one might actionally perceive various desserts as edible, but if this actional judgment occurs after a large meal there might not be any concomitant affectional judgments to activate one’s appetites and behavior to consume the food.

We observe this distinction in nonhuman animals as well. Consider the following rough sketch of the threefold division of percepts: meat (aspectual), edible (actional), and desired (affectional). A hungry dog, following a fitting consumption of nourishment, will shift from the estimative perceptions of *this* desired, edible, meat to *this* undesired, edible, meat. If the meat has already begun to decay, and our urbanized canine finds carrion to be inedible, it will now perceive it as *this* undesired, inedible, meat.⁵⁴

⁵⁴ N.B. Of course this example has been simplified for heuristic purposes. The real complexity of nonhuman animal perceptions and estimations admits of many more aspectual and actional percepts. The dog no doubt smells the putrid odor, a proper sensible, which gives the “meat” a further perceived aspectual layer, say, “decayed,” and so it is now actionally estimated to be “inedible” and so is affectionally “undesired.” Given a sufficient state of hunger, however, a starving dog will often re-evaluate the inedible actional percept, while maintaining the aspectual percept of the decaying meat.

Thus far I have argued for a threefold taxonomical division of cogitative percepts that help us to better characterize the complexities of animal perceptual behavior. This taxonomical division aims to overcome the deficiencies of many presentations of Aquinas's account of the estimative and cogitative power. The fact of the matter is, the behavior of most higher animals cannot be explained adequately by merely attributing to nonhuman animals a simplified account of incidental sensations of colored moving magnitudes as useful or harmful. The typical exegete's rehearsals of the sheep who perceives the wolf as harmful and so instinctually flees, leaves Aquinas's account of the estimative power in nonhuman animals incapable of explaining the quotidian experiences many of us have with nonhuman animals. Whether or not sheep always instinctually act on the basis of the first actional percept estimated, it is certainly not the case that all nonhuman animals behave in this way.

This study's threefold division recognizes within Aquinas's doctrine of the estimative power the taxonomical resources to explain why, for example, many nonhuman animals quit eating when they are full, or at least once they become sick. Such behavior, as we have seen, is too complex to be accounted for by simply appealing to a vague doctrine of instinctual judgments. The threefold distinction of cogitative percepts helps us to address how nonhuman animals can still actionally perceive food as *edible*, as hoarding behavior manifests, even though they no longer affectionally *desire* it as edible, but *desire* storing it more. These distinctions can also help illuminate other elaborate cases of nonhuman animal behavior, like when mothers hunt and acquire nourishment for their offspring, but do not consume the food attained for the offspring. Consider as well the limited manifestations social behavior found in many different nonhuman animals.

Alasdair MacIntyre's treatment of nonhuman animal behavior could be clarified further by distinguishing the beliefs and as-structures of human beings, from the merely estimative abilities of dolphins to aspectually identify alphas and actionally behave with respect to them in ways that is different from how they aspectually and actionally behave with respect to their subordinates.⁵⁵ Finally, the threefold division of estimative percepts also elucidates various examples of human intervention into nonhuman animal abilities, like training dogs to be retrievers. Retrievers can still actionally detect game to be edible, but they have been trained not to affectionally estimate it as desirable here and now. It would be easy to generate countless fascinating illustrations of natural and trained behavior of nonhuman animals that clearly manifests the distinction between estimations of aspectual, actional, and affectional percepts.

Thus far I have presented the general contours of a taxonomical distinction between three kinds of percepts formed by the cogitative power. The rest of this paper is dedicated to providing supplementary clarifications of this threefold distinction by comparing it with other philosophical treatments of perception. I begin with Aquinas. Since this paper aims to be a Thomistic analysis of perception and the cogitative power, I should provide a little exegetical traction for the threefold distinction between aspectual, actional, and affectional percepts by at least pointing to a few passages where I think this division can be found in Aquinas. I then illustrate some of the ways this Thomistic account of perception and the cogitative power can be enriched by—but also contributes to—topics addressed in contemporary philosophy of perception. I develop the notion of aspectual percepts by drawing on James Gibson's account of invariant identities. Then I

⁵⁵ See MacIntyre, *Dependent Rational Animals*, chs. 4–6; Barker, "Aquinas on Internal Sensory Intentions," 217.

take note of the importance of Alva Noë's enactive theory of perception and the need to capture the dynamic nature of perception. Finally, I turn to the Husserlian doctrine of filled and empty intentions, which I integrate into my account of aspectual and actional percepts.

III.

Aspectual, Actional, and Affectional Percepts in Aquinas

Even though the aims of this study on the cogitative power and perception are principally philosophical, I do hold that the doctrine I have presented is Thomistic, and so it would be reasonable to supply some evidence to justify this claim. I have already done this in part by showing how the distinctions established thus far provide a fruitful application of Thomistic taxonomical principles. In this part I round out this claim by providing a cursory exegetical defense of the threefold division of cogitative percepts by examining a few texts from Thomas Aquinas.

