Peter John Olivi on Perceptual Representation

1 Introduction

The thirteenth century witnessed a lively debate on the mechanisms of sense-perception. Many thinkers believed that, when you perceive an object, it gets represented in your sensory soul: the compartment of the immaterial soul that is responsible for perceptual processes. But, understandably, philosophers held quite different views about the precise modality of this phenomenon. In this paper, I shall study the contribution to this debate of one of the most original and controversial thinkers of his time: Peter John Olivi (1248-1298). His contribution to the scholastic debate on perception is widely recognized as an important and interesting one. In order to make this proposal more precise, I shall first simplify the scholastic debate for clarity's sake and say that it centered around two questions. The first question was, bluntly put, how the perceptual representations in the sensory soul originate (assuming that they are not innate). The second question was how, granted that the sensory soul processes perceptual representations, these representations represent what they do. In other words, what is so special about the representation that is currently processed by your sensory soul in virtue of which it is a representation of this page rather than anything else?

One answer to the first question was that this page propagates likenesses (*species*) of itself that affect your retina. When these likenesses are processed by the sense-organs and the brain, they will eventually be received in the sensory soul. The *species* or likeness of the page is the representation that the sensory soul processes when you perceive the page in front of you. On this account, your sensory soul quite passively receives representations that are brought to it via the ports of your five senses. This view, which was often ascribed to the Aristotelians, was criticized by Franciscan writers who were inspired by Augustine's writings on perception. Augustine had argued that in visual

processes, the eyes emit a visual ray that, like a stick, reaches out to their objects. Moreover, he had emphasized the active nature of our soul in sense-perception. Augustine's "extromission-account" of perception seems not to have enjoyed much popularity among scholastic authors. Yet in the wake of Augustine, many Franciscans objected to the Aristotelian characterization of perception as a kind of reception. Instead, they stressed the soul's activity in perceptual processes. They held that external objects impinge on our sense-organs, but believed that this would trigger the active production of a representations by the sensory soul in itself. Generalizing, one can say that the answers that the scholastics gave to our first question can be allocated along an "Activity-Passivity axis".

But it is one thing to explain how a page-representation comes to be in the sensory soul, it is another to explain how it represents this particular page rather than anything else. We have already encountered one answer to this question. One might think that the page-representation currently processed in your sensory soul is somehow a likeness of the physical sheet of paper. This similarity-relation might account for the fact that the representation is a representation of this sheet of paper rather than of anything else. But then, someone else might point out that many representations do not represent by being similar to what they represent. For instance, smoke represents fire but does not quite look like it. Rather, the reason that smoke represents fire seems to be that fire is the natural cause of smoke. Thus, might it not be the case that the representation in your sensory soul does not represent this page by being similar to it, but simply in virtue of the fact that it was caused to be in the soul by this sheet of paper rather than by anything else? In fact, the answers that the scholastics gave to our second question can be allocated along a "Causality-Similarity axis".

By situating thirteenth-century positions on perceptual representation along these two axes, we can now roughly distinguish four kinds of accounts available in the scholastic debate:

Passivity-Similarity (PS): The sensory soul passively receives representations,

¹ Cf. G. O'Daly, 'The response to skepticism and the mechanisms of cognition', in *The Cambridge Companion to Augustine*, ed. E. Stump and N. Kretzmann (Cambridge, 2001), 159-170, 165.

which represent by being similar to their objects.

Passivity-Causality (PC): The sensory soul passively receives representations, which represent their object by being caused by them.

Activity-Similarity (AS): The sensory soul actively produces representations, which represent by being similar to their objects.

Activity-Causality (AC): The sensory soul actively produces representations, which represent their objects by being caused by them.

The PS-theory was sometimes ascribed to "the followers of Aristotle" by Franciscans such as Matthew of Aquasparta.² Godfrey of Fontaines appears to have held some kind of PC-theory of perception, whereas authors such as John Peckham seem to have been sympathetic to the AS-variety.³ The AC-theory may initially seem awkward, but it is not inconsistent. Many proponents of "activity-theories" of perceptual representation (such as Aquasparta and Peckham) held that the soul is somehow incited or triggered to actively produce representations by the external objects in its environment. This incitement establishes a causal relationship between subject and object. Now, a proponent of this kind of position may well hold that this relationship (co-)determines the content of the representations that the soul has actively generated from its own resources.

Having defined these axes, I am now in a position to state more precisely the aim of this paper: it seeks to situate Olivi along the Activity-Passivity and Causality-Similarity axes. Now, since Olivi was an independent thinker who was not in the least inclined to go by the judgment of authorities on questions that were of importance to him, his writings on perception are sometimes difficult to understand, partially because they hardly fit the familiar patterns, and partially because Olivi himself seems to be struggling

² Cf. Aquasparta, *Quaestiones Disputatae de Fide et de Cognitione* (Florence, 1957), 256 ('De Cognitione', q. 3).

³ For Peckham, see section 2, for Godfrey, cf. G. Pini, 'Can God Create my Thoughts? Scotus' Case against the Causal Account of Intentionality', *Journal of the History of Philosophy* 49:1(2011), 39-63, 41-42, A. Côté, 'L'objet et la cause de la conaissance selon Godefroid de Fontaines', *Freiburger Zeitschrift für Philosophie und Theologie* 54:3 (2007), 407-429.

to formulate cogent alternatives to the theories that he rejects. Consequently, situating Olivi along our two axes will be a challenging enterprise.

The easy part of our task is to situate Olivi on the Activity-Passivity axis. Olivi never gets tired of emphasizing the activity of the sensory soul in producing perceptual representations. Nonetheless, if it is easy to find Olivi's position along the Activity-Passivity axis, making sense of it is not. Indeed, it has been argued that Olivi laid so much stress on the activity of the sensory soul that his position became highly problematic.⁴ In order to gain a proper understanding of Olivi's theory of perceptual representation, this worry needs to be addressed. I shall do so in section two by drawing on a recent suggestion made by Silva and Toivanen.⁵ This will clear the ground for addressing the more difficult part of our task: situating Olivi on the Similarity-Causality axis. This task will be taken up in section three, which makes for the lion's share of this paper. There, I shall review Robert Pasnau's suggestion that Olivi headed for some kind of AC-theory. Thought-provoking as his reading may be, I believe it stands in need of correction. In fact, I shall make a case for an AS-reading of Olivi.

2 Olivi on the Activity-Passivity Axis

In his question "on affections of the cognitive power from without", Olivi points out that retinal stimulation all by itself cannot explain the occurrence of a visual perception. Something more is required. Indeed, Olivi says that properly speaking, perceptions are not primarily physical occurrences. Rather, "a cognitive act is firstly and foremost located in the sensory power and not in its organ". The term "sensory power" refers to the relevant capacity of the sensory soul.

⁴ D. Perler, *Theorien der Intentionalität im Mittelalter* (Frankfurt, 2004), 136-137.

⁵ J.F. Silva and J. Toivanen, 'The Active Nature of the Soul in Sense Perception: Robert Kilwardby and Peter Olivi', *Vivarium* 48 (2010), 245-278, 276.

⁶ "[A]ctus cognitivus primo et immediatius est in potentia quam in eius organo". *Quaestiones in Secundum Librum Sententiarum*, ed. B. Jansen (3 vols.) (Florence, 1922), vol. III, 83 (q. 73). Henceforth: *II Sent.*, question; volume, page.

For example, when you perceive John, there occurs a representation of John in that faculty of the sensory soul. For Olivi that does not mean that the sensory soul processes anything like a mental image of John. Rather, it means that the very mental act that is your perception of John is itself "expressive" or "representative" of John. In other words, the structure of your perception is such that it pertains to John: you perceive "Johnly". Thus, Olivi states that, in general, "the actual cognition is the actual and cognitive representation of the object" and approvingly quotes Augustine on perceptual cognition in particular: "the actual vision of the eye [is] a representation or similitude of the very object".

