

Scotus on Sense, Medium, and Sensible Object¹

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1. Introduction

As the specialized literature has made clear, Duns Scotus's philosophy of sensible perception falls well within the common background of the Aristotelian tradition of the Middle Ages. As an Aristotelian, he "is interesting, then, not because he offers any startlingly new ideas about cognition, but because he gives a careful and penetrating analysis of the field as it stood at the end of the thirteenth century."² I concur that on the whole this statement is true, and Scotus's theory of cognition falls within the basic tenets of 13th-century philosophy. Moreover, his theory of perception does not stand out for providing radical new paradigms in a special way: Scotus himself apparently did not bother to finish a revision of his questions on Aristotle's *De anima*, and certainly made no move to see them published.

I will argue that we can accept this and still find material worth of attention in Scotus's theory of perception, not just to discuss his position regarding sensory cognition in his time, but also as a heuristic entry-point into his later psychological and metaphysical theses. Elsewhere³ I have argued in this vein that these questiones anticipate a general direction of Scotus's psychology wherein the nobility of the powers of the soul depends on the proportion each one has with its proper object and act, and its dependency on the object's medium, which in turn sets the stage for differentiating between

1 This study is a result of the research funded by the Czech Science Foundation as the project GA ČR 14-37038G "Between Renaissance and Baroque: Philosophy and Knowledge in the Czech Lands within the Wider European Context".

2 Pasnau, R., Cognition. In: Williams, T. (ed.), *The Cambridge Companion to Duns Scotus*. Cambridge, Cambridge University Press 2003, p. 285.

3 See my Proporción y mediación en las cuestiones sobre el *De anima* de Duns Escoto: prolegómenos a una teoría de la acción escotista, in: González Ayesta, C. – Lecón, M. (eds.), *Causalidad, determinismo y libertad. De Duns Escoto a la escolástica barroca*. Pamplona, Eunsa 2014, pp. 43–65.

a faculty's actualization (its passing from first to second perfection, in Aristotelian terms) and its specification (namely, the content cognized by its act).⁴ In general, we may say that the least perfect external senses possess an organic unity with their objects and acts and depend in different ways on their physical medium ('different ways' which, in turn, serve as a fixture to distinguish between them). The superior senses, such as the sight, maintain a material proportionality with their objects but depend less on the medium. The intellect, meanwhile, holds no proportionality with its object, whose (intentional) being is different from the (real) being it represents, and yet indirectly depends on the sensible object in the formation of its species. Finally, the will holds no proportionality with its object and thus may be described as a free potency, as opposed to the natural (cognitive) powers.

In this paper I will examine in more detail Scotus's doctrine of perception with a view on the perfection of the faculties according to his philosophy. I will proceed in three steps. First (section 2), I will paint a general picture of the Quaestiones on the *De anima* and the possibilities and difficulties their study faces, especially against the broader scope of Scotus's metaphysics. I will secondly (section 3) enunciate some of the main theses about the senses held by Scotus in these quaestiones, and, finally, (section 4) I will evaluate them by following Scotus's exposition on the order and hierarchy of the senses. In the concluding section (5) I will make a brief reference to Scotus's theory of the will to show the metaphysical relevance of this reading.

2. A note on the text

Why focus on the Questions *super secundum et tertium De anima*? One must keep in mind, before all else, that scholars were not certain of their authenticity until very recently, and their critical edition was only published in 2006.⁵ Richard Cross may be quoted here at some length to summarize the point:

The authenticity of the work has long been contested. The editors of the modern critical edition argue strongly for its authenticity, though it would be hard to describe their arguments as abso-

4 I believe this is a fundamental distinction when dealing with the relation between intellect and will and Scotus's voluntarism and essentialism.

5 Quotations from Scotus's questions on the *De anima* are taken from Bazán, C. – Emery, K. – Green, R. – Noone, T. – Plevano, R. – Traver, A. (eds.), *Opera philosophica*. St. Bonaventure, N.Y., The Franciscan Institute 2006. I will abbreviate citations by indicating the question and paragraph number, e.g. "q. 1.1" stands for first paragraph of the first question. The translations are mine, but I wish to thank Světlá Hanke Jarošová for her comments and corrections.

lutely decisive. But more recently Stephen Dumont has told me, in conversation, about connections between the Reportario and the De anima questions that the editors of the forthcoming critical edition have noted ... It is worth noting too Dumont's opinion, again communicated to me in conversation, that the De anima questions, since they use material integral to the Lectura, probably date from around the time of that work – i.e. 1298-99.⁶

Surely studying such a text seems interesting on its own, but Cross himself recognizes that “much of the discussion of sensation ... has no parallel elsewhere in Scotus's works.”

To the difficult history of its transmission and interpretation, we must add the text's own difficulties.⁷ Additionally, while these *questiones* have been subjected to several critical studies, many analyses focus primarily on the questions regarding intellectual cognition.⁸ This is understandable, since

6 Cross, R., *Duns Scotus's Theory of Cognition*. Oxford–New York, Oxford University Press 2014, p. 2, note.

7 “Since the *Quaestiones de anima* is largely devoid of the additional matter and *cedulae* found in his other works, we have concluded that the *Quaestiones* represent a lecture course that Scotus taught probably only once, as a student-teacher while probably enrolled in the theological faculty at Oxford, and one that he never revised or otherwise authorized for publication” (*Quaestiones super secundum et tertium de anima*, Introduction, p. 85*). For the difficult transmission history of the *Quaestiones* see Introduction, pp. 95* ff. For the question of their authenticity, consult the corresponding section § 3 of the Introduction, pp. 121* ff.