It is not difficult to find many instances where Aquinas provides examples of human beings apprehending aspectual percepts by the cogitative power. He tells us it is through the cogitative power that humans apprehend particulars under common natures possessed in the intellect, like perceiving "*this* man" under the common nature "man," "*this* tree" under the common nature "tree," and all particular semantic notions apprehended in audible phonemes, or visible and tactile graphemes.⁵⁶ But it is much more difficult to convince cogitative skeptics that Aquinas also thinks nonhuman animals can apprehend perceptible aspectual intentions by their estimative power.⁵⁷ I will examine

⁵⁶ See *In IV Sent.* d. 49.2.2; *In DA* II.12; *ST I.* 78.4; *In DS* 1; *In I Meta.* 1; *In Post. Anal.* II.20. Also see De Haan, "Linguistic Apprehension as Incidental Sensation."

⁵⁷ It seems that a hermeneutical literalism has led many to contend that, according to Aquinas, nonhuman animals can only estimatively perceive *operabilia*, and that they do so without any prior

one passage where it is impossible to interpret Aquinas in this restrictive fashion. I hope that by examining one instance where Aquinas attributes estimation of aspectual perceptibles to nonhuman animals it will provide a sort of hermeneutical watershed for how to read other more ambiguous passages.

Aquinas holds that some nonhuman animals can produce and apprehended significant sounds, especially those animals that seem to participate in prudence, experience, and opinion.⁵⁸ This can occur in nonhuman animals that, like humans, can apprehend non-sensible intentions or perceptibles that are *incidental* to audible sensibles.

But *hearing* announces to us only *differences* among sounds, which are not found in all bodies, and are not expressive of the many diversities of things. *But to a few* animals hearing does show differences *of voice*. Voice is sound projected with an imagining from an animal's mouth, as is said in On the Soul II, and so the voice of an animal as such naturally indicates the animal's inner feeling (*passio*), as the barking of dogs indicates their anger. Thus the more perfect animals know one another's inner feelings from voices, a knowledge that is not in imperfect animals.⁵⁹

Are the perceptibles that are accidental to the audible voice aspectual, actional, or affectional? The animal₂ that perceives animal₁'s anger does not thereby form its own affectional percept of anger. To form an affectional percept would make the apprehending animal₂ have its own passion of anger, but this is not the case described by

aspectual awareness of the identity of the objects in the environment or the circumstances which these *operabilia* are oriented towards. The studies on the cogitative power by Michael Stock, Tony Lisska, Mark Barker, and myself are clearly opposed to this superficial interpretation of the cogitative power.

⁵⁸ See *In I Meta.* lect. 1; *In DA* II.28 (Marietti, III.4, n. 629); *In DS* 1; *In DM* 1; 2 (450a15).

⁵⁹ *In DS* 1 (437a5), trans. Kevin White, p. 29. In this chapter Aquinas goes on to affirm the importance of the incidental sensation of audibles for human teaching and learning. See also *In DA* II.18; *In Post. Anal.* II.20; *In I Meta.* lect.1.

Aquinas. It also cannot be an actional percept. This would require reading into the text an interpretation that contended Aquinas is proposing something like animal₂ forms an actional percept to attack, hide, or flee from animal₁ when it perceives that animal₁ is angry. But Aquinas clearly does not say anything to suggest that animal₂ forms its own actional or affectional percepts when it perceives that the animal₁ is angry. Rather, Aquinas plainly states that the apprehending animal₂ is perceiving *that* the other animal₁ is angry, which is a putative example of an apprehension of what I have called an aspectual percept. This aspectual percept of “anger” perceived by animal₂ might or might not then result in the perceiving animal₂’s own estimation of an actional judgment to hide, flee, or attack, but these possible actional percepts are neither mentioned, nor suggested in this passage. In short, Aquinas clearly holds in one text that nonhuman animals can incidentally sense the bark of an animal as indicative of the barking animal’s anger, and this can only be reasonably interpreted to mean that some nonhuman animals can perceive aspectual percepts by their estimative power.⁶⁰

It is indisputable that Aquinas holds nonhuman animals estimate what I have called actional percepts,⁶¹ and I have just briefly considered one text where he affirms that aspectual intentions are perceived by nonhuman animals. But where does he mention

⁶⁰ N.B. In *In IV Sent.* d. 49.2.2 Aquinas provides an example of *per accidens* sensation of a particular intention like Socrates, a clear instance of an *aspectual intention*, and notes how this is found in both the cogitative power in humans and the estimative power in nonhuman animals. No distinction or qualification is given that aspectual intentions are not found in the estimative apprehensions of nonhuman animals. Even if we do suspect that Aquinas would want to qualify that a nonhuman animal does not apprehend Socrates *as* “Socrates,” we can still affirm that many nonhuman animals can discern the difference between two humans like Socrates and Plato on the basis of *per se* and *per accidens* sensibles.

