Chapter 7 Medieval Theories of Active Perception: An Overview

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7.1 The Augustinian Tradition on the Philosophy of Perception

Although perception has historically been taken as a basic constitutive process of knowledge in that all knowledge is either the direct result of or made accessible to higher cognitive powers by means of perception, the majority of medieval thinkers treated it in a perfunctory manner, as a side issue to other "major" philosophical problems such as intellectual cognition. To say that it received limited attention is not, however, to say that it received none. In recent decades, scholars working on medieval epistemology have investigated and unearthed a variety of accounts encompassing a multitude of philosophical lines of influence. This scholarly work has focused on what could be called the Aristotelian tradition and the tradition of geometrical optics in the Latin West. In what follows I would like to draw attention to a different tradition, that of Medieval Augustinianism, with a view to reconstructing its key elements and mapping its major historical developments.

It is argued, in the chapter on Augustine that he conceived of perception as a dynamic process made possible by the soul's mode of presence in the body, paying continuous attention to its affections and its active formation of images of external objects that act upon the sense organs. Perception is precisely the awareness by the soul of the affection (*passio*) of the sense organs by sensory stimuli. Furthermore, according to this theory, the soul's activity guarantees the inviolability of the basic ontological principle of the superiority of the soul over the body (MP), expressed in the epistemological principle (EP). These elements—ontological superiority, attention, capacity for making inner images representative of external objects, and perception as an act of the vital principle—are at the heart of medieval theories of active perception.

The above-mentioned chapter identifies some problems with Augustine's account, together with the developmental nature of such a theory throughout his life.

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I take these aspects to be secondary in terms of understanding how the theory was received in the Middle Ages, however. Most authors considered them part of one single theory—Augustine's—and developed their own theories from it and under his authority, sometimes of course achieving a very different effect. The claim is that even if there were no Augustinian theory of perception (and I think there was), there was certainly a medieval Augustinian theory of perception. Similarly, I do not intend to claim the existence of an Augustinian tradition in a wide sense, and rather to argue that there is a certain tradition in the philosophy of perception that is explicitly indebted to Augustine. Many authors, especially in the late Middle Ages, shared a number of core commitments with respect to what we know of the external world and took them to originate in Augustine. They all refer to certain passages in Augustine's works—such as De musica 6.5, De trinitate 11.5, De Genesi ad litteram 12.16 and De quantitate animae 23.48—in support of their claims. 1 In the following sections I present a brief survey of what constituted such a tradition throughout its main historical developments. The focus is on late medieval thought, under the assumption that the new Aristotle radically changed the nature of the discussion about perception.

The resurfacing of Aristotle's works in the Latin West from the mid-twelfth century onwards, together with the works of his commentators (especially Avicenna and Averroes) and Arabic optical treatises (especially Alhacen's *De aspectibus*) revolutionized the Latin philosophical psychology and epistemology. As a result, the Aristotelian causal theory of perception became mainstream. According to this theory, perception should be understood in the general framework of a theory of change and according to the principle of act and potency: it is the taking on by the senses of the sensible form without its matter. Aristotle's analogy of the reception by the sense organs of the form with wax receiving an impression from a seal exemplifies this point most clearly, independently of the kind of change the "receiving of an impression" or "form without matter" is taken to mean.²

The object in this account is the efficient cause of perceptual acts by acting upon sense organs *and* powers, bringing about the actualization of what the powers potentially are (let us designate this the causal efficacy principle (CEP)). A good example of this theory is to be found in Thomas Aquinas, as follows:

1 to sense is to be moved; since, through the sensible objects' altering the condition of the senses in acting upon them, the animal is made actually sentient from being only potentially so.³

¹ Even authors not belonging to this tradition identify the theory with Augustine: see e.g. Albert the Great 1968, II.3.6, 105–106. See Pattin (1988), v–vi; 1–3. The fact that the same passages are quoted in support suggests the existence of a textbook of Augustinian sentences on different topics in the manner of the *Auctotitates Aristotelis*. I am unaware of the discovery of such a work, but its existence seems likely.

² i.e. Whether there is a physiological change in the sense organ or just an intentional or spiritual change.

³ Aquinas 1961/1967, II.82.12, 270. See Aristotle, *De anima* II.5, 418a3. See also Albert the Great (*De anima* II.3.6, 107) who, when explaining the way sensible things actualize sense powers, states that he is following "directe Peripateticorum sententiam". At roughly the same time (ca.

An offset of the theory is that the sense powers are passive with respect to external objects, which generate the actual sensation. Passivity is not a detail but an integral part of the theory: the object (or its perceptible qualities) is the agent acting upon the appropriated power in a way that actualizes that power, and without this potentiality-actuality axiom perception remains unexplained. In this type of account the external object performs two roles: that of the agent, in the sense of being the activator of the perceiver's perceptual powers, and of the content, in the sense of being that which is known as the result of the process (see Corcilius's contribution to this volume). It must be said that the theory accommodates some activity, but it is limited to the combination of sensory information and perceptual judgment.⁴ Proponents of such a theory include, in addition to Thomas Aquinas, authors such as Godfrey of Fontaines and Thomas of Sutton.⁵

The newly available works on natural philosophy, optics and medicine contributed to shaping how the mechanics of perception was explained in radical new ways, and challenged traditional Augustinian accounts. The problem with Aristotelian theory they identified was this: the image in the soul is the result of the object's efficacious action even though the material object cannot act upon the spiritual soul, and the material species issued by the object cannot become spiritual on its own.⁶ Instead they focused on defending the impassibility of the spiritual soul with respect to corporeal objects against the bottom-up causality on which the Aristotelian theory was based, in other words the notion that perceptual acts of the soul are caused by material external objects. My claim is that a more sophisticated and systematic account of perception within the Augustinian camp came into being as a result of this challenge. The outcome was a group of theories that limit the role of objects in the process of perception, taken as necessary conditions for perception but not the cause of perceptual acts, and that stress the active nature of the soul. This activity is expressed in the soul's capacity for producing by itself the exact image of the external object via assimilating itself into the species of the object affecting the sense organs and perceiving that external thing.

My intention in what follows is not to be exhaustive (more authors should be included) or comprehensive (more theses may be claimed), but rather to lay the

^{1256),} Robert Kilwardby identified such a view as being of the *Aristotelici*, see Silva and Toivanen (2010, p. 252).

⁴ See Anonymi Magistri Artium 1998, II.11, pp. 126; and Anonymi Magistri Artium 1985, II.10, q.3, pp. 276–279.

⁵ See e.g., Godfrey of Fontaines 1932, q.1; Thomas of Sutton 1969, q. 13, pp. 86–91.

⁶ Matthew of Aquasparta presents this argument in an eloquent way in Qdfc 3, #20, 253. From the fourteenth century onwards, the debate over the agent sense displaced the Augustinian active theory. The existence of an agent sense was raised by Averroes and further developed at the beginning of the century by John of Jandun (see Brenet's contribution to this volume).

⁷ According to this tradition, due to the conjunction (*colligacione*) of the soul to the body, the body, can act upon the soul by resisting its ruling of the soul by its natural inclination to sensuality. See, e.g. John of la Rochelle 1995, pp. 48, 153.

foundations for a more detailed study. The focus is on the elements that contributed to the development of such a theory.

7.2 Excited by Things: The Role of Objects in Perception

Robert Pasnau starts Chap. 4 of his influential book *Theories of Cognition in the Later Middle Ages*, entitled "Passivity and Attention", by referring to Boethius' criticism of the Stoic view that the soul is completely passive in the process of perception. Boethius (480–524/525) writes in *Consolation of Philosophy*:

2 This is a cause of greater power, of more effective force by far than that which only receives the impressions of material bodies. Yet does the passive reception come first, *rousing and stirring all the strength of the mind* in the living body? When the eyes are smitten with a light, or the ears are struck with a voice's sound, then is the spirit's energy aroused, and, thus moved, calls upon like forms, such as it holds within itself, fits them to signs without and mingles the forms of its imagination with those which it has stored within.¹⁰

Pasnau is making the point that medieval authors thought perception must involve active elements, and therefore sided with Boethius against a completely passive account of cognition. It is interesting to note however, and despite the fact that Boethius was a frequently used authority, how infrequently this passage features in the context of discussions on perception—Pasnau names no particular thinker making use of it.¹¹ Moreover, what accounts for activity in different accounts needs to be argued rather than just intuited, and it must be made clear that to claim that perception involves active elements is different from claiming that it is an active process.

Boethius' criticism of Stoic perceptual theory in the above passage focuses on the fact that perception depends on the affection by external objects of the perceiver's sense organs, and on the forming of an impression (or image) of the object causing that affection. ¹² The first problem he identifies is that Stoic epistemology seems not to provide an account of the passage of material images in the senses to immaterial images in the spiritual mind, or of how concepts are formed through abstraction. ¹³ The really serious problem, however, is that the Stoic account has the

⁸ The author of this chapter is currently writing a monograph on the notion of active perception from Augustine to the fourteenth century. He gratefully acknowledges audiences in Helsinki, Rome, Paris, Jyväskylä, and Uppsala for their comments on previous versions of it.

⁹ Pasnau (1997, p. 125).

 $^{^{\}rm 10}$ Boethius 1984, Book 5, Meter 4, transl. W.V. Cooper (London: J. M. Dent and Company, 1902), pp. 156–157.

¹¹ He does refer to Thomas Aquinas' SCG III.84.10 but with respect to the passivity of the intellect, not of the senses, see 129–130.

¹² For these aspects and a detailed summary of the Stoic view of perception, see Lokke (2007, p. 35).