8 Tobias Hoffman's *Duns Scotus Bibliography from 1950 to the present* (May, 2016⁹) garners several studies dealing with the *Quaestiones super secundum et tertium De anima*; most focusing on intellectual knowledge: Druart, Th.-A., Avicenna's Metaphysics and Duns Scotus' *Quaestiones super secundum et tertium De anima*. In: López-Farjeat, L. X. – Tellkamp, J. A. (eds.), *Philosophical Psychology in Arabic Thought and the Latin Aristotelianism of the 13th Century*, Paris, Vrin 2013, pp. 185–204; Hoffmann, T., The *Quaestiones De anima* and the Genesis of Duns Scotus' Doctrine of Univocity of Being. In: Counet, J.-M. – Friedman, R., *Medieval Perspectives on Aristotle's De anima*. Leuven, Peeters 2013, pp. 101–120; Noone, T., L'univocité dans les *Quaestiones super libros de anima*. In: Boulnois, O. – Karger, E. – Solère, J. L. – Sondag, G. (eds.), *Duns Scot à Paris, 1302–2002. Actes du colloque de Paris, 2–4 septembre 2002*. Turnhout, Brepols 2004, pp. 255–271; Noone, T., Scotus on Intellect, Intelligible Species, and Imagination and Scotus's 'Quaestiones super libros De Anima': A Comparison with His Oxford Theological Commentaries. In: Cândida, M. – Pacheco, M. C. – Meirinhos, J. F. (eds.), *Intellect et imagination dans la philosophie médiévale / Intellect and Imagination in Medieval Philosophy / Intellecto e imaginação na Filosofia Medieval*. Actes du XI^e Congrès International de Philosophie Médiévale de la Société Internationale pour l'Étude de la Philosophie Médiévale (S.I.E.P.M.). Porto, du 26 au 31 août 2002. Turnhout, Brepols 2006, vol. 3, pp. 1493–1506; Tropia, A., McCagwell's Reading of Scotus's De Anima (1639): A Case of Plagiarism? *The Modern Schoolman*, 89, 2012, No. 1–2, pp. 95–116; Whitworth, A. F., Attending to Presence: A Study of John Duns Scotus' Account of Sense Cognition. Ph.D. dissertation. Marquette University 2010; McAleer, G., Duns Scotus and Giles of Rome on whether Sensations Are Intentional. In: Ingham, M. B. – Bychkov, O. V. (eds.), *John Duns Scotus, Philosopher: Proceedings of "The Quadruple Congress" on John Duns Scotus*, Archa Verbi: Yearbook for the Study of Medieval Theology – Subsidia 3. Münster, Aschendorff – St. Bonaventure, N.Y., Franciscan Institute Publications 2010, pp. 111–118. Richard Cross's ch. 1,

the doubts regarding their authenticity were also held by Ephrem Longpré, general editor of the Scotistic Commission,

on the grounds that the doctrine of some of the questions (e.g., qq. 15, 17-18), i.e. concerning the hylemorphic composition of spiritual substances, the reality of intelligible species, the mind's need to have recourse to phantasms in every act of cognition, flatly contradicts Scotus' teaching in his surely authentic, mature writings.⁹

Charles Balić concluded that a new edition was necessary, and so did the editors in the first volume of the *Opera omnia*.¹⁰

Regarding the layout of the text, the *quaestiones* are not a literal commentary on Aristotle, but rather a series of questions and problems, dealing with sensibility, intellection, and willing. It is a work of his youth and some of Scotus's positions here are tentative. Furthermore, this material was not distributed for copying or studying until after Scotus's death.

Even a cursory reading will acknowledge that Scotus is not a natural philosopher, and his interest in physics seems to be always driven towards other philosophical or theological points. Thus, his discussions on perception do not delve here into e.g. optics or physiology, but are rather dialectic in nature, and concern the differing opinions of Aristotle and other authors – mainly Avicenna, Averroes, Aquinas, Giles of Rome, Henry of Ghent, and Peter John Olivi. As the authors of the critical edition observe, the number of sources and range of discussions increase dramatically once he reaches the doctrines of the intellect and the will in q. 11.

One of the main features pervading Scotus's exposition is the idea of the adequate object of a sense and its causal power. I believe this to be one of the most fruitful treatments to get out the questions, since, as I said above, it helps us to acknowledge the difference between a faculty's actualization (its passing from potency to act) and its specification (the actual content of the cognitive act). His discussions of co-causes and the different ways in which a potency can be reduced to an act may well be read from this angle. The discussions on co-causality are of course quite relevant in Scotus's epistemology, wherein the object and the faculty contribute to the formation

"Sensation", of his *Duns Scotus's Theory of Cognition* may well be one of the most focused studies on the matter of this paper (particularly section 2, on the mechanisms of sensation, and 4, on the species).

⁹ *Introduction*, p. 121*.

¹⁰ Cf. Balić, C., *De critica textuali Scholasticorum scriptis accomodata*. *Antonianum*, 25, 1945, p. 287, n. 2.

of immanent actions; they are also relevant to distinguishing these immanent acts from physical or natural actions, a central topic in discussions about sensory perception. And, in a more general sense, causal questions also help set the stage for Scotus's treatment of the will. While I will not survey his views on the will in this brief treatise, it should be noted that for Scotus the will is a wholly free faculty, and thus his view of cognitive co-causality and the relation between a faculty's dependency on its object and the latter's medium are, I believe, central to approach it.