⁶¹ “... quod *sicut* appetitus rationis non sequitur quamlibet apprehensionem rationis, sed quando aliquid apprehenditur ut bonum ; *ita* et appetitus sensibilis non surgit nisi quando apprehenditur ut conveniens. Hoc autem non fit per exteriorem sensum, qui apprehendit formas sensibiles; sed per aestimationem, quae apprehendit rationem convenientis et nocivi quam sensus exterior non apprehendit. Et ideo in parte sensitiva non est nisi unus appetitus secundum genus, qui tamen dividitur, sicut in species, in irascibilem et concupiscibilem, quarum utraque sub sensualitate computatur.” *In III Sent.* d. 17.1.1.2, ad2; *ST I.* 78.4; 81.3.

affectional percepts? As was intimated above, I locate the distinction between actional and affectional percepts in the analogy Aquinas makes between human action and irrational animal behavior. The particular analog of interest to the question of affectional percepts is explicitly taken up in the question on command (*imperium*) in *ST* I–II.17.2. Just as there are freely chosen human actions that are not executed, so also there are actional percepts formed by the estimative power in nonhumans that are not affectively desired and performed, because no instinctual affectional percept of being suitable or unsuitable is formed vis-à-vis the actional percept. An affectional percept is required to provide the *impulse* to move the sensitive appetites that immediately initiate behavior.⁶² Aquinas writes,

The impulse to act (*impetus ad opus*) occurs in one way in brute animals and in another way in men. For men bring about an impulse to act through the ordering of reason, and so in men the impulse to act is one of command. However, in brute animals the impulse to act is accomplished by natural instinct, because as soon as they apprehend something fitting or unfitting, their appetite is naturally moved to pursue or to flee. Hence, they are ordered by another to acting, and they do not order themselves to action. And therefore in [brute animals] there is impulse, but not command.⁶³

⁶² N.B. One might raise an objection that I am attributing to nonhuman animals full blown free actions. But this would be a mistake. Aquinas maintains that some nonhuman animals are imperfectly voluntary (see *ST* I–II.6.2), but there is nothing in his account that entails these nonhuman animals are engaged in perfect voluntary actions. Nonhuman animals cannot rationally consider the ends they act for as *ends*; such transcendent intellectual modes of consideration exceed the capacities of the estimative power. On my account, the estimative percepts formed by nonhuman animals remain within a pragmatic horizon (see *In DA* II.13). Consequently, nonhuman animals can neither have perfect voluntary acts nor free choices.

⁶³ *ST* I–II.17.2, ad3.

The term “affectional percept” should be identified with Aquinas’s account of the instinctual impulse (*impetus*) that is the natural analog in the sensitive part of the soul to the rational act of command (*imperium*). Of course a number of exegetical issues would need to be teased out of this passage and others before one could present an unassailable defense of my interpretation. I do not have the space, however, to take up these issues here. Nonetheless, the notion of an “affectional intention” does capture the spirit, if not the letter of the distinction Aquinas makes between the estimative impulse of nonhuman animals and command of rational animals. These two passages should provide sufficient exegetical support for my claim that the threefold distinction of percepts maps onto features of Aquinas’s doctrine of the cogitative power.

IV.

Aspectual Perception: Invariant Identities within a Dynamic Sensible Manifold.

Thus far I have only articulated a few of the more obvious manifestations of aspectual, actional, and affectional percepts, such as the complex but clear judgments involved in the earlier illustration of Socrates’s encounter with a prowler. These examples all included the aspectual percepts of the garden-variety objects we perceive and interact with on a daily basis. At this level of description, priority is normally given to the aspectual percepts that identify the whole, rather than to the aspectual percepts of various perceptible components or layers. In this section I want to focus on the distinction between the sensible gestalt and the aspectual perception of a perceptible gestalt so as to isolate the simplest or most basic aspectual perceptible perceived by the cogitative power in acts of incidental sensation.

Despite the fact that it often goes unnoticed by many philosophers and psychologists, one of the more obvious manifestations of animal perception is found in their core ability to mark out and track persistent identities within a dynamic sensible manifold. Central to James Gibson's doctrine of affordances is his robust account of invariants.

