Some Aspects of the Notion of Intentional Existence at Paris, 1250-1320

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Summary: The notions of intention and intentionality play a role in both medieval and modern philosophy, but the relationship of modern to medieval discussions has remained obscure. By examining the use of the terms 'intention' and 'intentional existence' in a group of texts by such authors as Roger Bacon, John Pecham, Matthew of Aquasparta, and John Duns Scotus, it is shown that the terms had a variety of meanings in the Middle Ages. In particular intentions could be both extraand intra-mental. The article concludes with a discussion of Peter Auriol, who restricted intentions to the purely mental realm.

Often, when an historian of medieval philosophy undertakes to explain the intricacies of the notion of "intentions" and "intentional existence" to non-medievalist philosophy colleagues, they are likely to assume that these ought to relate somehow to the modern philosophical notion of intentionality. Yet that has generally not been the assumption of medievalists, although, as Pinborg noticed, two Italian scholars, Preziosi and Vanni Rovighi, had associated this terminology in the texts of Pierre Auriol to that of Husserl. Given the tradition of research into medieval treatments of intentions at the Institut for Græsk og Latin, it is appropriate to delve into this issue again. Of course, there is no single modern understanding of intentionality as elaborated, for instance, in the works of Brentano, Husserl, and Frege; for our purposes, it may suffice to consider a couple of accessible introductions to the topic that are relevant to an assessment of any medieval notions behind the nineteenth-century development of 'intentionality' as a technical term. In the introduction to an important collection of articles on Husserl and Intentionality, Hubert Drevfus credits Føllesdal with having seen "what Husserl considered to be his greatest achievement:"

A general theory of the contents of intentional states which accounted for the directedness of all mental activity. As Føllesdal explains more fully ... the phe-

¹ See especially: Preziosi 1950; idem 1968; Vanni-Rovighi 1960.

nomenological reduction is Husserl's way of describing the turning of attention away from both objects in the world and psychological activity to the mental contents which make possible the reference of each type of mental state to each type of object Husserl has finally begun to be recognized as the precursor of current interest in intentionality – the first to have a general theory of the role of mental representations in the philosophy of language and mind.²

These mental representations, as mental "contents," are not on Husserl's view reducible to mental acts. As Husserl saw, "since numerically different mental states can have the same content, the content of the act cannot be identical with the specific occurring act but must be an abstraction of some sort."³

The distinction between acts and their contents, at least, does seem to be very much at issue in the debates among Auriol, Hervaeus Natalis, and Radulphus Brito on the one hand and, on the other, between Ockham and Chatton. So at that level alone we should hesitate to label Husserl as "the first" without restriction. The second accessible source which we may consult is Føllesdal himself, who stresses Brentano's role in his "Brentano and Husserl on Intentional Objects and Perception:"

Brentano ... held that intentionality is characterized by a certain kind of directedness In his early writings Brentano simply said that the directedness is characterized by there being some object which is always there, which the act is directed toward. Brentano's phrase is that the object 'intentionally inexists' in our act One seems immediately faced with a dilemma: on the one hand one might try to emphasize the fact that there is always some object there, and then the problem is that if this is going to be the case, that object has to be a rather watered down kind of object. It is something that in a certain way exists only in our consciousness. This also was suggested by the phrase 'intentional inexistence' [However,] there are several letters from Brentano to various of his students in which he complains bitterly that people have taken him to hold that the intentional object is some kind of object in our mind Brentano ... goes on to insist that the object is a real full-fledged physical object. But of course that gives rise to other difficulties.⁵

Some difficulties were debated by medieval authors, to whom we may now turn. By the outset of the fourteenth century, theologians teaching at Paris recognized that the terms "intention" and

² Dreyfus 1982: 2.

³ Dreyfus 1982: 3.

⁴ Pinborg 1974; developed in Tachau 1988: 148-53, 186-88.

⁵ Føllesdal 1982: 31-32.

"intentional being" had multifarious and hence ambiguous uses. So, for instance, at distinction 13 of book 2 of Lombard's *Sentences*, addressing the question "whether luminosity (*lumen*)," which multiplies through such media as air or water "is the proper sensible species of the corporeal light [source] (*lux*)", John Duns Scotus faced the usual task of explaining the ontology of transmitted luminosity in a transparent medium. The list of Parisian scholars from 1250-1320 who treated the nature of light at this juncture in their *Sentences* lectures would include, among others, Scotus's confrères Bonaventure, Pierre Auriol, and Gerard Odonis; as well as the Dominican Durand of Saint-Pourçain. Scotus's view was that luminosity has real but intentional being; and, to help his audience at Paris grasp the notion of *esse intentionale* at issue, Scotus set out the following uses of the term '*intentio*:'

It must be recognized that the noun 'intention' is equivocal. [Used] one way, an act of the will is called an 'intention.' In a second way, it [is used for] the formal reason (ratio) of a thing, [as when it is said that] the intention of a thing from which its genus is accepted, differs from the intention from which the thing's [specific] difference (differentia) is accepted. In a third way, a concept is said [to be an intention]. In the fourth way, what '[in]tends' (ratio tendendi) toward the object is called [an intention], as a similitude is said to be the 'reason for tending' (ratio tendendi) toward that thing of which it is a similitude.¹¹

⁶ Duns Scotus, *Rep. Sent.* 2.13, "Utrum lumen sit propria species sensibilis lucis corporalis," in McCarthy 1976: 37-44. For the title of Scotus's treatment of this topic in his *Ordinatio* (also edited by McCarthy), see below, note 18.