Hence, for Olivi the question of how representations get into the sensory soul amounts to the question of how the sensory soul comes to be in states that are themselves expressive and representative of their objects. In his *Summa*, Olivi reviews several answers to this question. According to some philosophers, the external object John is itself causally responsible for bringing about a certain state in the sensory soul. They explain this by saying either that John himself can directly act upon the sensory soul, or that he propagates likenesses (*species*) that impinge upon it. Olivi is quick to dismiss such "passivity-theories" of perception. They fail to appreciate that perceptions are acts that the soul undertakes, not passions that it undergoes. Moreover, he fears that many such theories imply that the likenesses or *species* in the soul, rather than external objects, become the direct objects of perceptual acts. 12

⁷ In modern terms, this is an "adverbial theory" of perception. Cf. R. Pasnau, 'Peter John Olivi', in *The Stanford Encyclopedia of Philosophy*, ed. E. Zalta (Fall 2008 Edition).

⁸ "[A]ctualis cognitio [est] eius actualis et cognitiva repraesentatio". Cf.: "omnis cognitio fit per actualem cognitionem obiecto simillimam eiusque expressivam". *II Sent.* q. 74; III, 130. Cf. q. 74; III, 168 and q. 58; II, 470.

⁹ "[Augustinus] actualem visionem oculi vocat informationem eius et speciem seu similitudinem ipsius obiecti". *II Sent.* q. 58; II, 471.

¹⁰ For extensive discussion, see Toivanen, *Animal Consciousness. Peter John Olivi on Cognitive Functions of the Sensitive Soul*, (Jyväskylä, 2009), chapter 4.

¹¹ Cf. *II Sent.*. q. 58; II, 463-464.

¹² II Sent. q. 58; II, 469.

Olivi next turns to a number of "activity-theories" of perception. According to one variety of the activity-theory, perceptual acts are caused by *species* that the soul generates in itself. Although this account does of course stress the activity of the soul in perceptual processes, Olivi finds it too baroque: if the soul is powerful enough to bring forth a John-*species* from its own resources, then why could it not immediately generate an act expressive of John? To be sure, that would be more parsimonious. According to a second activity-theory, mainly associated with John Peckham, external objects "excite" the soul to actively produce perceptual acts that express and represent their objects. Olivi rejects this view, because he thinks that external objects can only excite the soul to generate an act pertaining to them by somehow imprinting their likenesses on the soul. This would jeopardize the superiority of the soul over bodily objects. Moreover, in order for these likenesses to excite the soul to do anything, they should be taken notice of by the soul. But then these likenesses risk to become objects of cognition in their own right. Hence, this variety of the activity-theory endangers the subject's direct epistemic access to the external world. 14

Olivi launches similar critique against the Augustinian activity-theory. According to Augustine, you perceive John when (i) John impinges on your sensory organs and (ii) the soul takes notice of the John-induced affections of your body. (Peckham harks back to this account when he explains his own excitation theory as follows: "I say that because the soul is connected to the body as a perfection to what it perfects, the soul naturally takes notice of bodily changes and transforms itself in their similitude". This account has the virtue that nothing physical (John or the *species* of John) impinges on the soul. The *species* only impinge on the bodily organs. However, Olivi is still not content. After all, on this account, the soul would perceive the world after having taken notice of

¹³ II Sent. q. 58; II, 473.

¹⁴ *II Sent.* q. 58; II, 474-477.

¹⁵ De Quantitate Animae 4.1. Cf. O'Daly, Augustine's Philosophy of Mind (London, 1987), 85.

¹⁶ "Dico quod quia colligatur anima corpori, sicut perfectio perfectibili, (...) advertit naturaliter immutationes corporis et transformat se in illarum similitudinem". John Peckham, *Quodlibeta Quatuor*, ed. G. Etzkorn (Florence, 1989), 151 (Q. III, q. 9).

bodily affections. This suggests that all we directly are perceptually in touch with are our own bodily states.¹⁷

But if even if this activity-theory is unsatisfactory, how should perceptual representation be accounted for? According to Olivi, likenesses or *species in medio* propagate from visual objects such as John. Although these *species in medio* impinge on my sense-organs, this impingement does by no means constitute my perception of John. Rather, due to the union (*colligantia*) between body and soul, it triggers the soul to as it were direct an "attentional spotlight" to John. This attentional spotlight is what Olivi puts in the place of Augustine's visual rays, which he rejects: "if Augustine would call this ray a virtual protrusion of the attention, rather than a local one, that would not be inconvenient". When the attentional spotlight falls on John there occurs a representation of John in the soul:

Also, the object itself presents or exhibits itself as present to the cognitive attention, and through an act configured to it there occurs a kind of representation of it.²⁰

As Olivi specifies: when an object is caught by the attentional spotlight of my soul, there occurs an "expressive vision or cognition".

¹⁷ II Sent. q. 74; III, 123-124. For discussion, see R. Pasnau, *Theories of Cognition in the Later Middle Ages* (Cambridge, 1997), 179. Silva and Toivanen, 'The Active Nature of the Soul'. These authors do not discuss Peckham.

¹⁸ Cf. Toivanen, *Animal Consciousness*, 72, 138 and Pasnau, *Theories of Cognition*, 178-181. Clearly, if the impression of *species in medio* on the retina is to trigger the soul to direct its attentional spotlight, the soul must somehow take notice of the *species*' impingement on the eye. To this extent, Olivi must *nolens volens* agree with Augustine and Peckham that ordinary perception involves the soul's awareness of bodily states. What distinguishes Olivi from his predecessors is of course that, after the *species in medio* impinge on the retina, the soul outwardly directs an *aspectus* that directly attains to the external object.

¹⁹ "si radium vocaret virtualem protensionem aspectus et non localem, non esset hoc inconveniens". *II Sent.* q. 26; I, 452.

²⁰ "[I]psum etiam obiectum se ipsum praesentat seu praesentialiter exhibet aspectui cognitivo et per actum sibi configuratum est quaedam repraesentatio eius". *II Sent.* q. 72; III, 35-36. Translation Pasnau, unpublished.

Olivi's term for this attentional spotlight is *aspectus*, which literally means "look". Thus, he thinks the visual power must as it were look at John in order for a perception of John to occur. On other occasions, Olivi describes the turning of an *aspectus* to an object as the "conversion" (*conversio*) of a power towards its object.²¹ Or again: the visual power has to "apply itself" to John in order for a perception of John to take place.²²

Olivi's view is remarkable in several respects. First of all, it minimizes considerably the role of the sense-organs in perceptual processes. Although objects can impinge on our sense-organs, such impingement is not constitutive of a perception. A perceptual act occurs only after the soul has outwardly projected its attentional spotlight.²³ Secondly, Olivi's position is remarkable for its emphasis on the activity of the sensory soul in the genesis of perceptual representations. Indeed, Olivi tends towards the activity-extreme of the Activity-Passivity axis. The sensory soul does not receive anything from without. Rather, it actively "reaches out" to, say, John by directing its attentional spotlight to him. In a second stage, it actively produces an "act configured to" John that is representative of him. Although this may do justice to the superiour position of the soul with respect to the environment, we can now see that Olivi has perhaps exaggerated his stress on the soul's activity in a way that yields a philosophically problematic result. Let me explain.

Olivi sometimes compares the direction of an attentional spotlight with the way in which an archer aims his arrows at a target.²⁴ Of course, the archer has his target in mind when he aims his arrows at it. And indeed, when I direct my attentional spotlight to John because I am looking for him, I have some conception or representation of John in mind. But where did that conception or representation of John come from? The obvious answer would be: from an earlier encounter with John. It may seem, however, that Olivi

²¹ II Sent. q. 23; I, 424; q. 58; II, 431, 473; q. 59; II, 536, 543; q. 73; III, 64.

²² II Sent. q. 1; I, 7; q. 58; II, 476-7, 506-7.

²³ II Sent. q. 58; II, 512.

²⁴ E.g. *II Sent.* q. 72; III, 43-4: "sicut iaciens saggittam ad modicum signum et terminum non sic faciliter tangit illum sicut iaciens eam ad signum et terminum maximum et altissimum: sic iaciens suum visualem et auditualem aspectum in obiectum altissimum et visibilissimum facilius et indeclinablilius videt illud vel audit quam minus latum minusque visibile".

cannot say this. After all, he says that in order to perceive John in the first place, I must already have directed my attentional spotlight to him. But do I not already need a conception or representation of John in order to do that? If that is so, then Olivi's theory seems to be implausible indeed. Of course I did not already have a representation of John in mind before I ran into him for the first time. Rather, my perception would seem to be precisely what gives me such a representation. So Olivi's theory of perception would seem to put the cart in front of the horse.