The active observer gets invariant perceptions despite varying sensations ...
constant perception depends on the ability of the individual to detect the
invariants, and that he ordinarily pays no attention whatever to the flux of
changing sensations.⁶⁴

Gibson's detailed doctrine of invariants helps to shed light on the variety of aspectual percepts registered by the cogitative power. The most basic kind of aspectual percept should be identified with the invariant perceptibles that maintain their unity and persist within the vicissitudes of a variant sensible and perceptible manifold. Invariant perceptible identities are not reducible to the phenomenal unity of colors, sounds, shapes, sizes, and locations of things within the sensible gestalt. A thing's sensible features can vary widely from one moment to the next; tracking a dynamic individual thing would be impossible on the basis of *per se* sensibles alone, and *a fortiori* on the basis of the physical and chemical stimuli, which merely constitute the material causes of sensible forms being communicated through a medium.⁶⁵ To perceive a morass of sensibles and

⁶⁴ Gibson, *Perceptual Systems*, p. 3

⁶⁵ N.B. The *per se* sensibles of any thing are not irrelevant to the perceptual identification of a thing. Substances have characteristic accidents that determine their characteristic sensible qualities. Shape in particular is integrated into the identification of aspectual and actional perceptibles of things. Shape manifests a determinate range of affordances proper to any thing, a caveat Thomas Aquinas did not fail to overlook (see *In VII Physic* lect. 5, n. 917). We must observe the fact that despite the dynamic character of the sensible gestalt, whenever we track a perceptible identity in motion its *per se* sensible qualities are not irrelevant. Without these *per se* sensibles there would be no *per accidens* sensibles, that is, no aspectual

perceptibles as a stable continuous unit is to identify by perception a particular thing as a dynamic nucleus of sensibility and perceptibility; it is to notice perceptually a primary substance; it is to target and register a *hoc aliquid*.

Whenever we move around a thing or it moves around us, a pageant of sensible qualities are dynamically altered as it becomes sensibly present within a range of distinct sides, faces, shapes, movements, locations, moments, colors, sounds, odors, tangibles and so on. It is within this dynamic kaleidoscope of sensible reality that the percipient also perceives a real underlying perceptible identity that is able to display itself according to a variety of contextually conditioned sensible qualities and aspectual perceptibles. The perceptual awareness or *per accidens* sensation of an invariant identity within a dynamic manifold of sensible qualities is the fundamental and primary instance of an aspectual perceptible. All of the other simultaneously perceived aspectual perceptibles constitute auxiliary layers of the perceptible gestalt that envelope any given perceptible invariant.⁶⁶ Some illustrations of invariant identities or aspectual percepts will be instructive.

A statue of Athena will remain aspectually perceived as a statue of Athena, an invariant aspectual perceptible, whether it is seen in daylight or under artificial light, from the front or the back, from a higher perspective above or a lower perspective below. A police car remains the same invariant perceptible whether I hear it coming around the corner of the building that occludes my vision, or if I see, hear, and feel it race past on the street in front of me, or watch and listen to it fade into the distance. The dynamic phantasmagoria of sensible colors, sounds, shapes, and movements does not impede an

percepts or persistent identities to be perceived concurrently. On the significance of shape, see Sokolowski, *The Phenomenology of the Human Person*, 108–16.

⁶⁶ See Gibson, *Visual Perception*, ch. 8; Sokolowski, *Phenomenology of the Human Person*, ch. 13.

animal's perceptual ability to identify the same invariant perceptible throughout the dynamic manifolds of the sensible gestalt.

We can also perceptually attend to an intramodal element of the sensible or perceptible gestalts. One might focus upon the “siren.” A “siren” is an invariant aspectual percept that can be identified amid a dynamic sensible manifold of varying audible qualities, like changes in intensity, shifts in pitch on account of the Doppler effect, or its moving distal location, all of which are broadcasted into the medium from the source of the siren.⁶⁷ Similarly, we can identify the same aspectual perceptible through a variety of different *per se* sensibles. For example, the tobacco slowly burning in a pipe discloses a rich intermodal sensible gestalt of *heat* from the *smooth round* briar bowl filled with *glowing red* embers, the *crackle* of tobacco leaves, the *aromatic* harmony of vanilla, hazelnut, and Bourbon, and the complementary nutty, whisky *flavors*, all of which are redolent of old philosophy professors. Any one or more of these sensible modalities taken on their own might be sufficient for the perceptual observation that a pipe is being smoked in the near vicinity. This is not an act of interpretation or inference; anyone familiar with the sensibles and perceptibles of smoking pipe tobacco can make this perceptual identification without needing to form any associative inference from sensibles to some kind of perceptible whole. Gibson also takes note of these same facts by considering fire, which can be seen, felt, heard, and smelt.