¹³ See Colish (1990, pp. 270–271). The problem the Stoic account raises about the certainty of knowledge in that all perceptions are contingent and particular and devoid of the kind of certainty innate notions are endowed with seems not to play a major role here.

obvious unwanted consequence of making the mind look like an absolutely passive entity, and cognition the direct result of the way objects act upon perceivers:

3 Once, old Stoic philosophy/Brought forth riddling, obscure old men:/Sense perceptions and images/They believed, were impressed on minds/From the outermost skin of things.¹⁴

This account makes the action of objects upon the sense organs lead necessarily to the formation of the image *and* to the assent to this image.¹⁵ In other words, the causal relation implies that once the object offers itself to the perceiver the perceiver cannot fail to perceive it. Boethius was ready to accept that external corporeal objects affected the body but he refused to accept that external things therefore acted upon the soul. The difference is slight but significant: what takes place in perception is not the affection of the mind but the affection of the body, and what happens to the mind is related to but not the consequence of this affection.

The passage in italics in text (1) also shows Boethius's inclination to emphasize the role of objects in arousing the mind to search within itself for notions that are similar to those received, applying them "to the marks received from without". The mind, he claims, excited by the action of sense objects upon the body (a form of material-material causation), applies to those received images inner (pre-experience) images that it has "hidden". The mind's reaction, its excited motion to search for, find and apply forms to the images, shows its active nature and qualifies the process. Before going any further, however, one needs to raise two important questions. First, are these images pre-experience in the sense of being innate or do they precede this particular experience but result from a previous sense experience? Second, what does this application of the "hidden" images to the ones received from outside really mean? Are these forms universals, general notions that allow the mind to judge the particular sensory images? If that is the case then perception has two immediate consequences: (i) it always involves recognition (of the type of object just perceived); (ii) it is necessarily a rational operation.

The same kind of ontological divide that is at the heart of Augustine's account of perception—the spiritual soul and the corporeal object—and the impossibility of the acts of the soul being caused by corporeal objects, is also evident in Boethius. It is worth pointing out, however, that Boethius' account differs from Augustine's in one important aspect: whereas Augustine considered the soul to be active because it is able to react to the affection of the sense organs, and to assimilate itself into this affection, resulting in the making in and of itself the image of the external thing, in Boethius' view the soul does not make but rather finds within itself forms that can be applied or made to fit the images received from without. As I will show versions

¹⁴ Boethius 2001, Book 5, Meter 4, pp. 139–140.

¹⁵ An essential feature of late medieval discussions is whether this relation between the presence of the object to the perceiver implies the formation of this image and whether the image could be formed without an external correspondent object; this discussion is related to the capacity of God to create in the human soul images of non-existent objects.

¹⁶ Are these forms the "common notions" he identifies with Plato's innate ideas? On this identification, see Colish (1990, p. 279).

of both theories were developed in the Middle Ages, the first one in the 1240s in both Paris and Oxford.

William of Auvergne (1180–1249), writing in Paris, claimed that true knowledge was the result of assimilation, and that this was true of both intellectual cognition and sense perception. ¹⁷ Sense organs (such as the eyes) have the capacity to receive sensible forms in the same way as the intellect has the capacity to receive intelligible forms. ¹⁸ We therefore come to know sensible objects "through the signs and impressions that they produce on the organs of the senses". ¹⁹

The reception of these forms is not sufficient to explain perception, however: if it were, in other words, if the form were the actualization of the potentiality of the sense organ, and this actualization were perception (i.e. seeing), it must be the sense organ that actually perceives the object. In that case, each sense organ would be both the instrument and the agent of the action of perception. This simply does not make sense in the light of Aristotelian natural philosophy as it would raise the following difficulty: the same thing seems to be more and less worthy than itself, in other words the eye as an instrument is less worthy than the eye as the agent (an instrument is less worthy than its user).²⁰

William held that perception also required in addition the existence of a power that is responsible for the seeing:

4 The act of seeing consists of two things (...) namely the impression or reception of a visible modification that is produced in the eye and the cognition or judgment by which the visible thing is known and is judged with regard to its color and shape. (DA 5.6, 121, transl. Teske, 199)

This passage makes it clear that perception requires judgment about color and shape, which is an operation of the soul. The mere reception of forms is not productive of seeing, for example, in other words does not qualify as efficient causality. A bodily sense organ such as the eye is not able in itself to judge or to distinguish the impressions received (DA 5.6, 121). It is with William, as Jean-Baptiste Brenet (2000, 62) points out in the Introduction to his translation, that the questions of efficient causation and the role of the (sensible, intelligible) object in the process of cognition take centre stage. Although William's concern was primarily with intellectual agency (the dynamism of the individual human intellect), it extended to all acts of the soul, including sense perception. The soul is active and it is the principle of activity of its own operations, judging what is received through the sense organs, but also controlling them as instruments for knowing. The existence of this control presupposes the power's activity of control over the way the instrument needs to be controlled:

¹⁷ Auvergne 1674, (Du, hereafter) II.3, 118.

¹⁸ Auvergne 1674, (DA, hereafter, 194).

^{19 &}quot;... illae non sunt notae nisi per signa & impressiones quas faciunt in organis sensuum", DA 102; William of Auvergne 2000, p. 145.

²⁰ DA 5.8, 123.

²¹ Guillaume d'Auvergne, De l'âme (VII, 1-9), transl. J.-B. Brenet (Paris: Vrin, 1998).

²² In DA 1.3, 67 William defines the human soul as the "operator" of the instrumental body.

5 the power that commands the eye (...) moves the eye by such movements because it desires and seeks to see, but it only seeks what it can acquire, and for this reason it is possible for it to see. (DA 5.6, 121, transl. Teske, 199)

This passage makes it clear that the human soul is active in the sense of controlling the sense organs but doing so according to a set plan in terms of seeking what it can acquire. It is the soul that does the seeing provided it receives the impression in the sense organs. In addition, the soul only attends to the objects (or images) to which it pays attention. Paraphrasing Augustine, William claims (DA 7.4, 208) that when someone is so concentrated on seeing or hearing something, he or she does not see or hear other things, as when in a state of dreaming or rapture.²³

William appears to accept that the sense organs, which the soul animates, receive likenesses of external things but does not conclude from this that the soul assimilates into these external things as a recipient becoming like the agent: external physical things do not act upon the soul except in the sense that they act upon the sense organs. Thus, the human soul does not receive anything from external physical objects: ²⁴ instead, the intellect, excited (*excitatus*) by the presence of things that are external to the senses, makes swiftly (*mira velocitate*) images of them. ²⁵ The action of external things upon the sense organs provides the occasion for the soul to exercise/execute its immanent (and pre-experiential) inclination for knowledge as well as its power to do so. The power moves itself into the act of cognizing.

William interprets this excitement in the context of a more general theory of the soul, according to which whatever one comes to know must be integrated into a web of previous knowledge, which exists as a default in the soul through divine illumination—understood here as related to the original creation of the soul. This is expressed in William's well known example of the spider and the web it builds. The touching of the web by a passing fly is enough to arouse the soul, which perceives the fly without receiving from it any sensory impression representing it.²⁶ William

²³ Matthew of Aquasparta expressed the same idea in *Quaestiones disputatae de fide et de cognitione*, pp. 394–400 (hereafter, Qdfc).

^{24 &}quot;... intellectus noster non est recipiens a rebus sensibilibus, & materialibus similitudines earum", Du II.74, 929. See also Du II.55, 914: "... neque enim animae nostrae a rebus sensibilibus aliqua reciperent, nisi per organa sensuum venirent ad illas passiones ab ipsis: sic neque passiones hujusmodi aliquid operarentur in animabus nostris, nisi ipsa organa hujusmodi alligata essent eisdem".
25 "Differ autem exemplum istud a designationibus, que fiunt in intellectu, quia designatio hujusmodi figurarum ad placitum, vel ex placitum est, et pacto: illae autem quae fiunt in intellectu, sive apud intellectum, per ipsum ex natura, & per naturam fiunt, natura inquam intellectus, quia mira velocitate, atque agilitate format apud semetipsum designationes, quas a rebus non recipit, sed leuissime commotus, exilissimeque excitatus ab illis, res ipsas sibi ipsi exhibet, & praesentat, & earum species ipse sibi ipsi in semetipso format." Du III.3, 1018, (emphasis added). See also Du II.74, 929–930: "Licet autem in explicandis occasionibus istis, sive excitationibus, per quas novae vel cogitiones, vel cogitationes". See Marrone (1983, p. 58) who identifies Augustine as the reference in this passage.

²⁶ "Aranea quippe, licet dici non posset proprie, quod a musca per motum telae suae recipiat aestimationem, vel imaginationem casus ipsius muscae, aut captionis ejusdem, fit tamen per occasionem motus hujusmodi in ea praedicta imaginatio, vel aestimatio, cum manifestum sit ipsam muscam necdum visam, nec alio sensu apprehensam impressionem facere non posse", Du II.76, 930.

also argues that one is able to recognize the subject of a conversation between a man and a trader from hearing random words from a conversation even though the subject—in this case the exchange of money—is never mentioned. Thus, perception is permeated by reason.