This problem has attracted the attention of commentators such as Perler, Silva and Toivanen. Perler believes that Olivi does not satisfactorily answer it and concludes that Olivi's otherwise interesting account of perception is thus plagued by a serious problem. Silva and Toivanen, however, have recently pointed out that Olivi's texts offer a way out of the problem. Indeed, Olivi grants that "we can direct our eyes without determinately intending to see those things which then fall in our visual field". Olivi creting one's eyes" to something seems to have been just one among the many ways in which Olivi referred to the direction of our attentional spotlight or *aspectus*. Now, if such a randomly-directed attentional spotlight may suffice for me to see John for the first time, I do not already need a conception of John in order to perceive him, which would solve the problem.

In section 2.1, I want to bolster this proposal by looking at the context of Olivi's remark. This will enable us to see something that has escaped scholarly attention so far, viz. that Olivi's critique of Bonaventure's account of angelic perception actually forced him to explicitly raise the problem himself. Moreover, a reconstruction of the context of Olivi's remark will also give us important information about Olivi's views on how perceptual states represent their objects, the second main issue of this paper. Thus, we will have to return to the context of Olivi's remark in section three as well.

2.1 Angelic Perception

²⁵ Perler, *Theorien*, 136-137.

²⁶ Cf. Silva and Toivanen, 'The Active Nature of the Soul', 276.

²⁷ Cf. *II Sent.* q. 72; III, 32; q. 58; II, 498 and q. 59; II, 543.

Angelic perception is a topic that may strike the modern reader as outlandish and "medieval indeed". Yet medieval discussions of angelic (cognitive) psychology are often very informative about their authors' views on human cognition: discussions of angelic psychology appear to have played a role analogous to that of thought-experiments in contemporary philosophy.²⁸

In question 36 of his *Summa*, Olivi asks what happens when the angel Gabriel sees John.²⁹ The first and easy part of the answer is that when Gabriel sees John, there occurs a representation of John in Gabriel's soul. In this respect, Gabriel's perception of John is not different from mine. The difficult part concerns how John gets represented in Gabriel's soul. Olivi begins his question 36 by discussing Bonaventure's view on this. According to Bonaventure, angels have an innate stock of general concepts. In order for Gabriel's soul to represent John, he has to make use of these general concepts. This happens as follows. First of all, Gabriel keeps in mind several of his innate general representations, like those of "man", "white", "tall" and "philosopher". While keeping these representations in mind all together, Gabriel turns (*convertere*) his mind to John: he "applies" his representations to John. Bonaventure often expresses this by saying that Gabriel turns his *aspectus* to John: Gabriel has to turn the look of his mind's eye to John in order to see him.³⁰ When Gabriel has done so, his general representations of 'man' and 'white' will have acquired a new, particular content: "this man, John" and "this white thing, John".

Iribarren and M. Lenz (Aldershot, 2008), 143-154, 144.

²⁸ D. Perler, 'Thought Experiments: the Methodological Function of Angels in late Medieval Epistemology', in *Angels in Medieval Philosophical Inquiry: their Function and Significance*, ed. I.

²⁹ For an overview of Olivi's writings on angelic psychology, see T. Suarez-Nani, 'Pierre de Jean Olivi et la Subjectivité Angelique', *AHDLMA* 70 (2003), 233-316, esp. 284-297.

³⁰ "Angelus sine conversione aliqua habet cognitionem loci, et cum convertit se supra locum, cognoscit omnes res quae sunt in loco, applicando species universales ad singularia et componendo". Bonaventure, *Liber II Sententiarum* (Florence, 1938), 112 (d. 3, p. 2, a. 2, q. 1). Cf. also "si ego habeo penes me speciem figurae, speciem hominis, speciem coloris et temporis, et componam ad invicem; sine nova receptione speciei cognoscam individuum in propria natura. (...) [Sed] angelus huiusmodi individua et singularia non cognoscit, nisi dirigat aspectum supra ipsum cognoscibile, et secundum illud quod est in re, ipse componat species in se". Ibid., 111. "[N]on sufficit habere species innatas, nisi aspectus angelicus convertatur". Ibid., 111. Also ibid., 112.

A modern comparison may help to clarify Bonaventure's position. When you want to study a sample by looking at it through a microscope, you first select the right sort of lens before you look through it. Once you look through the microscope, the sample will clearly shine forth in the lens. Likewise, when Gabriel wants to see John, he first selects the right sort of representations (the lens). In a second stage, he turns his *aspectus* to John with these representations in mind (looks through the lens at John). As a consequence, John will get represented by means of the selected representations (shine forth in the lens). Olivi summarizes this view as follows:

And thus the angel can in this way see the things and their individual features, because such representations can by composition and application be applied to this or that thing in such a way that they will properly and singularly represent them.³¹

In fact, there are many similarities between Bonaventure's account of angelic perception and Olivi's own views on human perceptual cognition. On Bonaventure's account, Gabriel can see John because John gets represented in Gabriel's soul. Likewise, I can consciously see John because there occurs a representation of John in my sensory soul. Gabriel acquires his perceptual representation of John by "turning his mind" (convertere) to John, whereas I acquire mine by turning (convertere) my perceptual power to John. Bonaventure refers to this as the application of Gabriel's mind to John. Likewise, Olivi said that my perceptual power must be turned or indeed "applied" to John. For Olivi, "applying one's mind to John" and "turning one's cognitive power to John" are paraphrases of "turning one's aspectus to John". In fact, this was precisely the term that Bonaventure himself often used for the conversion of an angel's mind to its object.

But in spite of the apparent similarity with his own theory of human perception, Olivi proceeds to launch fierce criticisms against Bonaventure's account of angelic perception. He points out that applying representations or turning its mind to a singular is not something that an angel does randomly. Rather, an angel will combine certain

³¹ "Et sic per hoc potest [angelus] res videre et earum particulares conditiones, quia huiusmodi species per compositionem et applicationem possunt huic vel illi rei sic applicari quod eas proprie et singulariter repraesentabunt". *II Sent.* q. 36; II, 629.

representations and turn his mind in a certain direction because he seeks to perceive a particular object rather than another: "these applications spring from the will that intends to see some determinate thing and at such a place; hence, angels will not ordinarily see any thing if they do not first have the intention to do so". But of course, one can only have a volition pertaining to John if one already has some conception of John in mind: "an angel cannot want something if he does not precognize (*praecogitat*) it". But this means that even before an angel could see John, the angel must already have a conception of the individual John: "angels can see no singular if they do not actually foreknow and do not already cognize it and its individual features". He ut then, where would such a conception come from? Few scholastics (if any) would grant that Gabriel had innate conceptions of individuals like John. So Gabriel's conception of John would have to be acquired at some point. Presumably, Gabriel's first perception of John would precisely be that point. But we have just seen that a John-conception is presupposed by, not begotten in, Gabriel's perception of John. Thus, it seems that Bonaventure's account puts the cart in front of the horse.

It is fair to ask whether, by launching this critique against a theory which is remarkably similar to his own, Olivi has not fallen in his own trap. In fact, he himself appears to suspect that this has happened. Having pointed out that on the "application-theory", an angel must already possess a conception of John before it could see him, he writes "[Perhaps] something similar can be said about us, because we do not see things before we direct our eyes to them". Just as Gabriel ought to already possess a conception of John before he could see John, we must already possess a conception of John before we can see him, precisely because just like Gabriel, we must turn our

³² "[I]llae applicationes specierum erunt a voluntate intendente talem rem determinate videre et in tali loco; ergo communiter nullam rem videbunt, nisi prius intenderent eam videre". *II Sent.* q. 36; I, 634.

³³ "[Angelus] velle autem hoc non potest, nisi hoc praecogitet". *II Sent.* q. 36; I, 631.

³⁴ "[A]ngeli nullam rem in particulari possint videre, nisi prius actu praesciant et praecogitent eam et eius particulares conditiones". *II Sent.* q. 36; I, 632. Similar critique was voiced by Aquinas (*II Sent.* d. 3, q. 3, a. 3c.), Peckham *Quodlibeta Quatuor*, ed. G. Etzkorn (Florence, 1989), 92 (Q. II, qq. 7-8), and Bonaventure himself (*II Sent.*, 110; d. 3 p. 2, a. 2 q. 1, arg. 4).