It crackles, smokes, radiates in the infrared band, and radiates or reflects in the visible band. Accordingly, it provides information for the ears, the nose, the skin, and the eyes. The crackling sound, the smoky odor, the projected heat, and the

⁶⁷ For a recent defense of sonic realism that is similar to Aquinas's sonic realism, see the distal event theory of sound defended in Casey O'Callaghan, *Sounds: A Philosophical Theory* (New York: Oxford University Press, 2007).

projected dance of the colored flames all specify the same event, and each alone specifies the event. One can hear it, smell it, feel it, and see it, or get any combination of these detectors, and thereby perceive a fire. ... [The] problem of perception is not how sensations get associated; it is *how the sound, the odor, the warmth, or the light that specifies fire gets discriminated from all the other sounds, odors, warmths, and lights that do not specify fire*. Different stimulus energies—acoustical, chemical, and radiant—can all carry the same stimulus information [i.e. invariant perceptibles].⁶⁸

This paper's opening quote from Wittgenstein makes a similar observation. While color is proper to vision and is inaccessible to audition, the sensible modalities of color and sound both allow us to perceive aspectual perceptibles like "sadness," just as Aquinas notes how an animal can perceive "anger" in the bark of another animal. In short, the same invariant perceptible is displayed and can be perceived throughout a diversity of intermodal and intramodal sensible variations. Space does not permit us to take up additional examples that could clarify all the assorted ways that nonhuman and rational animals alike are able to perceive or incidentally sense a multiplicity of aspectual perceptibles through the various sensibles of color, sound, odor, flavor, and tangibles.

In this section I have connected the notion of aspectual perceptibles with James Gibson's account of invariant identities. Through a series of examples I have also shown why Gibson, Sokolowski, and others have argued that perceptible invariants are neither reducible to *per se* sensibles, nor to the electromagnetic, chemical, and mechanical energies involved in the communication of sensibles and perceptibles through the medium and our nervous system. Gibson's extended treatment of perceptible equivalence

⁶⁸ Gibson, *Perceptual Systems*, p. 54.

despite sensible and stimulus energy variance cuts a deep blow to anti-realist and reductionist theories of sensation and perception. The putative character of perceptibles is not easily eliminated once it is noticed that they constitute the heart of an animal's cognitive interface with the world. In the next section I focus on the importance of formulating a doctrine of sensory-perception that is as dynamic as the changing sensible and perceptible things in the world.

V.

Enactive Theory of Perception. Alva Noë and other philosophers influenced by James Gibson have been especially attentive to the significance of the integration of sensory-perceptual capacities with our motile abilities. We do not just passively receive sensibles and perceptibles from the world, we actively obtain them by positioning our sensory organs in appropriate ways that manifest the variety of sensible and perceptible profiles found in reality.

Perceiving how things are is a mode of exploring how things appear. How they appear is, however, an aspect of how they are. To explore appearance is thus to explore the environment, the world. To discover how things are, from how they appear, is to discover an order or pattern in their appearances. The process of perceiving, of finding out how things are, is a process of meeting the world; it is an activity of skillful exploration.⁶⁹

Noë's *enactive theory of perception* distinguishes between sensible looks and profiles, that is, the difference between how a cube appears from one visible or tactile perspective and how a cube characteristically appears with respect to all its looks. We discover the profiles of shapes, colors, sounds, flavors, and so forth by exploring them and

⁶⁹ Noë, *Action in Perception*, 164.

recognizing implicitly that the cube has a complete three-dimensional profile and that its appearances vary in ordered ways due to movement and the diverse alterations enacted by different perspectives.⁷⁰ “We gain content by looking around just as we gain tactile content by moving our hands. You enact your perceptual content, through the activity of skillful looking.”⁷¹ Sensory-perception does not just guide our motile abilities; sensory-perception is “constituted by the exercise of a range of sensorimotor skills.”⁷² Without our motile abilities, Noë argues, we could not be perceptually aware that there is more to what is present than is sensibly given. Without such motile abilities we could not perceive that the elliptical-looking dinner plate was really circular; we could not be aware of our ability to enact visually this sensible circularity by moving into a different visual perspective. Whenever we move to enact a better perspective for obtaining additional sensibles or perceptibles, we exhibit an implicit perceptual awareness that the sensibles or perceptibles that are currently absent can be enacted or made present by utilizing our motile abilities. We anticipate colors, sounds, odors, flavors, tangibles, shapes, motions, and affordances that are *virtually present*, that is, they can be made sensorially and perceptually accessible by exercising our motile abilities, by enacting these absent sensibles and perceptibles.⁷³

Aristotelians have always recognized the dynamic character of the sensible and perceptible world, but very little attention has been given to the complementary dynamic exploration of the sensing and perceiving animal. A Thomistic account of sensory-perception can and should appropriate a number of the central theses of the enactive

⁷⁰ Noë, *Action in Perception*, 75–122, ff.

⁷¹ Noë, *Action in Perception*, 73.

⁷² Noë, *Action in Perception*, 90.

⁷³ Noë, *Action in Perception*, 59–73, esp. 63.

theory of perception, especially its focus upon the significant ways our motile abilities are integrated into sensation and perception.