This establishes a relation to Augustine's definition of perception as awareness of change showing, at the same time, a shift of the theory in the direction of stronger intellectualism: the strong unity of the soul means that all its functions are, in a sense, rational.²⁷ On the other hand, William acknowledges that the soul is endowed by the Creator of "hidden" forms that do not derive from experience but that explain the behaviour of sentient beings, such as the spider's innate knowledge of how to build its web.²⁸

Finally, William, like Augustine before him, connects the activity of the soul with its mode of presence in the body and its definition as vivifying and ruling the body. The power controls the eye as its instrument but is not identified with it. This argument advocating the instrumentality of the body (including the sense organs) has another side to it: it shows that the power (that does the perceiving) cannot be material because whatever is material is passive. The power must be active in the sense of being productive of the act of seeing, and the soul is active in the sense of producing "within itself and in itself" apprehensions of sensible things (DA 5.6, 121).

At roughly the same time, in Oxford Richard Fishacre (1205–1248) was arguing in his *Commentary to the Sentences* that sensible things generated likenesses of themselves, which they impressed in the instrument of the common sense, the heart.²⁹ The soul acts on this impression by forming in itself an image of this likeness.³⁰ Retaining the basics of Augustine's terminology, Fishacre remarks that the soul swiftly assimilates and conforms itself to the received species.

By way of clarification he explains that, in his understanding, this "assimilation" (assimulatio) meant that by means of which something is communicated to another similar either by participation or by imitation, taking the case of the soul to be the latter. The soul makes itself like (or, assimilates) the species in the organ by imitation—meaning that the soul does not come to share any property with the thing cognized as it does not receive anything from the thing but that due to its own

²⁷ Marrone (1983, p. 61–62).

²⁸ "& ad hunc modum se habet de aranea, & de aliis, quibus lumina naturalium quarundam scientiarum quaedam videntur indita, vel impressa. Eorum igitur duntaxat scientia hujusmodi substantiis est a creatore naturaliter insita, vel innata, quorum cognitio ad regendam vitam ipsarum, & dirigendas operationes necessaria, & conveniens est." Du II.64, 913.

²⁹ "Sensibilia gignendo ex se similitudines suas, et per sensus immittentes eas in nobis, eas imprimunt in instrumento sensus communis, id est in ultimo sentiente, scilicet in corde; ex qua impressione efficitur ut anima, eo quod sit illi parti corporis maxime unita, intelligat illud cuius similitudo in corde fuit impressa. Nostra enim cognitio incipit a sensu. Et ideo dicit quod deficiente sensu necesse est scientiam deficere, in *Posterioribus analyticis*", Richard Fishacre 2008, pp 334–340.

³⁰ "Respondeo. Cum verbum quo se loquitur res exterior mihi, scilicet species rei, pervenerit ad intimum sentiens, non procedit ulterius ut intret gignendo se in mentem. Sed, ut dicit Augustinus, anima miris modis et mira quadam velocitate efficit in se simile ei quod est in organo intimo, hoc est assimulat se ille speciei susceptae et conformat, ut lux aquae cui contiguatur", Richard Fishacre, *In Primum Librum Sententiarum*, ed. Long (1968), (hereafter, *InISent* 3, *24).

power it becomes like it. The soul, like a piece of wood, has the natural (innate) capacity to become an infinite amount of things, but only one at a time.³¹ The stress up to this point is still on the soul's *power* of making itself like something else, but in distinction three of Book Two of his *Sentences commentary*, Fishacre develops his reasoning a step further.

His concern here is to discuss the priority of memory and intelligence. Among his arguments for the existence of a double memory he claims that "the soul from its creation has in itself many species of things". With respect to these, when the sensible species arrive at the organ of the common sense they excite (*excitatur*) the soul to search for the intelligible species it has in itself. To say, as an Aristotelian would, that the soul is, in a way, all things—in other words it is a blank slate with the potentiality to become all things—means according to Fishacre's interpretation that the soul already has in itself the images of all things to be known. Thus, it has the species of things before it cognizes the thing.

To conclude, Fishacre suggests that, in addition to the innate power of the soul to make itself like all things, there exists within it from the outset an indeterminate number of likenesses of things to which it turns once aroused by its contact with external objects. The innate-content aspect of Fishacre's theory would be the target of one of his students, Robert Kilwardby. Before moving to the next section I would like to point out that both William as Fishacre (and Boethius) retained the basics of the Aristotelian causal model in positing that external objects must affect a perceiver's sense organs for perception to take place. What they do in addition, however, is to restrict this bodily affection, compensating the passivity it entails with the motion of the soul meeting and "fitting" the forms it finds within to those marks received from without.

The Dominican Robert Kilwardby (c. 1215–1279), who was probably a student of Fishacre's at Oxford, asks in his treatise *De spiritu fantastico* whether the sensory soul has images of sensible things prior to sense experience. "Someone might say", he remarks,

6 that he does not need the use of his senses for the acquisition of corporeal images, but for rousing them, so that he should notice what he has within himself. But this does not seem likely since neither Augustine nor Aristotle seems to agree with this.³⁵

³¹ The sentence he uses is equivocal, but I think it should be read in the way I propose: "Sic in anima naturaliter infinitae sunt similitudines rerum, et tamen unam earum intuemur actualiter sine alia", *InISent* 3, *25.

³² "Vel melius: anima a creatione sua habet forte in se multas species rerum", *InISent* 3, *31.

³³ "Cum ergo species sensibiles veniunt ad cor, excitatur anima per has ad intuendum species intelligibiles in se ipsa", *InISent* 3, *31. This conception could be inspired by Augustine's analysis of the disembodied soul's punishment by fire in *City of God* 21. That is, at least, how John of la Rochelle understood it in stating it that one way the soul is punished by fire is when the fire of Hell conjures up in it (*excitentur in anima*) images of sufferance (*Summa*, 49, 157).

³⁴ Long (1968, p. 95).

³⁵ Robert Kilwardby (1987, p. 9), (hereafter, DSF), transl. A. Broadie 1993, p. 73.

After presenting this view in more detail and quoting (DSF 20–21) the passage from Boethius' *Consolation* quoted in (1), Kilwardby concludes:

7 Boethius seems to think that the species of all sensible things are within the mind, and that the mind is aroused by the passivity of sense to contemplating what it has within itself, and that a species coming by way of the senses from outside intermingles with those that are carried within (DSF 22, transl. Broadie 75)

Kilwardby understood Boethius' passage to be defending two main ideas (DSF 22):

- (i) The causal action of sensible external objects does not provide the soul with perceptual content but has the role of exciting the soul and to make it search within itself for the images of those external objects
- (ii) The soul has innate content of objects of the external world

Kilwardby objects to this view, pointing out that if that were the case, then the soul would either not receive images of external things and in that case all knowledge would be a fiction, or it would thereby duplicating the images by means of which things are cognized (DSF 10–1). In other words, it would make the soul perceive two types of species, those exciting the sense organs (*acquisitas*) and those the soul has within (*innatas*). Kilwardby refutes this view because he believed that all knowledge of external objects had to come from those objects. Although he had a serious contribution to make to this issue, and offers a detailed compatibilist account of Aristotle and Augustine's theory of sense perception, I will not pursue his arguments here, having done so elsewhere.³⁶

John Pecham (1230–1292), a Franciscan, subscribes to Bacon's (and Grosseteste's and Alhacen's) account of radiating species as the effect of the action of a natural body on other bodies. Every point of every natural body multiplies its species/form "in a continuous straight line" in all directions, and these species are eventually received in a perceiver's sense organs.³⁷

It is through the species that the thing comes to be known: the thing ("stone", *lapis*) is in the soul of the perceiver by means of the species (*species lapidis*).³⁸ There is no problem in stating that the species of the sensible thing comes to be in the organ because the species is corporeal, i.e. has dimensions, and is thus proportionate to the organ (which is also corporeal). The problem for Pecham lay in claiming that the species in the organ was the cause of the species in the soul because that would mean that an inferior cause (a physical thing) is able to produce a superior effect (a spiritual image) (TdA 3.4, 11). Pecham denies that any external thing could act upon the spiritual soul, being ontologically superior to the material object. He supports his claim against this sort of bottom-up causality with an array of references to Augustine.³⁹

³⁶ See especially Silva and Toivanen (2010, pp. 249–260) and Silva (2012, pp. 131–171.)

³⁷ Pecham (1970, I.27, p. 109).

³⁸ QdA 9, 85.9-11.

³⁹ Pecham (1989, 17.6, p. 214).

Pecham argues, instead, that the soul is able to know external things because it is directed to them, ⁴⁰ and it has the essential capacity to assimilate itself into the species (thus the external things). When excited (*excitata*) by the presence of the species in the organ, the soul is able to transform itself so as to become like the thing: "the soul transforms itself into the likeness of the thing whose species is in the organ". ⁴¹ This, he states, is precisely Augustine's view in *De Genesi ad Litteram* 12.16.33, *De musica* 6.5.8, *De Trinitate* 10.5.7, and also what Aristotle meant in *De anima* III.8 in claiming that the soul is, in a certain way, all things—it is "assimilable" into all things (*assimilabilis omnibus*). ⁴² Pecham insists that the soul's desire to know all things explains the way it relates to the body. The following passage illustrates this point well:

8 The power of the soul in the organ, intimately united to it, perfects and moves [the organ]; and as the result of this natural surveillance it is necessary for the soul to be aware of all changes that take place in the organ and, to due to a natural connection, to transform itself and change itself proportionally to the body.⁴³

The power of sight is the perfection of the sense organ in the same way as the soul is the perfection of the body, which it is by being as a whole in each part of the body (TdA 4.1, 12). The soul perfects the organ of sense through its power and due to this natural connection (*colligatio*) changes itself as soon as something causes a change in the organ. The proportionality of this change (i) is the result of this close connection between soul and sense organ and (ii) means that the result of the motion—the soul's becoming like the likeness of the object in the sense organ—is proportional in nature and appropriated to the nature of the soul.