³⁵ "[Forsitan] dicatur quod simile poterit argui in nobis, quia nos non videmus res, nisi prius convertamus oculos nostros ad eas". *II Sent.* q. 36; I, 634.

aspectus to John in order to see him. This is of course the problem that was raised near the end of section two above.

Olivi thinks the comparison falls short, however:

But that the situation is not similar is evident. Because we can direct our eyes without determinately intending to see those things that then fall in our visual field. Thus we often direct our eyes, not intending to see this or that object, but just intending to see whatever presents itself to our gaze.³⁶

Thus, in order to see John, I do not have to direct my attentional spotlight to him in the same way as an archer aims his arrow at a target. The archer must have his target clearly in mind in order to direct his arrow at it, but I need not already have John in mind in order to perceive him. In order to perceive him, I need only direct my attentional spotlight to things in my environment, whatever they may turn out to be. In case John happens to be among these things, there will occur a perceptual representation of John that causes me to consciously see John. Generally speaking, for a perception of x to take place, the following two facts must obtain: (i) I attend to whatever might be around and (ii) x happens to be around. These two facts can obtain even if I have no conception or representation of x whatsoever. In a nutshell: Olivi was well aware that his theory of perception appeared to put the cart in front of the horse. He solved the problem by pointing out that, contrary to what allegedly holds for Bonaventure's angels, our attentional spotlights are often more like lamps illuminating whatever might be around than like searchlights directed at a specific target.

Of course, Olivi did not deny that, after we have seen something for the first time, we *can* sometimes employ our attentional spotlight as a very precisely directed searchlight. Suppose I am at a party where I know John (whom I have first seen some time ago) to be present as well. When I decide to look for him, I narrow the focus of my

³⁶ "[Q]uod hoc non sit simile patet: tum quia nos possumus convertere oculos absque hoc quod intenderimus determinate videre illas res quae tunc obiciuntur coram oculis nostris, sic enim frequenter oculos convertimus, non intendentes videre hoc vel illud, sed solum intendentes videre illa quae tunc nostris aspectibus obiciuntur". *II Sent.* q. 36; I, 634. Silva and Toivanen argue that this passage provided Olivi with a solution of the problem. See note 26 above.

attentional spotlight so that it targets John in particular. In more precise terms, I selectively attend to my environment in such a way that only those perceptible objects relevantly similar to John get to be actively processed by my sensory soul. Thus it comes about that I do not consciously perceive many things even in my direct vicinity: "when our interior intention is totally intent and directed to something, our particular senses do not perceive even their most plain and obvious objects". As Toivanen's detailed analysis has revealed, however, our attention is never really "totally" absorbed by one phenomenon. There always remains a weak general attention to other perceptible features of the environment. It is in virtue of this weak general attention that, however intent I am on finding John, I do take notice of, say, very loud noises (the alarm bell, but not my phone).³⁸

The ground covered so far yields the following picture of human perception according to Olivi. When your eyes are opened, *species in medio* impinge on the retina and the soul outwardly projects an attentional spotlight. This spotlight need not be directed at any specific object. Instead, it may have the function only of "illuminating" whatever object your direct environment may harbour. If John happens to be in your direct vicinity, he will be shined upon by your attentional spotlight. As a consequence, there will occur a perceptual representation of John in your sensory soul, which makes you actually see him. This can come about even though your attentional spotlight was not from the beginning employed as a searchlight particularly aimed at John. Hence, although Olivi certainly leans towards the activity-extreme of the Activity-Passivity axis, his views are not as philosophically problematic as has been feared.³⁹ Having established this, we can now address the second part of our task: to situate Olivi on the Causality-Similarity axis.

3 Olivi on the Similarity-Causality Axis

³⁷ "cum nostra interior intentio totaliter ad aliqua est intenta et conversa, tunc nostri sensus particulares etiam suis obiectis patuli et aperti nihil penitus de illis percipiunt". Olivi, *Quodlibeta Quinque*, ed. S. Defraia (Grottaferrata, 2002), 26 (Q. I, q. 7).

³⁸ Toivanen, Animal Consciousness, 109-120.

³⁹ Cf. Perler, *Theorien*, 137.

Thinkers such as William Crathorn believed that when you see John, John gets represented in the sensory soul by a likeness or similitude of John. 40 They clearly are on the similarity-side on the Similarity-Causality axis. Others, like Godfrey of Fontaines, held that my cognition (whether perceptual or otherwise) pertains to John because it was caused by John. 41 Indeed, Godfrey clearly was on the causality-side of our axis. Many philosophers incorporated both causal elements and similarity relationships in their accounts of representational content. Thus, Aquinas explained representational content in terms of similitude but worked with a notion of similitude that connotes causal relationships: he held that, whereas effects resemble their causes, the reverse need not hold. 42 Again, William of Ockham believed that, generally, our cognitions were likenesses of their objects. But he observed that a cognition that is similar to x will also be similar to any object y that is similar in all respects to x. Hence, similarity cannot account for the fact that I can engage in a cognition that pertains to x and x alone. Thus, Ockham felt that in order to account for singular cognitions, a causal component had to be added to the story as well. My current perception is of x and not of "x or any object y similar in all respects to x" because it was caused to be in the mind by x, rather than anything else. 43

Because of this causal element in his theory, Ockham has often been interpreted as an externalist about singular representational content.⁴⁴ According to externalists, the content of someone's representations is (at least partially) determined by the way he

⁴⁰ Cf. Pasnau, *Theories of Cognition*, 89-100.

⁴¹ Cf. Pini, 'Can God Create my Thoughts?', 41-42 and Côté, 'L'objet et la cause de la conaissance'.

⁴² Cf. Pasnau, *Theories of Cognition*, 106-107.

⁴³ Cf. C. Panaccio, 'Ockham's Externalism' in *Intentionality, Cognition and Representation in the Middle Ages*, ed. G. Klima (Bronx, forthcoming).

⁴⁴ E.g. P. King, 'Rethinking Representation in the Middle Ages' in *Representation and Objects of Thought in Medieval Philosophy*, ed. H. Lagerlund (Hampshire, 2007), 95-97 and Panaccio, 'Ockham's Externalism'. For a dissenting voice, see S. Brower-Toland, 'Intuition, Externalism and Direct Reference in Ockham', *History of Philosophy Quarterly* 24:4 (2007), 317-335.

relates to his environment.⁴⁵ It is possible that even if your and my sensory soul are in the exact same state, only mine represents John, because I am related to an environment that features John, whereas you are not. This is precisely what causal accounts of representational content say: even if your and my sensory soul are in the exact same state, yours cannot represent John, because it is not caused by John. Mine does, because it was caused by John.

To get a better grip of what externalism amounts to, consider the following thought-experiment (freely moulded after Ockham). 46 Suppose that I am currently perceiving John. Also suppose that God could open up my skull and directly look into my sensory soul. As I am engaged in a perceptual act, God would see some activity going on. But would he also see that this act represents John? According to externalists, he would not. In order to see that my act represents John, he would also have to investigate the way I relate to my environment. Again, this is precisely what causal theories predict. According to such theories, the content of my act is (partially or entirely) constituted by its causal relationship to John, which is itself external to the soul. Hence, since we are assuming that God is looking solely at what goes on in my soul, he cannot ascertain whether the soul-activity that he sees represents John rather than someone else.

Where should we locate Olivi on the Similarity-Causality axis? In general, Olivi states that "all cognition occurs by means of an actual cognition that is highly similar to the object and expressive of it". Since he explicitly states that perception "belongs to the genus of cognition", it seems we can take this to imply that the perception of John is "expressive" of John by being similar to him. Indeed, Olivi approvingly quotes Augustine to the effect that "the actual vision of the eye [is] a representation or similitude of the very object". Pasnau has challenged this kind of reading, however. According to Pasnau, Olivi held that cognitive representations of individuals owe their

⁴⁵ Cf. J. Lau, 'Externalism about Mental Content', in *The Stanford Encyclopedia of Philosophy*, ed. E. Zalta (Fall 2010 Edition).

⁴⁶ Cf. Ockham, Reportatio, in Opera Theologica V, ed. G. Gál, (New York, 1981), 378-9 (II, q. 26).