Despite the insights of Noë's enactive approach to perception there are a number of deficiencies and limitations with his taxonomy. This is surprising since Noë frequently remarks how many psychologists and philosophers have generated problems where there were none due to their impoverished descriptions of sensible reality, its many appearances, and its supposed illusions. But Noë himself often does not provide precise descriptions that would distinguish sensation from perception, appearances from the real, the absent from what is present, and sometimes even relies too much on sensorimotor abilities to resolve perceptual problems.⁷⁴ Many of these difficulties would be resolved by distinctions that are commonplace for Aristotelians, like that between *per se* proper and common sensibles, and *per accidens* sensibles. In the next section I briefly take up the ambitious task of integrating the salient features of the enactive theory of perception into the Thomistic doctrine of perception, along with some insights drawn from Robert Sokolowski's phenomenological treatment of perception.

V.

Filled and Empty Percepts: An Enrichment from Phenomenology. I have already noted that the extracognitive presence of a unified sensible-perceptible reality is required for the perception of invariant identities, that is, cogitative perception of aspectual perceptibles is necessarily concurrent with the sensation of essential sensibles. But the

⁷⁴ For example, in his otherwise insightful treatment of Bach-y-Rita's tactile-visual substitution system in *Action in Perception*, 111–17, Noë insists, on the basis of his inaccurate description of the experience of using the tactile-visual substitution system, that it is a *visual* experience, when in fact it is a tactile experience of moving shaped magnitudes at a distance, which humans ordinarily can only sense via vision.

problem is more complicated when we consider the nature of our conscious attendance to invariant identities within a dynamic sensible manifold.

Let us return the earlier example of walking around a statue of Athena. When we perceive the statue there are numerous different shapes that can be seen at once, but there are many more that are not present and cannot be seen. By displaying one spectrum of sensibles from any particular sensorial perspective, three-dimensional objects necessarily occlude alternative shapes, faces, profiles and other sensible qualities. But even though one cannot see the shapes and colors on the other side of a statue, the percipient is nonetheless taking the statue as having other sides that possess relatively similar sensible qualities contiguous with the side of the statue that is currently sensibly present. The enactivist theory of perception explains that because perception involves an *implicit* recognition of how to obtain alternative perspectives of the sensible manifold through exploration, we can *implicitly* perceive the other sides that are obtainable through exploration. I think the enactivist explanation is true; however, the notion of *implicit* perception is ambiguous.⁷⁵ This ambiguity can be removed by integrating the enactivist's explanation with the distinction between sensation of *per se* sensibles and perception of *per accidens* sensibles, and with Husserl's distinction between presence and absence, filled and empty intentions. Weaving together these three complementary threads provides a more complete explanation of this phenomenon.⁷⁶

⁷⁵ Noë wrestles with this ambiguity and others in *Action in Perception*, 165–9.

⁷⁶ Sokolowski has already laid the foundations for this kind of synthesis in his *Phenomenology of the Human Person*, ch. 13. For a detailed account of the doctrine of presence and absence, filled and empty intentions, see Edmund Husserl, *Logical Investigations*, trans. J. N. Findlay, ed. Dermot Moran (New York: Routledge, 2001), vol. 2, Investigation VI; Robert Sokolowski, *Husserlian Meditations: How Words Present Things* (Evanston: Northwestern University Press, 1974); *idem*, *Introduction to Phenomenology*.

When observing one side of a statue, we are also perceptually intending the presence of the occluded sides even though they remain sensibly absent. In other words, we *perceptually* anticipate the sensible presence of absent sides before we can actually *sense* them as present. The distinction between sensation and perception clarifies both why we are not regularly deceived by the different sensible appearances of things displayed by different sensible perspectives, and how we are aware of our ability to obtain alternative sensible presentations by exploring alternative perspectives. Let us apply these distinctions to Noë's example of the circular plate. From a certain sensible perspective a circular plate *visibly* appears elliptical, but we do not *perceive* it as elliptical; we *perceive* it as a circular thing because we recognize that even though its sensible visual profile consists in elliptical *visible* appearances, the plate itself is circular. This is not a sensible or perceptual illusion, but an ordinary feature of sensory perspective. Anyone who is familiar with the everyday manifestations of sensory perspectives does not *perceive* the *visibly* elliptical plate as *being* an elliptical plate. They *perceive* the plate aspectually as circular even though it is *seen* as visibly elliptical from the perspective of the sensing subject. Both the perception and the visual sensation veridically obtain their objects, and so long as false perceptual judgments or confusing misdescriptions are avoided, there are no inconsistencies here. Similar distinctions would in fact apply to many of the classic examples of "visual illusions," such as the stick half-immersed in water.⁷⁷

⁷⁷ See DV 1.11; ST I.17.2; In DA II.30 (Marietti, III.6); Simon, "An Essay on Sensation." N.B. By ascribing the distinctions between reality and appearance, truth and falsity to things and sense powers I am speaking rather loosely (see DV 1.9). Technically, "sense does not know appearances. It is just as much a matter of [intellectual] judgment to know that an object is not real but apparent, as it is to know that an object is not apparent but real. Sense does not know appearances, because sense alone is not human knowing, and because sense alone does not possess the full objectivity of human knowing. By our senses we are given, not appearance, nor reality, but data." Bernard Lonergan, "Cognitive Structure," in