The soul's proportionate transformation to the change in the organ means that perception is the result of the soul's attentive action (*attentius agere*) upon the bodily affections and its awareness of this action (TdA 4.3, 13). That the object needs to be present is clear: in discussing how the disembodied soul is able to perceive, Pecham remarks that the soul is able to transform itself into the likeness of the external thing by receiving the species of the external thing in its sense organs. If no thing is, however, present, no species is radiated, and no perception ensues (QdA 10, 92–3).

The likeness of the thing in the soul is not a material entity, like the species in the sense organ, it is the same spiritual being as the soul.⁴⁴ Pecham clearly equates the soul's becoming like the species (in the organ) to its becoming like the thing that

⁴⁰ Pecham 1918, 10, 89.8–9 (hereafter, QdA).

⁴¹ "Anima transformat se in similitudinem rei cuius species est in organo", TdA 4.4, 14. See also *Quodlibet IV*, 17.6, 213.

⁴² TdA 3.2–3; and *Quodlibet IV*, 17.7, 214.

⁴³ "Vis igitur animae organum, sibi intimae unitum, perficit et movet; et ideo naturali perlustratione necesse est animam advertere omnes mutationes factas in organo et naturali colligatione in illius similitudinem se transformare, et proportionaliter corpori se immutat", *Tractatus de anima*, ed. G. Melani (Florence: Biblioteca di Studi Franciscani, 1948), 4.2, 13 (hereafter, TdA). All the translations are mine, except when otherwise indicated.

⁴⁴ This can be said even without considering the question of whether the image is distinct from the act itself.

generated the species and that the species represents by way of resemblance. This representation, the formation of which he describes in his works on optics according to a mathematical model, is also guaranteed here in this psychological work.

Pecham also makes clear that in any cognitive act there is a passive and an active aspect. In the case of perception, the organ is passive whereas the power (which is part of the soul) is active (QdA 1, 95). The object is necessary, but it is the assimilative capacity of the soul that is the essential requirement. Here, then, is the adoption of the two central Augustinian principles—EP and MP—together with an array of authoritative texts in support of the claim.

One of the most interesting late medieval presentations of the theory of what I have been calling the Augustinian tradition on the philosophy of perception, in particular the excitation version, is that of the Franciscan Matthew of Aquasparta (1240–1302). In question 3 of his *Quaestiones disputatae de cognitione*, written around 1278–1279, Matthew asks whether the knower receives the species from things or makes them from itself and in itself.⁴⁵

In his response he first presents evidence that supports the claim that the process of sense perception is characterized by an active nature. ⁴⁶ He considers the ways in which, according to the Philosopher, the soul relates to the body. It relates as:

- (1) A formal cause, i.e. insofar as it perfects the body
- (2) An efficient cause, i.e. insofar as it moves the body
- (3) A final cause, i.e. insofar as the body is appropriate and ordained to the soul.

With respect to none of the above can the soul be said to receive something from the body: on the contrary, as a cause the soul is active upon the body and all passivity with respect to it must be denied. Matthew then draws from Augustine a series of arguments based on the ontological inferiority of the body, ⁴⁷ according to which no corporeal thing can act upon that which is immaterial at the risk of upsetting the ontological hierarchy of the world. In fact, as he points out,

9 it does not agree with reason that what is corporeal acts or imprints by a natural action upon an incorporeal thing, as such would be peak against the nobility of a spiritual substance.⁴⁸

On the basis of this supporting evidence Matthew states that the soul cannot receive anything from the body.⁴⁹

In his reply Matthew directs his attention (and criticism) to two theories. The first is Plato's reminiscence theory (the "famous error of Plato", as he calls it),

⁴⁵ Although in this question Matthew is primarily concerned with the intellect and the role of intelligible species in cognition, there is enough evidence of sensory cognition.

⁴⁶ Matthew of Aquasparta (1957), 3, ad 23, 288 (hereafter, QdA6). See Rohmer (1928), 161–178; see also Beha (1960) and (1961).

⁴⁷ Matthew dwells longer on this question in QdA6, 239–240.

⁴⁸ "Et quod corporeum in rem incorpoream agat aut imprimat actione naturali, non videtur multum consonum rationi, et multum videtur derogare nobilitati substantiae spiritualis." Matthew of Aquasparta, Qdfc 3, responsio, 257.

⁴⁹ See also OdA6 3, ad 23, 288.

according to which souls arrive at their bodies with their knowledge of things acquired in another world, making all knowledge mere recollection.

The second theory, to which Matthew's criticism is particularly directed, is that of those who followed what he calls the *viam Aristotelis*, claiming that exterior objects are able to impress their species (*imagines*) not only into the senses, but also into the imagination and the intellect. Among these followers, some even state, in defense, that through this action sensible things bring about the actuality of the intellect, and others that sensible things are able not only to impress their species but also to bring them forth from the potentiality of the intellect, in the same way as natural forms are educed from the potency of matter. In each of these cases, sensible things have the role of an external agent efficaciously acting upon and bringing about the actuality of cognitive powers. All these accounts, Matthew claims, are false because they go against the order of the universe built on the superiority of the spiritual over what is corporeal, as Augustine repeatedly remarks (Matthew *dixit*).

Arguing against these two theories stressing the passivity of the soul with respect to external things, Matthew presents two other theories sharing the common thesis that the soul does not receive anything from external objects, but is excited by them. In another text (*Quaestiones de anima*), he explains what he means by something acting by excitement in contrast with being the efficient cause: an agent acting *per modum excitantis* does not induce the form to the thing changed, but excites the form that exists inchoately in it. Therefore, the "exciting" agent need not have in itself that form because it only supports the form in the thing changed coming into actuality. Let us now go back to *Quaestiones de cognitione* and Matthew's description of the two theories.

According to the first theory, (ii.1) the rational soul, when created, is endowed with the active potencies of all intelligible species constituting all arts and sciences, in the same way as natural matter is endowed with seminal reasons of all things to come. Once excited by an external agent, the sensible thing acting upon the sense power, these inchoate active potencies come into full actuality.⁵³ Although Matthew

⁵⁰ A similar description of the Aristotelian way is to be found in Robert Kilwardby—see Silva and Toivanen (2010), for references. The attribution proposed by the editors of Matthew's text and followed by Beha (1961, p. 9) of this first theory to Bonaventure and the second to Thomas Aquinas and Roger Bacon seems to some extent at least, misplaced, as Mazzarella (1969) convincingly shows.

⁵¹ "Ideo alii dicunt quod anima sive intellectus nihil omnino a rebus recipit, nisi *sola excitationem*", Qdfc 257. See also Matthew of Aquasparta, *Quaestiones disputatae de anima separate*, ed. PP. Collegii and S. Bonaventurae, in *Quaestiones disputatae de anima separate, de anima beata, de ieiunio et de legibus* (Florence: Quaracchi, 1959), 4, 65.

⁵² "Agens per modum efficientis vel inducentis habet utique formam quam efficit, sed agens per modum excitantis non; verbi gratia, ova confota calore solis pullifficant acsi cubarentur a gallina, sed ille calor non efficit aut formam inducit, sed tantum excitat formam quae latebat, et ideo non oportet quod habeat illam formam", Matthew of Aquasparta, QdA6, 4, ad 8, 303.

⁵³ This could be the theory of Robert Grosseteste (1168/1175–1253). See his Grosseteste (1981, p. 216): the *aspectus, excitatus* by the corporeal things turns itself towards its own light. See Spruit (1994), 125–126. Beha refers to Thomas of York (9) but a clear proponent of such a theory was Richard Fishacre.

does not completely dismiss this theory, recognizing its explanatory power with respect to the angelic rational soul, he nevertheless points out two objections. First, it goes against the conception of the intellect as being created as a blank tablet in supposing it to have hidden some sort of intelligible truths in a latent state—here Augustine is used as the authority against such a view, and is taken as stating that the intellect is naturally endowed with a natural power to understand, but is "contentless". ⁵⁴ The second and major objection is the following: the need for excitement implies that the actualization taking place in the soul is the result of the action of an external agent, thus asserting precisely what this theory was suppose to avoid—the external thing's causal efficacy.

According to a second theory (ii.2), the soul is bereft of species prior to sense experience, and the species of sensible things are the occasion for the soul to form inner images of them. No change takes place in the soul that is caused by anything external but, due to the natural connection (colligantia) of its faculties with the sense organs, 55 when some change (immutatio) takes place in the organ, the soul, excited (commonita et excitata) by this change, configures and assimilates itself (assimulat et configurat se) proportionally into it.⁵⁶ According to Matthew, this theory has the obvious advantage of not accepting that the soul can be acted upon by what is inferior and less worthy, the object and its species. As a result it is the one defended by the majority of the Masters who were his contemporaries. It is not without problems however: if the soul, aroused by the sense object, likens itself like the species in the sense organ, then, "by that likeness it would more likely come to the knowledge of the likeness than to the knowledge of the thing",⁵⁷ as a likeness made by an agent must primarily represent that same agent. The objection, as the text goes on to make clear, applies more to the intellectual than to the sensory aspects of the theory. In fact, when he clarifies his own view he retains essentially the same points.⁵⁸

is sometimes misleading because it tends not to distinguish which operations belong to the intellect

⁵⁴ The point, discussed by other authors, refers to the capacity to understand the truth of a proposition when considering it—such as when the soul understands the proposition "the whole is bigger than its part" and its truth. Matthew stresses here that knowledge of the terms of the proposition ("whole" and "part") needs to be acquired through perception (Matthew of Aquasparta, Qdfc 3, 259).