⁴⁷ "[O]mnis cognitio fit per actualem cognitionem obiecto simillimam eiusque expressivam". *II Sent.* q. 74; III, 130.

⁴⁸ II Sent. q. 58; II, 479: "de genere cognitionis".

⁴⁹ Cf. n. 9 above.

content to the causal relationship in which they stand to that individual: "for Olivi, it does seem to be the bare causal facts themselves that fix reference of a cognition to a particular object". Since all we ever perceive are singulars, this regards all perceptual representations in particular. Thus, when our perception pertains to an individual like John, our perceptual act does not represent John by being similar to John, but rather by being caused by John. Olivi would thus be on the causality-side of our axis.

If Pasnau is correct, then Olivi would have been one of the first authors to embrace externalism about representational content. Indeed, Pasnau thinks that Olivi "deserves considerable credit" for doing so.⁵² In what follows, I shall argue that this interpretation stands in need of correction, and I will develop an alternative to it.

3.1 Objects as Termini

Olivi's most explicit statement on representations that have individuals as their contents can be found in his question "whether bodies can act upon the soul":

An act of cognition represents the individual character and proper quality of its object (...) because it is terminated at the individual object, insofar as it is individual.⁵³

Pasnau takes this passage as evidence for his reading, commenting that "my visual content is of my car and not another identical-looking car, because it is my car that's in the proper causal relationship to my act of seeing".⁵⁴ Although this passage says nothing about causal relationships, it makes sense to frame it in such terms. Instead of saying that John is the terminus of my act, Olivi also says that John is the terminative cause (*causa*

⁵⁰ Pasnau, *Theories of Cognition*, 119.

⁵¹ Pasnau, *Theories of Cognition*, 119-120.

⁵² Pasnau, *Theories of Cognition*, 121.

⁵³ "Quod igitur actus iste repraesentet individualem rationem et proprietatem sui obiecti, (...) habet (...) ex hoc quod terminatur ad obiectum individuale, in quantum individuale". *II Sent.* q. 72; III, 37; translated in Pasnau, *Theories of Cognition*, 119

⁵⁴ Pasnau, *Theories of Cognition*, 120.

terminativa) of my act.⁵⁵ In order to understand what that means, we have to ask what it means to say that John is the terminus of my perceptual act. This will help us to locate Olivi on the Causality-Similarity axis.

One possibility is that John is the terminus of your perceptual act precisely insofar as he is the terminus of the *aspectus* that leads to that act. This appears to be the position of Pasnau, who reduces the terminative causality of John to the fact that John terminates my *aspectus*:

The external object is merely a kind of final cause or, more precisely, a "terminative cause". It is merely by being the object of the cognitive power's attention that the external object plays a role in cognition.⁵⁶

On this view, the sentence "an act of cognition represents the individual (...) because it terminated at the object" would mean: "an act of cognition represents the individual because its *aspectus* terminated at the object". If this were Olivi's position, he would hold that God cannot see who you are currently perceiving by looking into your sensory soul. Rather, God would have to follow the rays of your attentional spotlight in order to find out on whom they fall. That is, he would have to look at factors external to your sensory soul. On this reading, Olivi's view would clearly be a branch of externalism. Moreover, the notion of similarity would play no role in Olivi's account of singular representational content: on this interpretation we should not place him on the similarity-side of our axis.

That this cannot be Olivi's theory of perceptual representation, however, can be gleaned from his discussion of angelic perception (section 3.2) and a closer look at what it means for an act to be terminated in an individual object (section 3.3). In his critique of Bonaventure's account of angelic perception, Olivi makes it clear that the fact that, say, John terminates the *aspectus* of the angel Gabriel cannot be constitutive of representational content pertaining to John. This strongly suggests that Olivi cannot go on to say that the fact that John terminates my *aspectus* is constitutive of representational

⁵⁵ II Sent. q. 72; III, 36

⁵⁶ Pasnau, *Theories of Cognition*, 171.

content pertaining to John in my soul. In section 3.3, we shall see that for Olivi, the termination of a perceptual act cannot be reduced to the termination of an *aspectus*. Consequently, when he says that the termination of a perceptual act in John makes the act representative of John, he is not saying that the fact that John was the end-point of the *aspectus* leading to that act makes the act representative of John.

3.2 Angelic Perception Revisited

Bonaventure had said that angels were created with an innate stock of general representations. When the angel Gabriel would see John, Gabriel's general representation of, say, "man" would be enriched with the content "this man, John". As we have seen, Bonaventure accounted for this enrichment as follows. In a first stage, Gabriel jointly keeps his representations of (e.g.) "man" and "white" in mind. He selects as it were the lens through which to look at John. In a second stage, keeping these representations in mind, he turns his mind to John. He looks as it were with his mind's eye at John through the lens. In this way, Gabriel's representations of "man" and "white" would acquire the contents "this man" and "this white thing".⁵⁷

But Olivi finds it difficult to see how that would work. The first element of Bonaventure's explanation can hardly account for a representation of the individual John, because "universal representations cannot represent something individual, no matter how you combine them". 58 Hence, the second element from Bonaventure's account would have to do the work. Somehow, the fact that Gabriel's mind is turned to John must enrich Gabriel's innate representation "man" with the individual content "this man".

But Olivi thinks that it could only do so by triggering a change in the internal essence of the representation "man". The general representation "man" can only acquire the content "this man, John" if a new "reason (*ratio*) or similitude" is brought forth in it. I assume that for the general representation to receive such a new "reason or similitude" is for it to undergo a change in its internal structure or configuration. After all,

⁵⁷ Cf. *II Sent.* q. 36; II, 629.

⁵⁸ "[E]x speciebus universalium, quantumcunque compositis, non potest repraesentari nisi universale". *II Sent.* q. 36; I, 630.

Olivi develops his view that in order for a representation to acquire new content, it must receive a new "reason or similitude" in opposition to those who hold that new content can be acquired "without any real difference" made to the representation and "without a real addition or augmentation" to it:⁵⁹

either such a conversion and application yields a variation in the essence of the representations or not. If not, then they are not more apt to represent the thing, nor are they more capable of representing its particular features than before. (...) And no variation will suffice for seeing these things if it does not bring forth in the representations a *ratio* or similitude that properly and distinctively represents the individuality of the things.⁶⁰

The turning of Gabriel's mental eye to John is not by itself constitutive of representational content pertaining to John. It can contribute to a John-representation only if it triggers the formation of something else that does the actual representing: a new configuration of Gabriel's general representation. Such a new internal structure of Gabriel's representation of "man" would be a "reason or similitude that properly and distinctively represents the individuality of John.

At this point, let me recall that the notion of an angelic turning of the mind to John looked uncannily similar to Olivi's concept of the turning of a cognitive power to John. Indeed, Olivi had described both turnings as a *conversio* of the soul to John, or as the soul applying itself to John. Moreover, Bonaventure had used the term *aspectus* for the conversion of Gabriel's mind to the object it seeks to cognize, just as Olivi had said that in order for me to see John, my perceptual power must turn itself to John by directing its *aspectus* to him.

⁵⁹ "[S]ine omni reali differentia et sine reali additione vel augmentatione". *II Sent.* q. 24; I, 619. Cf. q. 36; I, 632.

^{60 &}quot;[A]ut ex huiusmodi conversione et applicatione fit aliqua variatio in essentia specierum aut non. (...) Si non: ergo non per hoc sunt magis appropriatae ipsi rei nec magis potentes repraesentare particulares conditiones ipsius quam prius. Et ultra hoc oportebit dicere unde causatur huiusmodi variatio essentiae earum. Nulla etiam variatio earum ad res videndas sufficiet, nisi ingignatur eis aliqua ratio seu similitudo repraesentans proprie et distincte particularitatem rerum". *II Sent.* q. 36; I, 632. Also q. 33; I, 621.

But if the notion of an angelic turning of the mind to John is not different from that of the turning of a human *aspectus* to John, then what Olivi is really saying to Bonaventure is this: the turning of Gabriel's *aspectus* to John can only beget Gabriel a representation of John by triggering the formation of something else, namely, a "reason or similitude which properly and distinctively represents the individuality of" John. The turning of the *aspectus* to John could play a role only in leading to the thing that does the actual representing: the "reason or similitude". It is not itself constitutive of representational content.