We should, however, attempt to clarify why there are no inconsistencies despite these sensory and perceptual differences. Aquinas distinguishes both a loose and strict sense of *per accidens* sensibles. Thus far we have only been considering the strict sense whereby whatever is a *per accidens* sensible, like *this* tree and *this* apple is a kind of non-sensed intention that is not sensible in any *per se* or essential way. However, there is another loose sense of *per accidens* sensible that can be used to distinguish how the proper sensible “red” is a *per accidens* sensible with respect to the *per se* proper sensible “sweet.” The apple is both red and sweet, however, in terms of sensibles, it is *per accidens* that the sweet is also red. This looser sense of *per accidens* helps us to clarify how there can be sensible and perceptual differences without inconsistencies.⁷⁸

By virtue of our cogitative perceptions we can apprehend and intend not only the aspectual percepts which are extracognitively present to us here and now as *per accidens* sensibles, we can also intend aspectual percepts of *per se* sensibles like colors, sounds, and odors, which are neither present nor actually being sensed. We do this quite often. We regularly cogitatively perceive by aspectually intending a *per se* sensible which is not present, like in the case of the perceived circularity of the dinner plate that is currently being sensed as elliptical. Note well, we are not imagining the plate as circular, we are perceptually intending it by an aspectual percept. Likewise, even though one perceives that the visibly present small, red, sphere is an apple, what is not sensibly present is the sensible gustable “sweet.” Nevertheless, we are able to perceive the red apple as “sweet”

Collection, Collected Works vol. 4, eds. Frederick E. Crowe and Robert M. Doran. (Toronto: University of Toronto Press, 1993), 205–21; 218. In short, the operations of sensation and perception do obtain and conform to extracognitive things, namely, their real formal objects, but they do not do so under the intelligible formality of “truth,” “reality,” or “thing,” which, as understood and affirmed, are proper to intellectual judgments. This is a topic of great importance, but I cannot deal with it here.

⁷⁸ See *In DA* II.13.

by virtue of an aspectual percept that allows us to anticipate the sweetness we can taste by consuming the apple. The specification of “consuming” is, of course, an actional percept, and if the “sweetness” not yet tasted but aspectually perceived is “desired,” then we also have an affectional percept. In short, we are able to perceive cogitatively percepts of both absent intramodal and intermodal *per se* sensibles (e.g., sweet) on the basis of different present *per se* sensibles (e.g., red and round) that we cogitatively perceive by *per accidens* sensations.⁷⁹

Our ability to intend cogitative aspectual and actional percepts of *per se* sensibles that are absent is essential for our motile-*cum*-perceptual enactive abilities, as well as for our apprehension of invariant identities within a dynamic sensible manifold. Yet in order to make this clearer we must make more explicit some key notions borrowed from Husserlian phenomenology, a few of which we have already been employing.

First is the division between presence and absence, which I already noted was a salient feature of Aquinas’s own taxonomy. Sensible and perceptible features of reality are able to be present or absent relative to some subject with sensory and perceptual powers. If the reality is absent as sensible in some respect, it cannot be actually sensed in that respect, because sensation requires the real presence of the sensible to act on the sensory powers. If the reality is altogether absent then it cannot even be cogitatively *perceived*, however, it can still be cogitatively *thought*, just as it can still be intellectually

⁷⁹ Aquinas does recognize that the relationship between “color” and “flavor” can be considered as a wider sense of *per accidens*. “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*.” Thomas Aquinas, *Commentary on Aristotle’s De anima*, trans. Robert Pasnau (New Haven: Yale University Press, 1999), II.13.395–6.

thought.⁸⁰ In other words, the cogitative power cannot incidentally sense any perceptibles that are not actually present in some way through the *per se* sensible manifold, though it can think them. This last point, moreover, admits of numerous further qualifications that I do not have the space to address here.

Next, we should appropriate the distinction between filled and empty percepts introduced by Husserl and developed by later realist phenomenologists like Sokolowski. This is the cognitional complement to the ontological distinction between presence and absence, being and nonbeing. Whenever a reality is perceptually intended and is really present to the percipient, then that percept is *filled*. However, if a reality or object is intended, but it is absent and not really present, then this intended percept is *empty*. I think this distinction introduces a fruitful clarification of Aquinas's own treatment of the kind of intentionality found in the acts of the cogitative power and possible intellect.