This is the background against which I read this early work. Even if the distinction between natural and free faculties is not yet here as explicit as in his mature works, I believe it is still noticeable in the sense that the author strives to highlight the relations of dependency/independence of a faculty on its object, its medium, possible co-causes, etc. In my view, this may serve as the directing principle in his treatment of the senses, as I shall try to show in what follows.

3. Basic theses on the senses

Scotus's exposition begins with the sense of touch, examining the notions of organ, act, and medium. It then opens the consideration to the other senses, finally turning into a study of their hierarchy and perfection, as I will point out in section 4. I will broadly follow Scotus's exposition, highlighting his main theses rather than follow each of his arguments.

a) First thesis: senses are grounded in organs

The first thesis is that senses are grounded in organs. This is a common point in the Aristotelian systematization of psychology, and it provides the basic framework for Scotus's arguments. Indeed, the relation of the faculty with an organ is what constitutes the animal form of the soul, and at the same time provides a key criterion to deal with the notion of affection or *immunitatio*, which is necessary to distinguish between real forms, the objects of cognitive acts, and the media in which these objects are given.¹¹

The basic exposition of this first thesis is interwoven with the account, in the first *quaestio*, on whether there are multiple senses of touch, since it is

11 For the difference between real and intentional being in Scotus the reader may refer to (among many other studies): King, P., Duns Scotus on Mental Content. In: Boulnois, O. – Karger, E. – Solère, J.-L. – Sondag, G. (eds.), *Duns Scot à Paris*, op. cit., pp. 65–88, esp. § 2. King soundly quotes Reportatio IA, d. 27, q. 2, “sed nulla productio intentionalis est esse obiectum, nisi prius sit aliqua forma producta realiter aliqua productione reali in qua est obiectum productionis intentionalis; de hoc dictum est supra in isto libro d. 3.”

not clear that touch has a specific object like the other senses. The common opinion (viz. Aquinas) is that faculties are distinguished by their acts and objects,¹² and thus Scotus's main starting point here is that *sensus ille est unus cuius organum est unum, quia sensus fundatur in organo* (q. 1.2). The problem is that there appears to be not *one* proportionate object for the organ – nor even one contrariety – and thus we may wonder whether there are five or eight exterior senses, following the different pairs of contrary objects that seem to fall under its act, as pointed out by Aristotle.¹³ These pairs of contraries are warmth and coldness, humidity and dryness, hardness and softness, roughness and smoothness. Now, in general, “every potency is one with regards to the one genus which is univocally predicated of all objects that can be known by such a potency” (q. 1.8), as is the case for example of black and white in sight, etc. In the case of touch, its associated qualities do not seem to have only one genus from which they can all be univocally predicated.

One could argue that “*sensus tactus est unius contrarietatis; ergo est unus*” (q. 1.5), in the sense that four of the possible sensibles of the sense of touch are passive qualities, and four are active qualities. But Scotus wonders in q. 1.13 whether this is a logical or a real univocal distinction. In a purely logical sense, all the qualities of touch “*convenient in uno conceptu qualitatis*”. However, taking univocity not logically but within the natural realm, a sense may have different indivisible species as its object, as long as they belong to the same natural genus. A logical form of univocity, such as the distinction between active and passive qualities, is not enough of a contrariety to ground a sense, because we need a natural genus of qualities (cf. q. 1.20). The possible solution here, for Scotus, is to acknowledge a *metaphysical* sense of univocity, *secundum quam aliqua uniuntur in genere propinquo*, and in this sense Averroes would be right in claiming that the real sense of univocity concerns the *specie specialissima*.

Since a single logical contrariety cannot be admitted as the object, Scotus feels obliged to admit that there are two formal senses of touch. Indeed, the sense of touch has different genera of qualities, so that even if it is in reality one subject, it is formally *two senses*, “but not as different or divided as if there were two things”,¹⁴ an opinion shared by Aquinas and others.¹⁵

12 Cf. Thomas Aquinas, *De veritate* q. 10 a. 1 ad 1um; *Summa theologiae* I q. 77 a. 3.

13 Cf. *De anima* II, 22, Bk 422b17-27.

14 *Quaestiones super secundum et tertium De anima* q. 1, 9: “non tamen ita diversi vel divisi sicut alii ab invicem.”

15 Cf. Thomas Aquinas, *In de anima* II, lect. 22: “*formaliter loquendo et secundum rationem, sensus tactus non est unus sed plures; subiecto autem est unus.*”

The unity of the sense is out of question, since whether its organ is the flesh or the nerves, at least it seems clear that when it feels one contrariety, it also feels the other one. Moreover, the only possibility for there to be different senses of touch would be to be so either in species or in number (q. 1.3). They can't be different in number, for they are *in eodem subiecto*. On the other hand, one of them would be redundant (*superflueret*) if it could feel what the other feels (*a quacumque igitur contrarietate vel sensibili immutaretur unus tactus, et alius*). But can it be that there are two senses that differ in species? It seems hard to admit, for things of different species are not equal (*nec esse possunt secundum aliquos*), so one sense would be more perfect than the other, a possibility that seems false, "because touch at the same time perfectly feels one contrariety as much as the other (q. 1.3)."