This gives us information about Olivi's view on human perceptual representation: if he denies to Bonaventure that John's termination of Gabriel's *aspectus* can constitute representational content, he cannot proceed to say that the fact that John culminated the *aspectus* that led to my current perception of him is constitutive of the act's representational content. That would be both inconsistent and unfair. Rather, Olivi's reaction to Bonaventure suggests that for Olivi, representational content is determined by a certain configuration of the soul in virtue of which it is a similitude pertaining to John. But how can this be squared with the passage quoted at the beginning of 3.1, where Olivi said that "an act of cognition represents the individual (...) because it is terminated at the individual object"? As we have seen, on one reading this means precisely that an act of cognition represents the individual because its *aspectus* terminated at that individual. In 3.3, however, I argue that this is not a correct reading. A closer look at what Olivi does mean when he says that objects are the termini of our perceptual acts will corroborate the hypothesis that he accounts for singular representational content in terms of mental "configurations" and "similitudes".

3.3 Termination and Assimilation

It is not quite correct to say that John is the terminus of my perceptual act insofar as he is the terminus of the preceding *aspectus*, as Pasnau appeared to do. For Olivi, the termination of my *aspectus* and the termination of the ensuing act are two different terminations, as can be seen from the following sentences:

The visual power cannot generate a visual act if it is not the case that both its *aspectus* and its act are terminated (...) in the power's object.⁶¹

The object (...) is required as the terminative terminus of both the *aspectus* (...) and the very act.⁶²

The object, insofar as it terminates the *aspectus* and the acts of the powers, contributes to their specific production.⁶³

Or again: "objects do not cooperate except as termini that terminate, first, the *aspectus* of a power and subsequently its cognitive act". But what does it mean to say that John is the terminus of my perceptual act, if it does not just mean that he is the end-point of the *aspectus* preceding it?

Olivi suggests that for John to be the terminus of my perceptual act is for John to be mimicked by my act. Indeed, "the act is assimilated to the object as if to its intimate terminus".⁶⁵ He compares the way in which objects terminate our perceptual acts to the way in which a beam of light adapts itself to the object on which it falls:

Hence, the act is assimilated to the object as if to its intimate terminus. (...) And one can give some example of this by referring to sunlight (...). Because when the sun illuminates a round or triangular vase, the light which is in the vase has a round or triangular figure.

^{61 &}quot;[V]irtus visiva non poterit generare actum videndi, nisi suus aspectus et etiam suus actus sit terminatus (...) in suo obiecto". *II Sent.* q. 58; II, 405.

⁶² "[O]biectum (...) exigitur ut terminus terminativus tam aspectus (...) quam ipsius actus". *II Sent.* q. 58; II, 415.

^{63 &}quot;[O]biectum, in quantum terminat aspectus et actus potentiarum, cooperetur specificae productioni eorum". *II Sent.* q. 72; III, 35.

⁶⁴ "[O]biecta nihil ibi cooperantur nisi sub ratione termini terminantis primo aspectum potentiae et tandem eius cognitivum actum". *II Sent.* q. 61; II, 577.

⁶⁵ II Sent. q. 58; II, 414. "Assimilatur (...) actus obiecto tamquam suo intimo termino".

It is not the case that the vase itself has effectively produced that figure in the light; it did so only terminatively.⁶⁶

This comparison makes clear why Olivi should say that the termination of the act follows upon the termination of the aspectus. Just as a beam can adapt itself to the glass only if, say, the torch from which it issues was directed to the glass, my perceptual act can terminate in John (mimic John) only once the rays of my attentional spotlight have fallen on him: once he has terminated my aspectus. What the passage does not make clear, however, is how, causally speaking, the fact that John has terminated my aspectus leads to a mental act moulded after John. Indeed, Olivi's claim (made one page after the passage just quoted) that when our aspectus terminate in different objects, our powers' acts vary accordingly calls for an explanation.⁶⁷ One suggestion is that, just as bats locate insects by sending out squeaks that reverberate back to them from their prey, the attentional spotlight that has fallen on John reflects back to my sensory soul.⁶⁸ But this explanation leans heavily on an analogy between beams of light and aspectus. That weakens its explanatory appeal, as Olivi had made it clear the direction of an aspectus was nothing like a real emission of rays from subject to object.⁶⁹ As it is, I do not find a clear explanation in Olivi of the causal processes responsible for the dependence of our mental acts' configuration on the terminations of the preceding *aspectus*.

Be that as it may, the ground covered so far does suggest that François-Xavier Putallaz is right when he describes the terminative causality that an object exercises upon the act by saying that "the mind models itself on the object" and that the power "freely assimilates itself to its terminus". ⁷⁰ Indirect evidence for this reading comes from the

⁶⁶ "Assimilatur igitur actus obiecto tamquam suo intimo termino (...). Et potest huius dari qualecunque exemplum in lumine solis (...). Cum enim sol illuminat unum vas rotundum aut triangulare, lumen quod est in vase habet figuram rotundam vel triangularem, non quod ipsum vas effective produxerit in eo hunc figuram, sed solum terminative". *II Sent.* q. 58; II, 414-415.

^{67 &}quot;secundum quod diversificantur specifice sui aspectus, sic et sui actus." II Sent. q. 58; II, 416.

⁶⁸ This suggestion is briefly considered in Pasnau, *Theories of Cognition*, 172.

⁶⁹ See n. 19 above and Pasnau, *Theories of Cognition*, 172-173.

⁷⁰ F.-X. Putallaz, 'Olivi', in A Companion to Philosophy in the Middle Ages, ed. J. Gracia and T. Noone

way in which Francis of Marchia elaborates on Olivi's idea that external objects are the terminative causes of perceptual acts.⁷¹ Like Olivi, he believes that "the subject cognized does not effectively contribute to the generation of its conception in the intellect, but only terminatively".⁷² He clarifies his point as follows:

I say that such an assimilation is equivocal and that it need not be accounted for by saying that the object is the effective cause of the act that is similar to it, just as the similitude of an image made by a painter need not be accounted for by saying that the object that is depicted in the image is either the total or partial efficient cause of the image.⁷³

Bearing this in mind, let us return to the passage that opened section 3.1:

An act of cognition represents the individual character and proper quality of its object (...) because it is terminated at the individual object, insofar as it is individual.

If for an act to terminate in an object is for the act to mimic or assimilate itself to the object, the sentence "an act of cognition represents the individual (...) because it is terminated at the individual object" must be read as: "an act of cognition represents the individual because it mimics and assimilates itself to the individual". This dovetails nicely with how the passage proceeds: "and therefore it belongs to the essence of such an act that it is a proper similitude of this individual, in so far as it is this individual, rather

(London, 2008), 521 and idem., *Insolente Liberté. Controverses et condamnations au XIIIe siècle* (Fribourg, 1996), 146.

⁷¹ Cf. T. Suarez-Nani, 'Un Modello Alternativo di Conoscenza? Francesco de Marchia e la spazializzazione del rapporto conoscitivo', *Freiburger Zeitschrift für Philosophie und Theologie* 53:1 (2006), 345-366, 363-364

⁷² "[S]ubiectum cognitum [non] cogeneret in intellectu effective notitiam sui, sed tantum terminative". Quoted in Suarez-Nani, 'Un Modello Alternativo', 363.

⁷³ "Dico quod assimilatio huiusmodi est aequivoca nec arguit obiectum esse causam effectivam actus sibi similis, sicut nec similitudo ymaginis factae a pictore arguit illud obiectum, ad cuius similitudinem ymago facta est a pictore, esse causam effectivam totalem ymaginis nec etiam partialem". See Suarez-Nani, 'Un Modello Alternativo', 364.

than a similarity and assimilation are central to his account of representational content after all.

This conclusion can be supported by looking at the following passage from question 74 of the *Summa*:

A power cannot all by itself express and represent its objects, because then its essence would, taken in itself, be the proper and express similitude of all the objects it can possibly cognize or think of. Which is impossible. Therefore, it is necessary that either an object presents itself to the power or that the object is represented to it in an imagination, so that the cognitive act (...) is configured or assimilated to the object or its image, which configuration is the specific ratio of the very act.⁷⁵

The first sentence reveals that for an act to represent its object is for the act to be a "similitude" of the object. Since the soul is not all by itself a similitude of, say, John, it has to become one in order to represent John. It does so by "configurating or assimilating" its activity to John when he is present. Apparently, for an act to be a similitude of John is for it to be configured in accordance with John. When the act has configured itself according to John so as to become his similitude, it "expresses and represents" John. The last clause ("which configuration…very act") claims that a mental occurrence is an act of a certain kind in virtue of the way it is configured. In other words: the fact that my current act is a John-perception is due to the specific configuration of my current mental act.