Let us also note here how the clear Thomistic division between sensation and perception helps correct the descriptive imprecisions and ambiguities found in some phenomenologists' and enactive theorists' treatments of perception, presence and absence, filled and empty percepts. Clearly we must reject that there can be any empty intending in sensation. This is because there are no "sencepts" formed in acts of sensation by the external sensorium.⁸¹ We must say that all sensations are filled or sensation is nothing. By its very essence sensation requires the extracognitive presence of the sensible reality in the environment. One does not *visually* intend the empty *visible* "sencept;"

⁸⁰ See *ST* II–II.2.1. N.B. Aquinas recognizes that nonhuman animals clearly pursue things that are sensibly absent. By virtue of their estimative power, they can form aspectual, actional, and affectional percepts to search for food that is not yet sensibly present. See *ST* I.78.4; *In DS*, Prol. (436a8); 1 (437a1).

⁸¹ "...cognitio sensus exterioris perficitur per solam inmutationem sensus a sensibili, unde per formam que sibi a sensibili imprimitur, sentit. Non autem ipse sensus exterior format sibi aliquam formam sensibilem, set hoc facit uirtus ymaginativa, cuius forme quodam modo simile est uerbum intellectus." *Quod. V.5.2* [9], ad2 (375:49–55). See *ST* I.85.2, ad3.

vision does not form a visible-image of the other side of a building (though one can visibly imagine the other side of a building by imagination). To emptily intend the other side of *this* building involves a perceptual act performed by the cogitative power, a power within the internal sensorium. Unlike powers of the external sensorium, the cogitative power is able to intend perceptually empty aspectual percepts of absent *per se* sensibles. For example, it can aspectually, actionally, and affectionally intend the desirability of the absent *per accidens* odor, flavors, and texture of the apple that is *seen* from across the room; it does so by the sensibly present *per se* sensible shape, size, and colors of the apple. These other acts, as described, are not *imagined*, which would be to form odorous, gustible, and tactilible images by imagination. Rather, they are perceptually intended here and now as cogitative *aspectual percepts*. In these cases what are natively *per se* sensible odors and flavors are here intended as cogitative percepts. The cogitative power also allows us to cogitatively think and judge absent *per se* perceptibles, like the empty aspectual percept that there are *apples*, i.e. a *perceptible*, in another room, and the empty actional-cum-affectional percept, that they are desirable to eat.⁸²

Many more distinctions could be made that would bring us closer to the important demarcations between the cognitive abilities of rational and other animals, but we do not have the space to address these issues here. However, we should not overlook an important distinction that the doctrines taken up in the last few sections help to place in relief. For Aquinas, the intellect is able to abstract and make actually intelligible what is only potentially intelligible in sensible, perceptible things. Many Thomists fail to recognize that it is the invariant perceptibles, and not the *per se* sensibles, which are the

⁸² N.B. These Husserlian distinctions are also needed to explain the details of Aquinas's example of nonhuman animals' ability to form a particular intention of something desirable that is not currently present, or how we are able to incidental sense a red thing as sweet. See *In DA* II.13; 29; III.10.

principal referents of the potentially intelligible. We rarely abstract intelligible species directly from phantasms of *per se* sensibles; rather, abstraction and intellectual insight is principally oriented towards cogitative phantasms of invariants, the particular intentions that become universal intentions.⁸³ Even when we do abstract intelligible species of sensibles like colors, sounds, and shapes, we do so from potentially intelligible invariant percepts about colors, sounds, and shapes, not from imagined *per se* sensibles that remain both potentially perceptible, which does not require abstraction, and potentially intelligible, which does require abstraction. The chain of created being is continuous in Thomas Aquinas, and his cognitional theory is no exception to this rule. The actually intelligible is gradually approached through gradations of determination within the potentially intelligible, the highest being the phantasms, that is, the invariant percepts formed by the cogitative power.⁸⁴

VI.

Conclusion. This study has put forth a detailed analysis of perception and the cogitative power on the basis of the principles of Thomas Aquinas's philosophical anthropology. I have defended at length a threefold distinction of aspectual, actional, and affectional percepts formed by the cogitative power. While many more principles, distinctions, and problems would need to be addressed in order to present a comprehensive Thomistic philosophy of perception, the taxonomy established here has laid the foundations for such an ambitious project. Finally, this study has at least provided a sketch of how a Thomistic philosophy of perception and the doctrine of the cogitative

⁸³ See *SCG* II. 73, ff.; *In Post. Anal.* II.20; *In I Meta.* lect. 1. Fabro, Lisska, and Barker defend a similar contention, see *supra* nn. 4, 37.

⁸⁴ See *DV* 14.1, ad9.

power can contribute to contemporary approaches to perception, and can be enriched by the doctrines found in the ecological psychology of James Gibson, Alva Noë's enactive theory of perception, and the realist phenomenology of Robert Sokolowski. I have also suggested a number of ways in which this Thomistic account of perception contributes to and amplifies Alasdair MacIntyre's treatment of the metaphysical biology of human beings and the salient differences between rational and other animals. I hope that this study has at least made some progress in establishing a Thomistic philosophical taxonomy of perception that provides others with some of the tools that are necessary to move forward in these different philosophical disciplines.⁸⁵

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