⁵⁵ Matthew notes that the soul is connected, united, with the body and not mixed—a mixture implies a change in that which is changed, which clearly does not take place with the soul in its union or colligantia with the body (QdA6 3, ad 9, 283).

⁵⁶ "Quando ergo fit aliqua immutatio in organo sensus, puta in organo virtutis visivae, per aliquam speciem alicuius visibilis, anima, quae secundum illam virtutem est perfectio et motrix organi illius, commonita, excitat et pulsate ex organi immutatione, configurat se et assimilate sive coaptat illi motui proportionaliter et immutatur consimili immutatione; et illud est quod dicitur 'sentire'", Matthew of Aquasparta, Qdfc 3, 260. Beha identifies this theory with John Pecham and William of Auvergne.

⁵⁷ "Praetera, si anima format de se talem speciem sive similitudinem, per talem similitudinem potius deveniret in cognitionem sui quam in cognitionem rei, quia similitudo ab aliquo originata magis representat suum originale principium quam aliquid aliud", Matthew of Aquasparta, Qdfc 261. ⁵⁸ For a different account (although with similar conclusions), see Beha (1961), 4–11. Her account

In any case and given what he thought was the strength of his objections, Matthew proposed yet another theory that, in his mind, was more in line with both Aristotle and Augustine. According to this third theory (iii), one must distinguish between the cognition of corporeal and incorporeal objects. With respect to incorporeal objects, the soul knows them directly, in other words only receives them through "seeing them in itself" (*in semetipsa videt*). ⁵⁹ With respect to corporeal and sensible things, the soul knows them through the use of the senses, but not in the same way as it receives something from them as a patient receives something from an agent (*non ab ipsis rebus aliquid patiendo*). ⁶⁰ The way the soul knows sensible objects follows from the mode of its presence in the body: it is connected (*colligata*) to the body as its perfection and exists wholly in every part of the body (*tota toti et tota cuilibet parti*), ⁶¹ being connected to the different organs through its dispositions and powers. ⁶² He describes the process as follows:

10 When a change is made in a sense organ by some species, it cannot be concealed from the soul as the organ's perfective and moving power; rather, the soul steadfastly perceives it. In perceiving it forms it [the species] in itself, proportionally to the organ, so that it is either sensible or imaginable.⁶³

According to this account, the origin of which he links to Augustine and Avicenna,⁶⁴ when a sense organ is affected by a species, the soul perceives this species and forms in itself an image of the object proportionate to the way the organ is affected. This image is more spiritual in nature than the one in the sense organ.⁶⁵

Take the case of sight: when the eye is affected by the species of the visible thing—color or light—the power that vivifies the eye, the power of sight (*vis visiva*), makes an image in itself of the species. The soul and its sensitive powers are therefore active rather than passive with respect to external objects, and the proof of this statement is that when the soul is distracted by something it does not perceive

and which to the sensory soul—a distinction that is quite clear in the text.

⁵⁹ See Augustine, *De Trinitate* 9.3.

⁶⁰ This expression can be found in Thomas Aquinas, e.g., *Quodlibet* 8, 2.1c: "Anima humana similitudines rerum quibus cognoscit, accipit a rebus illo modo accipiendi quo patiens accipit ab agente". See Pasnau (1997), 126–130.

⁶¹ Spruit (1994), 127, remarks that the "colligatio" is found already in John of la Rochelle 1995, p. 194 (hereafter, Sda).

⁶² "Homo enim intelligit ex intellectu coniuncto et ideo oportet quod habeat organa et instrumenta corpori apta ad exequendum opera intellectus", Matthew of Aquasparta, QdA6 245. See also question III, ad 16, 286.

⁶³ "Quando autem fit immutatio in aliquo organo corporeo per aliquam speciem, non potest latere animam secundum illam potentiam organi perfectricem et motricem, sed statim percipit eam; percipiendo vero format eam in se secundum illius organi proportionem, ita quod vel sensibilem vel imaginabilem." Matthew of Aquasparta, Qdfc 3, 262.

⁶⁴ "Nam, ut vult Augustinus et videtur velle Avicenna, potentiae sensitivae non tantum sunt passivae, immo et activae." Matthew of Aquasparta, Qdfc 3, 262–263.

⁶⁵ Matthew of Aquasparta, Qdfc 3, 263.

other things, even when these other things affect the sense organs.⁶⁶ Therefore, the soul is not acted upon by sensible corporeal things but rather makes from them and about them spiritual images that are proportionate to the thing's affection of the sense organs and the powers that make the very same images.

The image that is made by the soul according to the affection of the sense organ generates new images throughout the several levels of faculties in the soul—the common sense, the imagination, and so on.⁶⁷ In other words, that image that reaches the intellect is not the same as that which was originally made by the sense power connected to a specific sense organ: a species is proportionate (*proportionata*) to the power making it. According to Matthew, all things have the natural capacity to generate (*diffundere et multiplicare*) species—no external thing is in the soul except through the species it generates.⁶⁸ However, he adds, there are two ways of talking about species: *qua* species they refer to the thing that generated them, but *qua* sensible, imaginative, or intelligible they refer to the power that makes them. This means that the species received from the external things are received not in the way that the things act upon the soul, but so that the soul has the power to receive them, making a spiritual image from them that is about them and thus being epistemologically relevant.⁶⁹ Matthew is arguing for a hierarchy or chain of species: sensible species, imaginative species and intelligible species.

The importance of Matthew's text cannot be overstated: it shows, first of all the existence of specific terminology—"excitacio", "assimilatio", "colligantia"—shared among a variety of theories; and second, that the frequent references to Augustine and to a certain number of key Augustinian texts clearly warrants speculation that such a theory identified by medieval authors originated in Augustine. The variety of theoretical possibilities also shows that such an account cannot be reduced to anti-Aristotelianism, but is rather a theory in its own right.

The text also shows—although I cannot address this issue in detail here—a shift in the discussion on the active nature of the soul from mainly concerning the sensory soul to concern the intellectual part of the soul, or to be more precise, to include the account of sense perception in a general account of the operations/functions of the human rational soul. How this shift could be made to fit into the on-going discussions concerning the nature of the intellect and the plurality of substantial forms, both central issues in the thirteenth and fourteenth centuries, requires a separate study.⁷⁰

Thus far the argument in favour of activity has rested on the superiority of what is spiritual with respect to what is material. Peter John Olivi (1248–1298) shifts the argument to concern the superiority of what is active with respect to what is pas-

⁶⁶ However, this seems to prove the opposite in that the soul is unable to concentrate (in itself) because it is distracted by images that are presented to the senses (see Qda6 283).

⁶⁷ On Augustine on this chain of species, see *De Trinitate* 11.9.16.

⁶⁸ Matthew of Aquasparta, Qdfc 3, 265. According to Matthew, we know things because all things generate and diffuse the species or likenesses, which are that by means of which they can be cognized (Ibid., 266).

⁶⁹ Matthew of Aquasparta, Qdfc 3, 267.

⁷⁰ See footnote 7 above.

sive.⁷¹ According to Olivi, the sense powers are not assimilated into the forms of material things as the result of the action of such forms upon the perceiver's sensory powers. This was the view of Aristotle and his followers (*Aristotelis et sequacium eius*), in claiming that the soul, conjoined with the body, is acted upon by external physical objects through their own power (QInIIS 73, 12). Olivi insists that objects are not causally efficacious with respect to cognitive acts: if they were, the object's action would go beyond its power, being repugnant to its corporeal nature (QInIIS 72, 101). Augustine (*De musica* 6.5; *De Genesi ad Litteram* 12.16.33; *De Trinitate* 10.5) is called upon as an authority arguing against this bottom-up causality, denying all action of corporeal things upon the soul (OInIIS 73, 15–7).

Olivi points out that there are four ways in which acting upon and being affected should be considered: first, there must be proportionality between the agent (and its power to act) and the patient (and its receptivity to be acted upon) (QInIIS 72, 6); second, the agent, although higher in the ontological hierarchy than the patient, can voluntarily subject itself to the action of the patient (III.72, 6); third, when what is affected is affected indirectly by being intimately related to something that is directly subject to this affection (QInIIS 72, 6–8); and fourth,

11 when an agent acts within itself, by directing its active force to an extrinsic object and in doing so also exposing and applying its passive power toward that object, as if it were going to grasp that object within itself. And it is in this way that the immediate principle of an apprehensive or volitional action acts within the soul's power. (QInIIS 72, 9, transl. Pasnau 1997)

The above text reveals Olivi's opposing view to the idea that perceptual acts are brought about by the mere presence of the object and its affection on the senses. He advances his counter-claim that what makes perception possible, in addition to this presence of the object to the senses, is the pre-experiential "intentional attention" directed to the object. 72 It seems to me that Olivi establishes here a distinction between determinate and indeterminate attention, i.e. attention to a particular object and attention not directed to a particular object (OInIIS 72, 75). It is this distinction that leads him to the double consideration of the perceptual act: as an act of the sensory principle that shares the properties of the soul from which it flows ("content-free", general, undetermined); and as the likeness that results from conforming (i.e. from being determined by being directed at) to the particular object perceived (OInIIS 72, 83). In giving to the object the role of terminative cause, meaning what the perceptual act is about, he refutes the view of those who insist on giving the object the role of efficient cause (QInIIS 72, 10), at least not in a strict sense: the object is the end point (the *terminus*) of the soul's attention (or intentionality) in that it determines the act of the sensory power (QInIIS 72, 35).