In the end, Scotus will admit that the organ of touch is a mixed body (nervous flesh) that has unity by means of a dominant perfection.¹⁶ He provides two proofs (q. 1.10): first, one and the same faculty cannot have at the same time *duos perfectissimos actus* (Scotus notes here that we cannot even concede this of the intellect), because just one act, if truly "most perfect", would totally adequate the virtue of its potency to itself. If touch can feel simultaneously that water is cold and wet, it cannot be with the same act; rather, if *per impossibile vel potentiam divinam* the coldness of water were removed, we would still feel its wetness, there being thus two acts. He concludes that "regarding different formal objects, there is no one act" (q. 1.11): there cannot be one act, because the sense receives two species (wetness, coldness), and "the species in the organ is the principle of the act, either formally or as an inclination" (q. 1.12). Moreover, each sense must have one determinate genus, as we can infer from each particular sense and from the logical thesis that an object must correspond to its faculty (q. 1.13),

16 For his specific sources: cf. Aristotle, *De partibus animalium* II, 1, Bk 647a15; Freeland, C., Aristotle on the Sense of Touch. In: Nussbaum, M. C. – Rorty, A. (eds.), *Essays on Aristotle's de Anima*. Oxford, Oxford University Press 1992, pp. 227–248. Avicenna also holds that the faculty of touch is distributed over the whole body, nerves perceive objects opposed to them in quality, and we may probably speak not of one faculty but four (which distinguish hot-cold, dry-moist, hard-soft, and rough-smooth), "but their coexistence in the same organ gives the false impression that they are essentially one" (in Rahman, F., *Avicenna's Psychology. An English Translation of Kitâb al-Najât*. London, Oxford University Press 1952, p. 27). Peter John Olivi, in his *In II Sent* q. 61 (in: Jansen, B. (ed.), *Quaestiones in secundum librum sententiarum*, vol. 3. Quaracchi, Collegium S. Bonaventurae 1926), adds another pair: heavy-light, and considers pleasure-pain. According to Olivi, the wide variety of things we can feel with the sense of touch all relate to "what constitutes our own well-being" (cf. Yrjönsuuri, M., *Perceiving One's Body*. In: Knuutila, S. – Kärkkäinen, P. (ed.), *Theories of Perception in Medieval and Early Modern Philosophy*. Dordrecht, Springer 2008, pp. 101–116). Averroes considers the pair heavy-light to fall within the domain of substance. Cf. Averroes, *Long Commentary on Aristotle's De anima*. Ed. R. Taylor. New Haven, Yale University Press 2009, Book II, § 109, p. 229.

“But the sense of touch does not correspond to one physical genus, for it would refer to only one contrariety, as the Philosopher made clear.”¹⁷ A genus can only have one contrariety; if there are more, they must then belong to a different genus, which suggests that the difference in touch is formal, or in Aquinas’s words: *formaliter loquendo* and *secundum rationem*.

b) Second thesis: active qualities are grounded upon passive qualities (as the form in matter), and their *real* correspondence makes the distinction of the senses possible.

According to Scotus, the formally distinct senses of touch are not numerically distinct, and yet are formally different. To justify this, he appeals to a series of sub-theses: (i) cognitive faculties correspond to their objects, (ii) the real relation between active and passive qualities corresponds to the formal relation between the different objects of touch¹⁸; (iii) more specifically, active qualities are grounded (*fundatur*) upon passive qualities, just as form is grounded in matter, because “*qualitates activae consequuntur compositum ratione formae, et passivae ratione materiae*” (q. 1.15). What this means is that if an organ can discern different active qualities not reducible to one natural contrariety, such an organ, while being materially one, may be formally more than one. And if some active quality is built upon a passive quality but the organ cannot discern it, then a different sense can also be built upon the first one and discern the new active quality. This allows us, e.g., to distinguish, in the first case, the formally different senses of touch, and, in the second one, between touch and taste.

Concerning touch, Scotus has said that its organ is not one formally but only materially (q. 1.17); thus, in the nerve there is a capacity that discerns between wetness and dryness, and another that discerns between coldness and warmth. These qualities, however, relate to each other, and thus they have usually been considered to belong to one sense (even if this is only true

17 See Physics I (trans. R. P. Hardie and R. K. Gaye, in: *The Works of Aristotle*. Ed. W. D. Ross. Oxford, Clarendon Press 1930, 6, 189b14), where, discussing the principles of motion, and whether there can be two contraries, two pairs of contraries, or three contraries, Aristotle writes: “Moreover, it is impossible that there should be more than one primary contrariety. For substance is a single genus of being, so that the principles can differ only as prior and posterior, not in genus; in a single genus there is always a single contrariety, all the other contraries in it being held to be reducible to one. It is clear then that the number of elements is neither one nor more than two or three; but whether two or three is, as I said, a question of considerable difficulty.”

18 See q. 1.15: “Sicut igitur se habent ad invicem obiecta sensus tactus, quae sunt qualitates activae et passivae, ita et potentiae activae. Modo ita est quod qualitates activae fundantur in passivis et se invicem concomitantur.”

when we consider the material organ of touch). When a different level of qualities is encountered, then a new organ is found (namely, taste), which is not distinct in the same sense as these qualities *se invicem concomitantur*, but rather, it is different *as taste*, so that a certain secondary quality (*tanquam qualitas secunda*) is the object, while still grounded in touch, following the Aristotelian *dictum* that “*gustabile est quoddam tangibile*” (422a8).