This passage is in line with Olivi's earlier claim that acts represent their objects by being configurated to them:

⁷⁴ "ideo de essentia talis actus est quod sit propria similitudo huius individui, in quantum huius, et quod non sit similitudo aliorum individuorum eiusdem speciei". *II Sent.* q. 72; III, 37.

⁷⁵ "[P]otentia non habet ex se sola exprimere et repraesentare sua obiecta, quia tunc sua essentia absolute sumpta esset propria et expressa similitudo omnium obiectorum ab ea possibilium cognosci vel cogitari. Quod est impossibile. Ergo oportet quod aut obiectum se praesentet ei aut quod in aliqua imaginatione ei repraesentetur, ita quod actus cognoscendi ipsi obiecto (...) configuretur seu assimiletur ei, quae quidem configuratio est specifica ratio ipsius actus". *II Sent.* q. 74; III, 115.

Also, the object itself presents or exhibits itself as present to the cognitive attention, and through an act configured to it there occurs a kind of representation of it.⁷⁶

In sum, for a perceptual act to terminate in John is for the act to assimilate itself to John. Olivi makes it clear that for an act to assimilate itself to John is for the act to configure itself in accordance with John. When an act so configures itself as to become a similitude of John, it becomes representative of John. Given the central role which Olivi assigns to the notion of similitude in his account of perceptual and other singular representation, it seems he should be positioned on the similarity-side of the Similarity-Causality axis. As we had already positioned him on the activity-side on the Activity-Passivity axis, the ground covered so far suggests that Olivi has an AS-account of perceptual representation.

This claim immediately raises several questions, however. (1) What does this reading mean for Pasnau's claim that Olivi endorsed externalism about singular mental content? (2) Does Olivi's similarity-theory not entail that mental acts must somehow share a property with the objects they represent? (3) Can Olivi's similarity-theory of perceptual representation account for the fact that my current perception pertains to x, rather than to "x, or any object y similar to x in all respects"? (After all, one of the charms of causal theories seemed to be that they are better equipped to explain this phenomenon than similarity-theories.) A closer look at what Olivi means when he says that our perceptual acts are similar to their objects will help us to address these questions.

3.4 Representation and Similarity

When a chameleon assimilates itself to the green leaves in its environment so as to become similar to them, the chameleon itself becomes green. The similarity between the chameleon and the leaves consists in the fact that they share a property: greenness.

⁷⁶ *II Sent.* q. 72; III, 36. Cf. n. 20 above.

Indeed, the concept of similarity has often been reduced to that of sharing a property.⁷⁷ For present purposes, I take it that this captures the gist of our ordinary conception of similarity. What would be the answers to the three questions formulated at the end of 3.3 if this were also Olivi's understanding of similarity?

As regards (3), Olivi's account of perceptual representation would face a problem in the case of a representation that is of one out of two qualitatively identical entities, like two perfectly similar eggs. After all, if my current perception shared any property F with one egg, it would also share F with the other. Hence, it would represent the one as much as the other. Regarding (2), if Olivi were working with this concept of similarity when he says that for my perception to represent John is for it to be so configured as to be similar to John, his theory of perception would indeed imply that that an immaterial occurrence in my soul must somehow share a property with the object it represents. This would make his theory highly problematic. After all, it is mysterious how an act of my soul could ever instantiate the properties that John exhibits, such as whiteness, humanity, or tallness.

As to (1), if property sharing is at stake when Olivi says that for my perception to represent John is for it to be so configured as to be similar to John, he would be an internalist about perceptual representation. Indeed, according to Robert Cummins, theories according to which representational content is determined by similarity understood as property sharing are varieties of internalism. This seems correct. Suppose that my perceptual act represents John in virtue of the similarity it bears to John. More precisely, suppose that my act represents John because it instantiates a set of properties abbreviated as F - that John also exhibits. Surely, my act can do so independently of the world which I inhabit and the environment to which I relate. In other words, even if you and I inhabit two radically different environments, our sensory souls can both represent John, as long as they are both so configured that they exhibit F. On this view, your soul can represent John, even if you have always lived on another planet than John. It is a consequence of this position that if God wanted to know whether "John" is the content

⁷⁷ Cf. Aquinas, *Quaestiones Disputatae de Veritate* q. 8, a. 8c; D. Armstrong, *Universals* (Boulder, 1989),
44; R. Cummins, 'Representation' in *A Companion to Epistemology*, ed. J. Dancy, E. Sosa (London, 2010),
700.

⁷⁸ Cummins, 'Representation', 701.

of my current perception, it would suffice for him to look into my soul and verify whether its perceptual act exhibits F. He would not have to investigate how I relate to my external environment.

But Olivi is not working with the ordinary concept of similarity. Several passages from his *Summa* reveal that he was working with a rather special notion of similarity. This will have repercussions for how we must answer the three questions individuated above. The difference between Olivi's concept of similarity and the notion of similarity as property sharing comes to the fore in two important passages from the *Summa*, to which I now turn.

The first regards the assumption, commonly made by scholastic thinkers, that not all faculties are capable of cognitively engaging with all kinds of objects. For instance, Aquinas thought that the senses and the imagination can represent only singular objects, whereas it is a prerogative of the intellect to represent universals. This is because there is a proportion between the senses and singulars on the one hand, and the intellect and universals on the other. Without a proportion between a faculty and a certain kind of object, the faculty cannot represent that species of objects. This proportion was often taken to be a kind of similitude. For instance, Bonaventure wrote that a cognitive power had to be proportionate to its objects "by assimilation" to its object. Thus, the soul would be proportionate to God insofar as it was an "image and similitude of God".⁷⁹ Likewise, Matthew of Aquasparta had argued that the proportion required between a cognizer and its object was a proportion "of convenience and assimilation".⁸⁰ On other occasions, he appeared to use "similitude" and "proportion" as if they were synonyms.⁸¹

[&]quot;'Ad [apprehensionem] requiritur proportio convenientiae; et talis est in anima respectu Dei, quia 'quodam modo est anima omnia', per assimilationem ad omnia (...) et maxime est capax Dei per assimilationem, quia est imago et similitudo Dei". *Liber I Sententiarum* (Florence, 1882), 69 (d. 3, p. 1, a. 1, q. 1).

^{80 &}quot;[I]nter cognoscentem et cognitum oportet esse proportionem (...), non proportionem univocationis (...) sed ordini et habitudinis convenientiae et assimilationis". *Quaestiones Disputatae de Anima Separata*, de *Anima Beata de Ieiunio et de Legibus* (Florence, 1959), 335 ('Quaestiones de Anima Beata', q. 7, ad 9).

⁸¹ Cf. Queastiones de Anima Separata, 359 ('Quaestiones de Anima Beata', q. 8, ad 9). Also Quaestiones Disputatae de Fide et de Cognitione, 260 ('De Cognitione', q. 3). Cf. also Aquinas, who in a non-cognitive

In question 33, Olivi discusses an argument that applies this view to angelic cognition. The argument runs as follows: in order for a power to engage in acts that are about universals, the power must itself be universal. But the acts of the angelic intellect are about universals. Therefore, the angelic intellect must itself be universal.⁸² In this argument, for one thing to be proportionate to another is for the two objects to share a property, viz. universality. Olivi replies as follows:

When it is said that a power is proportioned to the object, this does not mean that it has the same nature or properties as the object, because we manifestly experience the contrary. (...) What it does mean, therefore, is that the power is thus adapted and coordinated to the object in some determinate way, which is such that according to it, the power is fit to apprehend the object.⁸³

Although there must be some proportion between a power and its object, it is not necessary that the power and its object literally share a property like universality. In order for a power to engage in acts about - and thus to represent - a certain kind of objects, the power need not be similar to these objects in the ordinary sense of the word. It is sufficient that the proportion that obtains between a power and certain objects is such that in virtue of it, the power can engage in acts about these objects. In order for the power to represent, say, universals, it is sufficient that it stands in such a proportion to universals that the power is fit to represent them.