Although one can admit to the passive nature of a power, its spiritual (thus, simple) nature does not allow for it to be acted upon by anything material (QInIIS 72, 22): the attention of the soul must be turned to the object in order for it to be perceived (QInIIS 72, 26–7). Olivi does without either the species (*in medio* and in

⁷¹ Peter John Olivi 1922–1926, tom. III, question 72, 1 (hereafter, QInIIS).

⁷² OInIIS 72, 9; see also OInIIS 72, 11.

the sense organs) or the inner image. Our perception of external objects is direct, unmediated, and caused by the power of the soul.⁷³ The final aspect deserves to be stressed: Olivi is adamant in his claim that, as Augustine upheld, the cognitive powers of the soul are the principles of their own operations (QInIIS 58, 462), that is to say, is internally driven.

The principle of operations such as perception is the same as the principle of life, and this implies its ontological superiority over material things: they are not independently able to direct the attention of the soul to themselves (QInIIS 72, 22–3); instead, that attention must be there for them to be perceived. Moreover, the principle of life cannot be directed by what is non-living (QInIIS 72, 23): a perceptual act is a vital act, thus making it impossible to be caused by an external thing (QInIIS 72, 24–5). As I have shown, Augustine hinted at this aspect in *De Libero Arbitrio*, but Augustinians such as Olivi developed the association in the context of demonstrating the ontological superiority of the agent-subject with respect to the object.

I cannot or do not wish to go much deeper into Olivi's arguments—especially given that there is enough recent scholarship on the subject⁷⁴—but I would like to emphasize how these arguments are informed by Augustine's theory. Olivi develops epistemological arguments on the basis of Augustine's ontological intuition, according to which material things cannot act upon spiritual things, thus making it impossible for material external objects to bring about perceptual acts about themselves.⁷⁵ Although Olivi, like most of the authors mentioned thus far, had no problems (on the contrary) in accepting that the action of objects upon the sense organs was essential to the intentional nature of perceptual acts (and in some cases "mental" species)⁷⁶—in other words for those perceptual acts (and/or species) to be about those objects—he denies that this action is causally efficacious with respect to the perceptual acts. The species impressed in the senses are ontologically inferior to the form of the object that generated them and which they are supposed to represent (QInIIS 72, 22; see also QInIIS 72, 24).

Equally relevant for my purposes here is the explicit reference to Augustine as the source of this account and the use of some key passages in his works as authoritative in this regard. This holds true with respect to Olivi, and even if, as Juhana Toivanen has convincingly shown, he strongly criticizes the species theory as well as some aspects of Augustine's theory, he was notwithstanding committed to many of Augustine's major theses.⁷⁷ After stating his view on the matter, he presents Au-

⁷³ See Perler (2001, p. 49).

⁷⁴ See especially Tachau (1988); Pasnau (1997); Perler (2001); and Toivanen (2009).

⁷⁵ This is precisely the issue in question 72: "an corpora possint agere in spiritum et in eius potentias apprehensivas et appetitivas" (QInIIS, 1–51).

⁷⁶ According to Olivi, the representation of the object is the result of the perceptual act conforming to the object present to the attention of the soul (QInIIS 72, 82). In other words, by being directed to (and determined by) the object, the perceptual act becomes the likeness of the terminative object. This is very close to Augustine's intention.

⁷⁷ Olivi had a narrow understanding of sensible species in that he took them to be material—i.e. extended (QInIIS 72, 31)—and to be representative only of part of the object (QInIIS 72, 40–6). This was part of his attempt to reject them (see QInIIS 72, 47–8).

gustine's view, which he describes as being based on the impossibility of a body's acting upon the soul directly, and extensively quotes (QInIIS 74, 112–13) from Augustine's *De musica*, as well as from *De Genesi ad Litteram* and *De Trinitate*. On the other hand, his radical departure from traditional species theory did not stop Olivi from recognizing the need for some kind of inner mental representation in the form of memorial species that make available for knowledge information about external things (QInIIS 74, 115–16). What is clear, however, is that the species are not caused by external things even though they represent them.

Although Olivi was adamant in his criticism of the species doctrine(s), some of his contemporaries had no problem in asserting that whatever is known must make itself present to the knower through a species. This was the case of James of Viterbo (1255–1308), who claimed that modern authors used species as the term to denote the *likeness of a thing* (*similitudine rei*) in the soul, either in the senses or in the intellect.⁷⁸ The species has a different ontological status in the known thing, where it is material, and in the senses, where it is immaterial. This transition requires the depuration of the materiality of the material species such that it becomes immaterial in the senses. This "purification" takes place in the sensory powers as it means the very act of perception, which is the act of an immaterial entity directed to the external thing. James preferred to think of the species not as a likeness of an external thing in addition to the act of the soul but as the soul assimilated into the external thing.⁷⁹

According to James, things can be in the soul through conformation (*per conformationem*), in other words through the soul's conforming to and resembling them. In this sense the soul is, in a way, all sensible things.⁸⁰ However, James was less interested in the ontological status of the species than in the notion of causality implied in cognition, in other words whether the species could be the cause of cognitive acts or whether the cognitive powers themselves are the cause of their own acts. He opts for the latter option, claiming that the soul is, in its operations of understanding, willing and sensing the cause of its acts.⁸¹ As an authority supporting his argument James refers to Boethius and his critique of the Stoics' theory, according to which "the soul is, in knowing, both intellectual as sensory, passive in the same way matter [is with] respect to forms and the mirror with respect to the images".⁸²

James refers to two kinds of actions—transitive and immanent—of which the latter is the one that applies to the operations of the human soul. These operations are perfective of the powers, and therefore the soul must be active (because the principle of motion must be internal to the thing moved).⁸³ The sense power is

⁷⁸ James of Viterbo (1968), *Quodlibet* 1 (hereafter, Q.1), q.13, 184.

⁷⁹ One could call this the "proportionality and similarity principle".

⁸⁰ Q.1, q.7, 91.402-5.

⁸¹ This principle does not preclude that each of the soul's powers (intellect, senses and will) has passive and active aspects. A power is more active the higher its place in the hierarchy of the soul (Q.1, q.12, 168.371–74), in which the will comes first, then the intellect and finally the senses.

⁸² Q.1, q.12, 166.313–16.

⁸³ "Sed huiusmodi actiones animae sunt manentes in anima, et ipsam perficientes." Q.1, q.12, 166.321–22.

ontologically superior to the sensible thing because it is a living power or a power of life (*virtus vitalis*): it is therefore impossible for the act of perception to be caused by the sensible thing. At The acts of the soul are vital operations, and this applies to all operations, be it perception or intellection. In that vital operations follow from a vital principle, the soul, which is an internal principle, none of them can have an external cause. This is especially the case with actions that are not transitive (meaning that the effect is felt in another) but immanent, in other words that take place in the soul and perfect it. Things contribute to our knowledge of them because they arouse the action of the soul and are the end of the cognitive act in the sense that the cognitive act is about them. However, perception cannot be caused by an external thing, but must be internally driven as it is an operation of the soul not of the objects, with respect to which it is active. The soul is the efficient cause and the agent of its own operations.

James justifies his active view by connecting the soul's inclination for becoming all things to its state of incomplete actuality. The starting point for his account of the soul's activity is the definition of cognitive power as a natural potency in a state of un-fulfillment:

12 It is a certain incomplete actuality, a natural potency belonging to the second species of quality, considered the starting point with respect to the posterior actuality—this is why it is called aptitude (*aptitudo*) and natural capacity (*idoneitas*) to complete actuality. Moreover, that which is potency in so far as it is incomplete actuality moves itself into complete actuality not efficiently, but formally.⁸⁹

The powers of the soul by means of which it perceives and understands have a natural aptitude to the complete act and are able to bring themselves into full actuality,

⁸⁴ "... sensus excedit sensibile, quia sensus est virtus vitalis. Sensibile autem est non vivum, et sensibile est cum material; sensus autem suscipit sine materia. Aeque enim videtur inconveniens dicere quod actio sensus causetur a sensibili secundum se", Q.1, q.12, 164.237–40.

⁸⁵ This says nothing, of course, about the vital operation to be determined by a particular thing, although James is not arguing against external things playing any role—he just dismisses their role as the cause of such acts of the soul.

⁸⁶ Q.1, q.12, 166.319-24.

⁸⁷ "A rebus vero causatur scientia in nobis dupliciter. Uno modo, in quantum mediantibus potentiis sensitivis, ipsae res sensibiles excitant intellectum ad hoc ut se moveat. Alio modo, in quantum anima movetur, ut ipsis rebus assimiletur et conformetur in actu. Et sic causa cognitionis per modum termini, et inde sequitur quia anima assimilatur rebus, non autem res animae assimilantur." Q.1, q.12, 177.663–68.

⁸⁸ "... anima se habet respectu ipsarum [actiones] sicut efficiens et agens", Q.1, q.12, 166.317–18.

⁸⁹ "Quod patet, si consideretur qualis est illa potentia, secundum quam dicitur anima potentia intelligens vel sentiens. Est enim quaedam actualitas incompleta, pertinens ad secundam speciem qualitatis, quae est potentia naturalis, considerata secundum exordium et praeparationem quandam respectu actus ulterioris. Unde dicitur aptitudo et idoneitas naturalis ad completum actum. Illud autem, quod sic est in potentia secundum actum quemdam incompletum, movetur ex se ad completum actum, non quidem efficienter, sed formaliter", Q.1, q.12, 166–67.329–36, (emphasis added). There is an equivalence between aptitude (aptitudo), natural potency (potentia naturalis), and incomplete act (actus incompletus) (Q.1, q.12, 170.461–62).

that is into the act of cognizing. ⁹⁰ His reference to formal causality is attributable to the fact that this process is the result of what the thing is—in other words naturally capable of this sort of operation.