This means that the organ of taste is based on really distinct qualities from those sensed by touch. Thus, the difference between the sensible organs may be found not in the real distinctions between their objects, i.e., the study of natural qualities can serve for psychological analysis. It cannot be denied that the active qualities of taste are built upon the qualities of touch, for in the tongue we have different qualities for the senses of touch and taste, as per Scotus: “*et sic humor et potus per aliam qualitatem et aliam est gustabilis et tangibilis*” (q. 1.17). Touch, Scotus holds, is therefore the “most common of the senses and the grounding of the others, just as the vegetative soul makes a body animated, not in the sense that it is more perfect, just as taste is not the most perfect of the senses” (q. 1.19). Indeed, just as having more than one senses of touch does not multiply the animal soul into different levels or degrees, for they are grounded conjointly (“*in quocumque animali reperitur unus, reperitur alius, et in quacumque parte organi*”, q. 1.19), having five or six senses does not multiply the degrees of life or the five genera of faculties (vegetative, sensible, appetitive, motive, intelligible; cf. q. 1.16).

Comprehensibly, Scotus will admit in the end that between the two formally different senses of touch, “one is more perfect than the other, for it senses a more perfect contrariety, namely warmth and coldness” (q. 1.18). It is true that the sense of touch feels its different objects equally, but what Scotus claims this means is that it feels an equality of proportion (*aequalitatem proportionis*), not of conformity or perfection (*adaequationis et perfectionis*). Thus, being affected by warmth and coldness is more perfect than being affected by wetness and dryness. In an analogous way, both an eagle and an owl are perfectly disposed towards their natural objects, but “in absolute terms one is more perfect than the other” (q. 1.18). This will serve as the base to an important thesis later: a sense corresponds perfectly to its adequate object, but this perfection is relative to the faculty-object relation, and is not absolute, or rather is absolute only in the measure of the faculty’s proportionate correspondence towards its own act. This means that the consideration of how sense and object correspond is not simply the same as the consideration of the perfection of a faculty. I believe the reason for this ultimately rests on the degree of its dependence and proportion to matter: the more perfect a faculty is, the less it is depends on the material quali-

ties preceding its object. (The most perfect faculty, then, is the will, whose actualization is absolute *ex se*.)

c) Third thesis on the sense's dependency on matter

In question 2, Scotus aims to declare more carefully what the proper organ of touch is. Aristotle seems to favour the idea of flesh as the organ of touch in *De partibus animalium* II.8, but in Scotus's times the consensus seems to have been that flesh is an instrument or medium, with the nerves being the real organ of the sense of touch ("or something else in their place similarly coextensive throughout the body," q. 2.6). (Scotus excuses Aristotle, noting that the discrepancies in *De anima* II and in *De partibus animalium* are due either to Aristotle not having sufficiently studied the flesh and the nerves, or to him speaking imprecisely, as when he explains the place of the pupil in seeing.)¹⁹ The reason why nerves and not flesh are the best candidate for being the organ of touch is that the organ of an external sense should connect directly with the organ of the common sense, which Scotus allows to be "in cerebro vel in corde" (q. 2.7). Indeed, the common sense must be able to judge on the object of the external senses. Scotus admits of the possibility of nerves and veins being rooted in the heart, according to the Aristotelian opinion, or in the brain, "secundum medicos".

The ultimate reason for dismissing the flesh as the organ of touch appears in q. 2.8, where Scotus distinguishes between natural and animal virtues, i.e., natural properties and senses, which are the virtues or powers of the animal soul. Natural virtues are grounded in the flesh, which is a mixed body, but proper sensible objects lie in the animal virtues, which in turn are grounded in the veins and nerves (materially disposed to house the senses). Scotus correspondingly points out a difference between pure and nervous flesh: while pure flesh is merely a medium of touch, nervous flesh is properly the organ of touch, "for close to or next to each part of the flesh the nerves coextend throughout the body like a net. [...] It is through these nerves that the power of touch derives from the brain or the heart to all the

19 Averroes offers a similar view (*Long Commentary on Aristotle's De anima*, op. cit., § 108, p. 229): "Yet that account is contrary to the account in the book *On animals*; but nevertheless perhaps that account was in accord with what was apparent in that context, namely, what he knew about the parts of animals at that time, for then he still did not know about nerves and he said that the organ of that sense is the flesh. That account provides [the view that] the organs belong to those animals which are able to sense touch inside the flesh and this is consonant with that appeared afterwards through anatomy, namely, that the nerves have a passage for touch and motion. What, therefore, Aristotle knew by argument afterwards became apparent by sense."

body” (q. 2.9).²⁰ As sensible qualities can be felt throughout the body, the sense of touch must be coextensive with flesh, and this can only happen if the sense is in potency to receive sensible qualities – otherwise, a senseless portion of the flesh would quickly corrupt when hosting these active qualities. The sense of touch extends so that the flesh won’t be corrupted by the power of the sensible qualities, to preserve the convenience of animal life and to flee from noxious qualities.

The contiguous relation between flesh and nerves is decisive, since it helps us localize the medium in sensible knowledge. Is it necessary for touch to have an extrinsic medium? According to Scotus, it is not: first, because the medium must be deprived of the sensible objects of which it is a medium; but water and air are not deprived of sensible qualities. Secondly, if a sensible quality can be felt without a medium, the latter is not required (this is the case for example when we feel the cold air in winter). Thirdly, per Aristotle’s definition of *contiguous* things, touch and what is felt by touch are contiguous in place, and therefore there is no extrinsic medium. Fourthly, if there were an extrinsic medium, it would be affected before touch, and yet touch is not affected after the medium, but simultaneously with it.

Scotus picks up an important objection from Averroes, namely, that an animal cannot feel the medium surrounding it because such a place “is not a contrary, but conforms to what is in it” (q. 3.5). As every sensitive impression naturally requires an opposite,²¹ it is only natural that we are unable to feel our medium (viz. fish do not feel through water). Scotus, however, disagrees with Averroes: our sense of touch is in a real potency to reduce the tangible qualities to its act. A mixture is not necessary, for generation can occur without mixture in simple bodies (like water and air), and thus we are capable of feeling simple qualities, and not only mixed ones. Indeed, Scotus’s will point out that we can feel water and air as objects, and not as media.