Since the concept of proportion was often understood as a kind of similarity, Olivi's reply gives us an indication about what he means when he says that in order for

context juxtaposed the notions of 'proportion' and 'assimilation' as follows: "luna, quae est infima inter corpora caelestia, proportionatur terrae, et assimilatur quodammodo naturae ipsius". De Caelo II, l. 12, n. 9.

^{82 &}quot;[P]otentia enim et suum obiectum sunt sibi invicem proportionata; sed obiectum intellectus angelici est universale non solum secundum intentionem, sed etiam secundum rem, quia Deus qui est summe universalis est eius obiectum; ergo potentia intellectus angelici est universalis". II Sent. q. 33; I, 592.

^{83 &}quot;[Q]uando dicitur quod potentia proportionatur obiecto, non est sensus quod habeat eandem naturam vel proprietates quas habet obiectum (...). Sensus igitur est, quod oportet potentiam esse coaptatam et coordinatam ad obiectum sub aliquo certo modo et tali secundum quem sit nata apprehendere ipsum". II Sent. q. 33; I, 606. Cf. Hoeres, 'Der Begriff der Intentionaliät bei Olivi', Scholastik 36 (1961), 23-48, 42.

my act to represent an object, it must be so configured to the object as to be its similitude. Olivi's reply suggests that the act need not be so configured as to acquire a property that it shares with the object. Rather, it must be configured in some other, special way, in virtue of which it becomes representative of the object. The passage to which we now turn confirms this.

There, Olivi discusses the assumption, made by some of his opponents, that "every *species* that represents extended and locally situated objects is itself extended and locally situated, because entities must be represented by something similar to them, and that things cannot be represented by something very much unlike themselves".⁸⁴ This assumption, Olivi thinks, has little in favour of it. For one thing, it would imply that God's mind, which is of course supremely immaterial and universal, could never represent material singulars. But if this assumption leads to absurdities, what should be put in its place? Olivi limits himself to saying the following:

even they must hold that the objects that we know by our intellect, as well as those that we sense by means of our senses are represented to us by things that are not similar to those objects in their being (*dissimile in essendo*), but similar in expressing and representing them (*simile in exprimendo et repraesentando*).⁸⁵

Two red surfaces are "similar in their being" insofar as they both share the accidental property of being red. But mental acts like perceptions and other cognitions do not represent their objects in virtue of this kind of similarity. Rather, they represent in virtue of what Olivi calls "similarity in representing". In one way, this is a tantalizing result, for nowhere does Olivi spell out clearly what it takes for a mental act to be similar in representing to something. On the basis of the ground covered in sections 3.3 and 3.4, all we can say about the concept of similarity in representing is the following. (a) When a

⁸⁴ "[P]raesupponunt quod scilicet omnis species repraesentans extensa et situalia est extensa et situalis, pro eo quod simile oportet repraesentari per simile et non potest per dissimile et maxime disimillimum". *II Sent.* q. 67; II, 617.

⁸⁵ "Et certe ipsimet compelluntur tenere quod per dissimile in essendo, simile tamen in exprimendo et repraesentando repraesentantur nobis non solum ea quae per intellectum scimus, sed et ea quae sensibus nostris sentimus". *II Sent.* q. 67; II, 618.

mental act is similar in representing to John, it is configured in a certain way. (b) It is in virtue of this configuration that the act represents John, rather than something else. (c) The similarity in representing that my act bears to John cannot be reduced to property sharing. Olivi does not give a positive account of to what it can be reduced. At this point, we can easily imagine a critic according to whom what Olivi tells us about perceptual representation is way too meager. This critic might say that Olivi's framework is "a skeleton begging for flesh on the bones" indeed. To such an hypothetical critic, I would answer that, firstly, Olivi's framework is sufficiently informative to satisfactorily answer two of the three questions listed above and that, secondly, what Olivi does say is enough to distance himself from some of his most eminent contemporaries.

Question (2) was whether Olivi's similarity-theory does not commit him to the implausible view that an act of my immaterial soul can share a property with a person of flesh and blood such as John. We can easily see that the answer to this question is negative. On Olivi's account of perceptual representation, perceptual acts must be similar in representing to their objects. And similarity in representing cannot be reduced to property sharing.

Question (3) asked whether Olivi's similarity approach could account for the representation of one out of two objects that are similar in all respects. Frankly, I do not see that Olivi has a clear story to tell about this phenomenon. In the absence of a fully blown account of similarity in representing, I see no obvious reason why an act that is similar in representing to *x* should not also be similar in representing to an object *y* that is similar to *x* in all respects. Perhaps this problem about singular representation was not at the forefront of Olivi's mind. The fact of the matter is that he was happy to speak of "a proper similitude of this individual, in so far as it is this individual, rather than a similitude of another individual of the same species" (cf. note 74 above). It is doubtful whether Ockham, with his sensibility to the pitfalls of similarity-theories of singular representation, would have agreed with Olivi that there can be such a thing.

⁸⁶ Which does not imply that Olivi thinks that it *cannot* be reduced to something else. Indeed, perhaps God (but not Olivi) could spell out very precisely what properties of my current act's configuration make it a representation of John rather than anything else.

⁸⁷ Cf. K. Tachau, Vision and Certitude in the Age of Ockham (Leiden, 1988), 48-49.

Question (1) asked what Olivi's endorsement of a similarity account of perceptual representation means for his alleged externalism. We now see that Olivi's writings on perception express a clearly internalist commitment. Olivi thinks that for my current cognitive act to represent John is for it to be configured in some special way. In other words, for my soul to represent John is for it to be in a certain internal state. This means that if your and my sensory soul are in the exact same state, they would represent the exact same thing. Even if you and I have always inhabited two entirely different planets, our sensory souls will represent the same individual if the acts of our souls happen to be configured in the same way. In other words, the representational content of our souls is independent of how we relate to our external environments. Olivi's position allows that God can read off whether "John" is the content of my current perceptual act: in order to do so, God simply has to verify whether my sensory soul is structured or configured in a determinate way. This is a substantial view in the context of thirteenth-century philosophical and theological debate. It clearly distances Olivi from philosophers who, like Ockham, were prone to invoke causal elements in their explanation of singular mental content. Moreover, we have seen that a prominent member of Olivi's own order, Bonaventure, wanted to say that angelic representations could acquire new content without being configured in a new way, that is, without undergoing a change in their internal essence. By making representational content ultimately a matter of the way in which the soul is configured, Olivi provides a counterweight to this kind of proposal.

4 Conclusion

I have argued that Olivi's theory of perception is of the *Activity-Similarity*-variety. It is clear that Olivi is on the activity-side of the Activity-Passivity axis. Moreover, we have seen that despite its heavy emphasis on the activity of the sensory soul in the generation of perceptual representation, Olivi's theory can well handle a problem that was raised for it by Dominik Perler. Further, I have argued that Olivi is on the similarity-side of the Similarity-Causality axis rather than on the causality-side, as Pasnau has suggested. Perceptual acts represent by assimilating or configuring themselves according to their

objects, so as to become the similitudes of the latter. This makes Olivi an internalist about representational content.

The concept of similarity at work in Olivi's writings on perceptual representation is a rather special one, and goes by the name of similarity in representing. Olivi does not offer a fully blown account of what it takes for something to be similar in representing to another. All he tells us is that for a mental act to be similar in representing to its object is not for the act and its object to share a property. This suggests that when medieval thinkers say that mental occurrences are the similitudes of the objects that they represent, we should be careful not to automatically read our own concept of similitude into their claims. Indeed, I suspect that Olivi was not the only philosopher to employ a technical notion of similitude in cognitive contexts. Of course, this is not the place to offer an extensive discussion of the notion of similitude at play in the works of, say, Peckham, Aquasparta, Aquinas or Crathorn. Nevertheless, I suggest that a comparative study of the way in which these thinkers used the concept of similarity in psychological contexts will deepen our understanding of scholastic cognitive psychology. Moreover, such a study is likely to warn us that what seem to be familiar concepts may be interestingly different notions in the hands of the great thinkers of the middle ages.⁸⁸

⁸⁸ I would like to thank two anonymous referees for their comments on an earlier version of this paper.