James refers in this context to the distinction between instrument, special aptitudes and the use of the instrument. The instrument (of the soul, one is led to conclude) is the power or potency, such as the sense of sight; the special aptitudes are, I assume, the kinds of operation the power is able (has the inclination) to realize; and the use of the instrument is the act or operation of the power, such as seeing. The full actualization of the incomplete act is nothing else than the power to realize its aptitudes through its operations. James refers to "full actuality" because this is a case of completion and not one of going from pure potentiality to actuality.

Thus, James' argument rests on (i) the definition of the species as the actuality of the powers and (ii) the definition of the powers as incomplete actualities that have an inclination to cognize certain kinds of objects. However, this leaves unsolved the question of how to explain the quasi-actuality of the soul's powers. James resolves this by pointing out that the soul is endowed not only with general aptitudes, in other words the cognitive powers, but also with natural aptitudes (*aptitudines naturales*), in other words the likeness of things to be known existing in an inchoate state that can be fully actualized. This justifies his reasoning that objects do not properly cause perceptual acts because these acts exist already at a low kind of actuality, and that their content is nothing but the power as assimilated into (or made to be like) the object. This is connected to his characterization of the soul as being created with the power to conform itself (*conformari*) to all things (Q.1, q.7, 93).

In response to the question of how to conciliate Aristotle's known statement that the soul is like a blank tablet on which nothing has yet been written with his own view that it is endowed with potencies and aptitudes, James argues that to be in the incomplete act of cognizing is the natural default state of the soul, thus one should not say that the soul is in potency to the act but rather that it is in potency to the complete act. Thus, nothing has been written on the tablet because nothing has yet been actually cognized. The difference might seem slight but it is significant: the soul does not go from empty to understanding x, it goes from potentially understanding x to actually understanding x.

The problem with this view, as another objection goes, is that it seems to imply the existence of innate content, making it a version of Plato's theory of ideas and

⁹⁰ Q.1, q.7, 92. They are called potencies because (i) they dispose the power to act and (ii) are perfected by the acts (Q.1, q.7, 93.472–73); and dispositions because of their permanence (Q.1, q.7, 94.479–80).

⁹¹ O.1, q. 12, 167.344-50.

⁹² Q.1, q.12, 167.344–50.

⁹³ "... nata est perfici per ulteriores actus", Q.1, q.12, 167.355–56. The soul is naturally endowed with an aptitude to be perfected by the full knowledge of sciences and the virtues (Q.1, q.7, 92). On James of Viterbo on aptitudes, see Coté (2009).

⁹⁴ "Et hoc modo ponere scientiam innatam vel habitualem, scilicet secundum idoneitatem et aptitudinem, quae est actualitas quedam incompleta, non est inconveniens." Q.1, q.12, 171.493–95.

⁹⁵ O.1, q.12, 170.459-66.

thus requiring the existence of the human soul prior to its infusion into the body. It is to the latter aspect (the pre-existence of the soul) that James object, otherwise, he finds nothing wrong with Plato's theory. Fames problem with Platonism, as Antoine Coté (2009, 26) clearly points out, is the actuality of innate ideas, not their existence *per se* in another state of being: if the mind had actual ideas it would be permanently thinking about them, and even all of them simultaneously, which experience seems to have proved false. However, were these ideas not actual but each brought into actuality at different times, then the problem would be non-existent. James' solution runs along these lines. Ideas exist in the mind in an incomplete state of actuality and are brought into the state of full actuality on the occasion of a sensible thing's affecting the sense organs, made present to the intellect via the phantasm.

James insists that all his theory is committed to is the soul's natural endowment with "certain natural aptitudes to knowledge, by means of which it moves itself to actual understanding". What is innate is the general potency to knowledge (the power) and its special aptitudes, which are, as noted, incomplete acts.⁹⁷

With regard to the senses, the theory raises two concerns. First, if sensible things do not move the senses but the senses move themselves, ⁹⁸ one could be led to think that the senses operate without the existence of any corresponding thing to be known outside the mind. Second and conversely: if external things fully actualize natural aptitudes, then, they are causally efficacious with respect to the soul's operations.

James' solution allows him to address both objections at the same time: the action of sensible things upon the soul and its cognitive powers is to move them not in the sense of imprinting the form by means of which they are to be known, but by way of inclination and excitation (*per modum inclinationis et excitationis*). ⁹⁹ Sensible external things need to be present in order to cause this excitation, as Boethius correctly indicates in his objections to the Stoic passive account of perception, but as Augustine states in Book twelve of *De Genesi ad Litteram* and in the sixth Book of *De musica*, without the activity of the soul no perceptual act takes place.

13 Sensible things change the sense organs. Once changed, on account of the conjugation of the organ with the power and the likeness that is made in the organ, and with the aptitude that is in the sense (that with which the sense is endowed to move itself), the sense is inclined or excited to move to actual cognition. ¹⁰⁰

⁹⁶ A major axiom of thirteenth-century natural philosophy is that God creates and infuses the human soul at a certain moment of foetal development; in this context, the soul cannot pre-exist.

⁹⁷ Q.1, q.12, 171.481–95.

⁹⁸ Q.1, q.12, 168-69.399-408.

⁹⁹ "Anima autem movetur principaliter, a Deo quidem efficienter, qui ipsam producit, a se ipsa vero formaliter; a sensibus vero et a sensibilibus movetur non principaliter; sed per modum excitationis et inclinationis cuiusdam, ut dictum est", Q.1, q.12, 175.614–16, (emphasis added).

¹⁰⁰ "Sensibilia autem immutant organa sensuum; quibus immutatis, propter coniunctionem organi cum potentia, et propter similitudinem ipsius immutationis, quae facta est in organo, cum aptitudine quae est in sensu, sive cum eo ad quod sensos natus est se movere, sensos ipse inclinatur et excitatur ut se moveat ad cognitionem actualem." Q.1, q.12, 172.515–20.

External objects act upon the sense powers by arousing the power to perfect its natural inclination (incomplete actuality) for knowing. James defines this in the following way:

14 for some thing to move another in this way, it is necessary for what moves to be conjoined with what is moved, and to be in a certain [state of] actuality that agrees with the actuality with which the thing to be moved is born. ¹⁰¹

Both cognitive power and external thing are in states of actuality that vary in the level of completeness. Without the power's incomplete actuality no change can take place because change is precisely the full actualization of this incomplete actuality. It is in this context that the causality that objects exercise upon the soul is strongly limited and the passive nature of the process is questioned. Instead, the object's action is followed by the reaction of the power, a reaction that is defined as the exercise or realization of its potential. ¹⁰²

The cleverness of James' theory is that it works equally well regardless of whether the content of perceptual acts is identified with the act (as in Olivi and later in Ockham) or with the species in addition to the act. In both cases the thing to be known must somehow be present in the soul in an incomplete state, or in a state of quasi-actuality, the completion or full actualization of which depends on its excitation by an external thing (a rebus excitata per sensus).

15 Thus, if one accepts [the existence of] such species in the soul, it is not necessary to posit, in addition to the operations and the acts, species that are to be acquired. Indeed, it is not necessary [to posit them] because the hidden aptitudes together with the exciting phantasms suffice for representation and the intellect's motion. ¹⁰³

The theory thus offers an original approach to the traditional Augustinian account in that it takes the general capacity for assimilation advocated by Augustine and earlier Augustinians such as Pecham, and pre-determines it to a specific (set of) object(s). ¹⁰⁴

In a way, James' theory has many aspects in common with traditional medieval Aristotelian accounts of perception, but his Augustinian-inspired notion of "incomplete acts" does not fit into the metaphysical account of medieval perceptual Aristotelianism. On the other hand, his theory deviates from Augustine and much of the

¹⁰¹ "Ad hoc autem, quod aliquid moveat aliud hoc modo, requiritur quod id quod movet, sit coniunctum ei quod movetur, et sit in actum secundum aliquid, quod habeat convenientiam vel habitudinem aliquam ad id, secundum quod illud, quod movetur, natum est esse in actum." *Quod.* I, q. 12, 172.

¹⁰² "Attentione autem dignum est ne forte intelligere et videre non sint pati et informari solum. Sed habent quandam intrinsecus excitatam operationem, secundum quam fit perceptio", Q.1, q.12, 174–75.596–98. See also Q.1, q.12, 174.583–84.

¹⁰³ "Si autem positis speciebus in anima, non est necessarium ponere alias species acquisitas, praeter operationes et actus. Non enim est necessarium propter repraesentationem et motionem ipsius intellectus; quia ad hoc sufficiunt aptitudines inditae cum fantasmatibus excitantibus." James of Viterbo, *Quod.* I, q.13, 187.

¹⁰⁴ Phantasms are likenesses of particular things, hence being endowed with material conditions (Q.1, q.12).

Augustinian tradition in the direction of a stronger Platonism. It contrasts with the traditional Augustinian account that takes human knowledge of the external world to derive from the general capacity of the soul to become like external things, a capacity that is determined by one particular object or feature at a time.