The medium is related to the perfection of the sense, as we shall see in the next section.

For now it will suffice to say that touch is limited by its contiguous position to its object. Indeed, touch can feel accidental qualities “that are inherent or adherent to it, i.e., not existing in their own subject but in something else

20 In theory, wherever the sense of touch is, the organ should also be. But this is not the case e.g. in the head. Scotus answers that “it is not necessary that there be nerves in every part of the flesh; rather it is sufficient that they be close or next to it in a real or in a formal sense, and thus in every part in a virtual sense, for the power of the nerve existing next to any part can feel the tangible object. And to the improbation I say that in the brains there are cartilages instead of nerves” (q. 2.13), a fact taken from Avicenna.

21 Averroes, *Long Commentary on Aristotle’s De anima*, op. cit., § 115, p. 237: “it was already explained that the sensible is a contrary before the affection.”

next to it” (q. 3.13). Inherent qualities are felt without an extrinsic medium, like abscess pain. Adherent qualities, on the one hand, can be felt immediately without a medium, and on the other hand by a medium which is adherent but immediately tangible, as qualities that exist in fluids such as air or water, which we can feel without another mediating body. So, in response to Averroes, Scotus claims that in order for a medium to be felt as such, it must be deprived of tangible qualities “in every sense or according to its own excelling attributes” (q. 3.16). If the medium has a quality in an excelling fashion, we will feel it more than another, and even be impeded from feeling other qualities. And even if it were deprived of tangible qualities in every sense, we could only feel adherent objects that are immediately tangible. In sum, touch faces its medium as an object; only a higher sensible faculty directed towards a secondary quality built upon the qualities of touch can face its medium as deprived of the opportune qualities, so that the medium can act as such. This suggests a way to order senses and objects according to their perfection, which I will examine in the following section.

4. Hierarchy and perfection

Every sense has a proper formal object or quality that it can reduce to its own act, and is materially grounded in a corporeal organ (as, analogously, form in matter), and thus faculties are distinguished by their proper objects. Scotus follows these basic tenets while always stressing with great care the difference between the physical and the intentional planes,²² i.e., the physical or natural impression in the organ and the proper cognitive act.

Scotus clarifies the natural/intentional distinction by studying the role of the medium in the different senses. What happens when the medium, rather than the organ, is affected first? Scotus studiously separates two different but related distinctions. The first one pertains to the possible meanings of “affection” and has to do with the difference between the natural and the intentional planes. The second one refers to the ways in which the medium can be ‘active’ before the sense. Regarding this second question, Scotus employs it to ‘classify’ the senses in q. 3.18, wherein he states that “something can be said to be *prius* with regards to causality, temporality or location”. In light of these possibilities, vision can be said to be immutated by a medium which has been affected earlier with regards to place and causality, but not temporally, for vision is instantaneous. Hearing’s medium is affected earlier regarding causality, location, and time, as is the case with

22 Cf. Whitworth, A. F., *Attending to Presence: A Study of John Duns Scotus’s Account of Sense Cognition*, op. cit., pp. 166–169.

smell and taste. How do we distinguish the latter? In the case of taste, the affection of the extrinsic medium (saliva) is the cause of the organ's affection: the organ and the saliva are affected at the same time. In touch, the external medium is affected earlier in terms of location, but not in terms of time or causality (for the *clypeus* and *clypeatus* beat at the same time, but it is not the beat of the *clypeus* that makes the *clypeatus* beat). Air and water, as they exist *in re*, do not affect touch, but they do insofar as they are objects: for touch, the extrinsic medium is *accidentaliter* a requisite, as the animal cannot live without it. Touch is inseparable from the contiguous medium, while the rest of the senses gradually detach themselves from the contiguity with their object. This gradual detachment, in turn, marks their order of perfection.

Going back now to the first distinction, namely between the natural and the intentional *immutatio* of the organ, Scotus distinguishes two ways in which a passive subject can receive a form.²³ In one way,

according to the way of being in the agent, and this happens when the passive subject is predisposed to the way in which the form is in the agent, or to the way in which the matter of the agent is disposed to it: this is the case of natural actions, in which the agent and the passive subject communicate in matter. Sometimes the passive subject is not so predisposed, and thus receives without matter, not because it receives the form without matter in itself, or because it existed previously without matter, but rather because it receives the form without a preceding disposition towards matter (as opposed to the other way in which the passive subject receives the real form [...]). And this is the way in this case [sensation], because the sense is not predisposed to receive the species or form of the sensible object as prime matter is, and thus receives its species as a certain absolute quality. It thus follows that the sense faculty, without the essence of the soul, can feel, because when a total cause is given, its effect is also given (q. 5.8).

In other words, a sensible faculty receives the form of its object according to its disposition towards that form. This disposition corresponds to the properties of an object, so that a more perfect sense is predisposed to more perfect, secondary qualities grounded upon the first qualities of that object.

23 For the original basis of these two kinds of *immutatio* in Aristotle's *De anima*, see his discussion on the senses of alteration in II, 5, 417a31 ff and 417b2 ff; cf. also Sisko, J. E., *Material Alteration and Cognitive Activity in Aristotle's De anima*. *Phronesis*, 41, 1996, No. 2, pp. 138–157.

The properties of the object affect the sense in two different ways: through a natural *immutatio*, through which “the sense is affected by the sensible in accordance with itself or its own being by which it exists *in re* (for example, in the way the sense of touch experiences warmth or another sense is altered in some way or moves according to place). The other one is a spiritual alteration [*immutatio animalis*], by which it is affected intentionally or spiritually by the sensible object” (q. 4.11).²⁴ In other words, “natural changes involve the recipient of the form becoming an instance of it; spiritual or animal ones do not.”²⁵

Vision is a special sense because it is affected “*spiritualiter tantum*”, while at the other end of the scale touch is affected both naturally and intentionally.²⁶ Touch’s organ is a mixed body, and its medium is flesh, which is naturally passive against the active tangible qualities. Still, in the sensible act of touch there is also an intentional affection, “for, if it were affected only naturally by reason of its being a natural mixed body, it wouldn’t feel tangible qualities, as is the case of wood or a stone, which are naturally affected” (q. 4.11). Indeed, and the whole natural-intentional distinction builds up to this thesis, “what constitutes a sense is the intentional affection.”²⁷

By combining these two distinctions, we obtain the final classification provided by Scotus:

From the diversity of the affections in the organ by the object and its conformation we can have the difference in the senses. Sometimes a sense is affected only intentionally, sometimes also

24 R. Cross acknowledges this difference when he asserts that the role of the species in medio is not strictly causal but precedes, nevertheless, the spiritual immutation (the proper act of perception). See Cross, R., *Duns Scotus’s Theory of Cognition*, op. cit., pp. 22 ff.

25 *Ibid.*, p. 34.

26 Scotus’s text reads here: “Tactus autem utramque immutatione immutatur realiter et naturaliter”. The editors suggest “naturaliter” should be read as “intentionally” or “spiritually”, where *naturally* here would mean in accordance with the nature of the sense. Helpfully, they add that it is hard to say whether “naturaliter” is here written because of an inadequate understanding of the text, a problem with the scribe, or perhaps “ex lapsu ipsius Scoti”.

27 Scotus adds here a theological reason for this. According to him and other scholastics, after the general resurrection of the bodies, sensible acts will be intentional only. In the present state, an intentional affection is caused by a natural one (cf. q. 4.12), but in the hereafter, natural bodies will not be capable of change in their natural qualities (“the damned, after the resurrection, will have the sense of touch and all senses in act, and yet will not be naturally affected”). Natural affection is possible for inanimate beings, and intentional affection is possible for the damned, but our present state requires both. Cf. q.4.13: “While an animal affection in the organ of touch or in another organ does elicit sensation, a natural affection does not, for a natural affection in the organ does not elicit sensation (it actually impedes it). The reason is that if without a natural affection it is possible to have an intentional one, the sensible object will be even more felt, as in the case of the damned. On the other hand, a natural affection in the flesh, which is a medium, will elicit sensation, by causing a similar affection in the organ, not by itself.”

naturally. If it happens in the first way, it is vision; if it happens in the second way, it can either be a natural change on the side of the object, or of the organ. If it is on the part of the object, either the affection happened through local motion, and this is hearing, which is affected by sound that multiplies itself in the air over to the hearing through local movement; or it happens through an alteration, and this is smell, which feels the odour proceeding from odorous things according to their being altered by heat [...] (There is no proper sense in the case of something affected by a motion in quantity, for quantity is a common sensible, not a proper one, and thus it should not be assigned to a proper sense.) If the affection is natural and on the part of the organ, we have taste and touch. They are different, because the organ of touch is affected by heat and the sensible quality that is its immediate object, or can only be immediately affected by them. Taste, however, cannot be immediately affected by flavour, which is its object, save by a humour next to the tongue. (q. 6.9)

The doctrinal undercurrent regarding the perfection of the senses should understand them, thus, as gradually becoming removed from the natural affection. In the case of touch, the reception is grounded in the contiguity between sense and object. The more perfect senses are grounded upon touch, but they can separate themselves more clearly from natural actions, giving way to a reception according to the medium. Vision, in turn, can receive its object through a purely intentional medium, lumen, defined by Scotus as a purely intentional quality. In the case of light, contiguity must be abandoned, if we are to see at all. For

in one sense, namely vision, there is a special cause, because a sensible put over the sense is not felt, as ‘colour cannot be seen without *lumine*’, and thus it must be seen by an illuminated medium. If colour were to be put on the organ of vision, it would obscure it, and thus it wouldn’t be able to see (q. 4.10).

In conclusion, Scotus thus holds that sensible acts require a natural *immunitatio*, even if only *in statu isto*. This controversial thesis is meant to highlight the fact that being naturally affected is a necessary co-cause of sensation, but it is by no means the formal *ratio* of sensation.²⁸

28 “Two partial causes concur towards the act of feeling on the part of man, namely, the sensible potency and the organ, and thus both are required and one is not enough for sensation, and

This in turn prepares the way for the proper perfection of the spiritual faculties: if a growing perfection allows sensation to depend less on natural causation, the intellect forms a present object spared of all media, as it only needs a certain *specification* from the object of the internal senses to determine itself towards its act; his actualization is, however, completely removed from the senses and sensible objects.²⁹ The will, on its part, is a faculty that determines itself, and can even determine itself to an object opposite to the one to which it has determined itself in this specific instant of time,³⁰ i.e., it can will the contrary of an object specified by the intellect. Even regarding its specification, the will is completely free.