Durandus of St. Pourçain (1275–1332/1334) was another late-medieval author who strongly advocated the application of the metaphysical principle according to which that which acts is more noble than that which is only receptive to the epistemological context. He did not consider the sensible quality by means of which the sensible thing acts upon the senses any more noble or perfect than the sensory power. Therefore, he claims, the object cannot cause in the senses the act of perceiving. At this point it should come as no surprise that the authority Durandus quotes in support of his claim is Augustine, and in particular the passage from *De musica* concerning the impossibility of the object's efficacious action upon the soul. After quoting another passage in *De musica* in which Augustine defines sensation as "an awareness of a bodily change", Durandus explains:

16 This means (...) that the sensible [thing] acts not upon the sensible power but upon the organ by reason of its disposing quality. The action [of the thing] when it presents itself to the senses does not go unnoticed and is thus perceived; to perceive is simply the presence of the sensible [thing] not going unnoticed by the sense.¹⁰⁷

After this—again not surprisingly—Durandus returns to a point he made earlier, that operations such as perceiving (and understanding) are constitutive of a living being, in the sense of following from what the thing is.¹⁰⁸

According to this earlier point, perception is to be understood as an immanent activity of the being that is alive—as an "actus vitalis" (S II.3, q.5, 155). Therefore, perceiving cannot have its cause in something that is external to the living thing itself. Perception is an immanent activity of a living being taking place in and by means of the agent. The determination of the act—what it is about—depends on the existence of an external thing affecting/acting upon the sense organs. Determination is not efficient causality however, and therefore one cannot take the object as the cause of the perceptual act. Durandus also points out that if the sensible species were able to bring about a perceptual act, then, the medium would also be able to perceive, which clearly is not the case. What makes perception possible, one is led to conclude, is precisely the existence of a living being endowed with the power to perceive on the occasion offered by the presence of an external thing making itself present via the species in his sense organs. This leads to the essential distinction Durandus makes between forms informing that in which they inhere and

¹⁰⁵ For an analysis of Durandus' theory of perception, see Solère (2012).

¹⁰⁶ Durand of St. Pourcain (2012), (hereafter, S) II.3, q.5, 152.

¹⁰⁷ "Vult dicere (...) quod sensibile non agit in potentiam sensitiuam, set in organum ratione qualitatum disponentium ipsum, que actio, cum sit presens sensui, non latet ipsum, et ideo sentitur, nec est aliud sentire nisi sensibile presens not latere sensum", S II.3, q.5, 162.

¹⁰⁸ The argument Augustine uses in *De Libero Arbitrio* (see Silva's chapter on Augustine in this volume).

forms changing that in which they inhere: the sensible quality by means of which the sensible thing acts on the sense organ acts by informing the sense organ rather than changing the sense power and bringing it into a perceptual state. The sensible species comes to be in the organ but it has no causal efficacy on the power that performs the perceptual act.

The two most important aspects of Durandus' account of perception for the purposes of this article therefore are: first, that perceiving is an essential operation of a living thing that cannot therefore have its cause in something external to the living thing, and second, that the object is necessary to determine the content of the perceptual act. If perception is awareness of an external thing, that external thing must be present to the perceiver in the appropriate manner that is conducive to a cognitive relation.

All the authors under discussion thus far share a number of essential theoretical commitments that argue for the activity of the soul in the process of sense perception, while at the same time explicitly dwelling on Augustine's works and thought as their inspiration and source of authority. However, these accounts are embedded in language that is far removed from that of Augustine, and even diverges from the omnipresent Aristotelian philosophy of perception. Nevertheless, I would suggest, authors following the latter tradition also take in influences from the Augustinian debate. A good example is the Franciscan Vital du Four (1260–1337).

According to Vital, sensible things are in the state of active potentiality to generate likenesses of themselves in the medium and through the medium in a perceiver's sense organs. In the case of sight, the species of color is generated by light acting upon a colored object that is then diffused through the medium. ¹⁰⁹ In addition to color, the medium and light, for perception to take place there must be a perceiver who is endowed with proper senses. This means that the likeness must be received in the sensory apparatus of the one doing the seeing.

Reflecting the analogy between perceiving and understanding, Vital defines passive power as that which has the potential to receive *in ratione cognoscentis* the object that is to be cognized. According to basic Aristotelian metaphysics, the power can only be actualized by something already in act, which applied to sensing means that the senses are moved into actuality (i.e. into actually perceiving) by the external sensible thing. The change that the species brings about in the sense organ is less spiritual than that which takes place in the intellect but more spiritual than the change in the medium caused by the generation of the species from the object. The species is impressed in the organ of sense *in ratione cognoscendi* and it is without matter in the soul, just as that which is known is in the knower (*sicut cognitum in cognoscente*). Vital's intention was, first, to diminish the materiality of the species through the chain of its multiplication—from the more material way of being in the thing to the more spiritual way of being in the soul—and to assert the

¹⁰⁹ The species is (i) the natural form of the thing, (ii) the likeness of the natural thing impressed in the sensory part of the soul, (iii) the quiddity or the essence of the thing: Vital du Four (1927), question II, section 1, 199 (hereafter, Qd). The action of light is also necessary for allowing the medium to receive the impressed species (Qd II.1, 191).

nature of the change in the sense organ and in the power as epistemological rather than physical.¹¹⁰

Vital thus regarded the affection (*passio*) by means of which the senses are brought into actuality as double-sided: on the one hand it is the reception of the species in the organ of the senses, and on the other it is the inclination of the sensitive power to perceive. Neither of these in itself is conducive to perception—the reception of the species without the soul's being inclined to perceive, as in sleep, and the inclination of the soul without the reception of the species. There is perception only when the naturally inclined power is excited by the species impressed in the sense organ: this arousal turns the power to the object. The sensory powers, although properly suited to perceiving, require that the sense organs receive the appropriated species, and these species must have a sufficient degree of intensity (*magno et forti sensibili*) to incline the power to perceive (to make the power attend to the object). ¹¹¹

"Excitation" terminology is used here in order to stress the reactive nature of the power with respect to the affection of the sense organ, that is the reception in the organ of the species. 112 Vital was also adamant in stressing that the species informing the sense organ was not enough to bring about the perceptual act, and therefore that the species was not the cause of perception (Qd II.3, 210). One is led to conclude that only the inclination of the power is given that role. The decisive argument he presents for this is probably the most persuasive. He claims that the relation between an agent and a patient must always be proportionate. Thus, the (species in the) thing cannot be the cause of the species in the senses because the former is more material than the latter. It is necessary to posit a chain of mediating species through which the materiality is somehow purified (Qd II.2, 199). The same applies in some degree to the chain of species in the inner senses.

Vital's choice of terminology—intentio, elicere, excitare, inclinare—clear reflects the Augustinian influences in his account, and at the same time he wanted to show how the terminology fitted into the Aristotelian account of perception. This, I believe, substantiates the view that late medieval theories of perception were dynamic: not only did Augustinians integrate elements of the Aristotelian theory of perception into their own theory, Aristotelians also took Augustinian elements into their Aristotelian-based accounts.

¹¹⁰ Vital du Four 1927, Qd II.1, p. 189.

^{111 &}quot;facit eam [potentia] esse intentam ad percipiendum", Qd II.1, 187.

¹¹² This is also how the "excitation" of visual power by the reception of the seen object is understood in the Anonymi Magistri Artium, *Lectura in librum de anima*, II.10.3, 277.

7.3 Conclusion

After one moment of disorientation and a second one of resistance, authors of the Augustinian tradition started to attempt the integration of Aristotelian elements into their theories. They acknowledged that perception included changes in the bodily sense organs, but denied that such changes could in any way be the cause of perceptual acts. There is no sense perception without sensory stimulation but the sensory stimuli do not cause sense perception, therefore the stimulation of the sense organs is dissociated from the inner image of the object that caused it. The first consequence is thus the limitation of the role objects play in the process of perception, from the efficient cause to a necessary but not sufficient condition. Resorting to active perception allowed philosophers of the Augustinian persuasion to maintain an ontological hierarchy according to which the spiritual soul cannot be affected by material and hence inferior objects—which also complies with the principle that the effect (the image in the soul, a spiritual entity) cannot be superior to its cause (the object, a material entity).

The authors included in this overview show the dynamism and variety in the tradition concerning the activity of the soul in perception. It is clear from Matthew Aquasparta's description of some of the theories of his time that the terminology and underlying ideas that were common to such a tradition were in full use by the last quarter of the thirteenth century. Vital du Four's texts, in turn, reveal an attempt to incorporate some of this terminology into the Aristotelian model, in the same way as Augustinians found it necessary to import much of the terminology from Aristotelian-inspired accounts at the beginning of the century. By the first quarter of the fourteenth century the question of the active versus the passive nature of the senses had turned into a debate about the existence of the agent sense. This was not about the active nature of the soul, it was about the existence, in addition to the traditional list of inner senses, of a power that was responsible for de-materializing (or spiritualizing) the sensible species. Such an account represented an attempt to enclose Augustinian activity (its commitment to MP/EP) within the model of Aristotelian faculty psychology.

Of particular scholarly interest in the period under study is the excitation theory. The reasons for its appeal are obvious: it allows the retention of the objective nature of perception without compromising the superiority (and agency) of the soul. The object provides the occasion for the perceptual act without being its cause. The problem, however, is how to convincingly avoid considering the "exciting thing" the cause of the act if the act is determined by the thing's acting upon the senses. This is precisely the criticism Matthew of Aquasparta timidly put forward, and that would be fully developed by Duns Scotus, and one may well doubt that any Augustinian could have offered a satisfactory response. Be that as it may, the fact that theories of active perception continued to be fashionable in the Renaissance and late scholasticism makes it clear that the notion of perceivers as agents struck a cord in the philosophical thought. Although the influence of the Augustinian tradition of perception on later periods has been noted in recent scholarship, further research

needs to be done in order to shed further light on the evolution of these ideas. What seems clear, however, is the need for a serious re-evaluation of traditional overviews of medieval perceptual theories.

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