Scotus adds a few pointers on the movement of the intellect and the will in q. 11. His principal thesis here is that it is improper to qualify the actions of spiritual faculties as a natural *immutatio*. To be moved by a natural cause, we should claim that the intellect, for example, is moved by a natural impulse from the object of the internal senses. But “if only *phantasmata* were needed to move the intellect and the will, then the intellect and the will would be purely passive faculties, they would not move themselves to their own acts, and it would follow that heavenly bodies could directly move them” (q. 11.7). This would be because incorruptible bodies necessarily move corruptible bodies. If they only needed *phantasmata* to be reduced to action, it would follow that the intellect and the will would be indirectly moved by the celestial bodies. The unfortunate consequence would be that “a bad fantasy would necessarily cause a bad will” (q. 11.7). But what if the will itself were able to form a good or bad *phantasia*? Then a bad *phantasia* would cause a wrong act of willing, but this would still be voluntary, “ratione primae voluntatis phantasiam formantis”. This is true, Scotus agrees, but it is an incomplete circuit, for the will itself is only moved through the intellect and *phantasmata*.

Scotus’s solution is that celestial bodies, being corporeal, cannot directly move our spiritual faculties (cf. q. 11.10). Now the caveat is this: “our *phantasmata* cannot sufficiently move our intellect and will”, because the act of the agent intellect is needed first in order to abstract the intellect’s object. This can be willed or not willed by our rational appetite. The spiritual faculties are thus not affected in their *exercise* by the medium in any way (and the

the sensible potency is as such inseparable from the organ. On the other hand, the intellective potency is the total cause of the act of cognition, and does not require any other cause on the part of man; and therefore it is called separable, because it does not *per se* employ an organ as an instrument” (q. 5.12).

29 Natural intellectual knowledge is obtained “ab intellectu agente et phantasmate” (*Ordinatio*, prol. 1^a pars, 17n. 61).

30 Cf. Dumont, S. D., *The Origin of Scotus’s Theory of Synchronic Contingency. The Modern Schoolman*, 72, 1995, pp. 149–167.

will even less so than the intellect), even if they need perceptual knowledge to determine themselves, to an extent.

5. Concluding remarks

The author of the *Quaestiones super secundum et tertium De anima* is not, of course, the mature Scotus. Still, as I have argued, he seems to follow a path of gradual separation of spiritual acts from matter, even to the point of obtaining insightful remarks about the nature of the world and of the soul according to the perfection of the cognitive faculties. While his treatment of the will is not as nuanced or detailed here as in his later works, he is already paving the way for the distinction between natural and rational (free) faculties.

Indeed, that Scotus is attempting to outline a strongly spiritual notion of willing is clear in his ‘corrections’ to Aquinas and Giles of Rome. According to Scotus, Thomas believes the intellect and the will “are passive firstly in regards to the *species impressa* of the object” (q. 12.6). The *species impressa* is then a *principium elicitivum*, in the sense that the faculty is not the principle of eliciting an act of *this* concrete knowledge, but rather of eliciting a “*totum compositum ex potentia et specie*”. So, according to Scotus’s interpretation (to which Aquinas would probably object), the spiritual faculties are only a passive principle with regards to the species or determination of the act, while the formal principle of the act is the *species impressa*. For Scotus, this makes the *species impressa* the actual *ratio eliciendi* of the cognitive act.³¹ Indeterminate potencies, such as the human spiritual faculties, can only be reduced to an act by a determinant principle. For Aquinas, Scotus claims, the *species impressa* is what operates this reduction. What Scotus finds objectionable in this reconstruction (cf. q. 12.9ff) is that an action must be attributed in a greater degree to a formal principle than to a material one: indeed, it is only *through* the formal principle that an action can be attributed to the material principle. If the species were the formal principle of action, then the act of our spiritual faculties would be attributed to them to a lesser degree than to the species, which for Scotus is absurd: a species is not a faculty. (If per impossible these objects were made to exist outside a faculty, they would be in act with no faculty to reduce them to such an act.)

The questions on the *De anima* seem in the end to correspond adeptly to the mature Scotus’s great themes. The first part, containing his exposition of the senses, is perhaps not radically new, but it builds the main theme of a growing perfection of the cognitive faculties that sufficiently distin-

31 Cf. q. 12.7.

guishes their degrees of perfection according to Scotus's understanding of the successive partial or total co-causes of human actions: the object *in re*, the organ's immutation, the immutation of the medium, and the act of the faculties themselves.

In this way, Scotus also manages to account for formally distinct perfections in natural things as pertaining to the degree of the perfection of a sense, and when a superior sense can be grounded upon an inferior one, while still being able to formally grasp a *natura in re* in a more perfect or higher fashion. This is not a vacuous point. Indeed, the exposition of the growing perfection of the cognitive faculties and their objects sets the stage for the latter questions on the spiritual faculties, in which Scotus prepares the way for his theories of the univocity of being and human knowledge of God.³²

ABSTRACT

This paper aims to examine some of Scotus's key notions on perception in his Commentary on the *De anima*, focusing on the notions of sense, medium, and object. I will keep two main points of interest at hand: first, Scotus's understanding and reception of the philosophy of perception advanced by his contemporaries, in light of his own theory of the faculties, objects, and the perfection of their respective acts; second, the distinction and classification of the external senses according to their perfection.

Keywords: Duns Scotus, perception, sensible object, medium, intentionality

32 “Dans les QQ *De anima* : Scot soutient la these que l’etant n’est pas un analogue logique parce qu’il serait clans ce cas equivoque. Dans une certaine mesure, l’ etant est univoque a Dieu et a la creature, mais en un sens que Scot n’explique pas.” Noone, T., *L’univocité dans les Quaestiones super libros de anima*, op. cit., p. 269.