⁷ Bonaventura, *Sent.* 2.13.3 "De lucis effectu et irradiatione," q.1, "Utrum lumen, quod exit a corpore luminoso, sit corpus," vol.2: 323-26; q.2, "Utrum lumen sit forma substantialis an accidentalis," vol. 2: 327-29.

⁸ Pierre Auriol, Rep. 2.13, "Utrum lux fuit prima die creata."

⁹ Gerard Odonis, *Rep. Sent.* 2.13, ms. Klosterneuburg 291, fol. 117ra-118vb: "Circa materiam de qua agitur, in hac distinctione queruntur quattuor. Primum est utrum lumen vel lux multiplicet speciem suam in instanti vel in tempore; secundo utrum lux illa que fuit facta prima die multiplicaverit lumen suum; tertio, utrum lux sit substantia vel accidens."

¹⁰ Durandus de Sancto Porciano, *Sent.* 2.13 (ed. Venice: 1571), q.1, "Utrum lumen sit corpus," fols. 154vb-155ra; q.2, "Utrum lumen habeat esse reale an intentionale in medio," fol. 155rb-vb.

¹¹ Duns Scotus, *Rep.* 2.13.un. (McCarthy 1976: 39); *Ord.* 2.13.un. (McCarthy 1976: 26): "Notandum est quod hoc nomen 'intentio' est equivocum. Uno modo dicitur actus voluntatis 'intentio.' Alio modo: ratio formalis in re, sicut intentio rei a qua accipitur genus differt ab intentione a qua accipitur differentia. Tertio modo

Although what is designated differs for each of these uses for "intention" that Scotus records, theoretically they are not entirely unrelated. The first labels the *voluntary* purpose for or aim of acting, the *sine qua non* element of moral or immoral choices of the will on twelfth- and thirteenth-century ethical and soteriological theories. We speak of such purposes when we say, for instance, that someone choses an alternative *intentionally*, or that one acts wanting or *intending* to help or harm. ¹² If the will's intentions initially seem least relevant to the modern notion of intentionality, we might note that at least from Augustine on, ¹³ Christian theologians took active *directedness* (which intentions guided) to be fundamental to the psychological faculty of the will. Other psychological faculties that apprehend or are cognitive, even if they are to some extent the passive recipients of what is in the world (*via*

dicitur conceptus. Quarto modo, dicitur ratio tendendi in obiectum, sicut similitudo dicitur ratio tendendi in illud cuius est. Et isto modo dicitur lumen 'intentio' vel 'species' lucis."

Because (1) Scotus's wording is very nearly the same in both his Parisian *Reportatio* of 1304-05 and the (earlier) *Ordinatio*, which presumably reflects his Oxford teaching ca. 1298-99; and (2) both versions have truncated sentences and arguments characteristic of *reportationes*, I have conflated these two versions of Scotus's lectures (in the process emending McCarthy's texts) for the sake of sense.

¹² Luisa Valente suggested at our Symposium that the Parisian master, Peter the Chanter, has used 'intention' thus in his De tropis loquendi, Paris, lat. 14892, fol. 121rb-va: "Secundum diversas quoque intentiones solvitur contrarietas. Legitur: 'proprio filio suo non pepercit Deus sed pro nobis omnibus tradidit illum.' Sed et Iudas tradidit Dicimus quod tam Pater tam Filius tam Iudas tam iudeus <tradiderunt> sed diversas habuerunt intentiones. Pater tradidit idest de dispensatione sue sapientie Filium passioni exposuit pro redemptione generis humani. Filius se ipsum tradidit quando voluntarie morti se ipsum exposuit optulit Item dicit auctoritas: 'querunt animam meam ut auferant eam.' Contra videtur: 'non est qui requirat animam meam.' Distingue diversas rationes: mali querunt et requirunt animam iusti libidine subversionis et malitie; boni querunt et requirunt zelo considerationis et reverentie ... Item legitur quod Paulus circumcidit Thimotheum quem perficit episcopum ... sed hac intentione fecit ne qui predicatur erat in Israel destructor videretur legis mosaice" (My emphases.) Where the Paris manuscript has the word 'rationes,' ms. Avranches Bib. mun. 28 has 'intentiones' according to Dr. Valente's transcription of this text, which she has generously provided me.

¹³ See, e.g., Augustine, *De Trinitate* 11.2.2.10-35: "Primum quippe illud corpus visibile longe alterius naturae est quam sensus oculorum quo sibimet incidente fit visio, ipsaque visio quae quid aliud quam sensus ex ea re quae sentitur informatusapparet? ... sensus ergo vel visio ... ad animantis naturam pertinent omnino aliam quam est illud corpus quod videndo sentimus, quo sensus non ita formatur

species), are nevertheless in other ways like the will in being as obviously *directed* toward apprehensible objects. ¹⁴ Thus, on Scotus's catalog, there is an etymological connection between the first and the fourth uses for "intention," insofar as they both express what *tendit in*, that is, reaches or directs one towards an object. ¹⁵

The example that Scotus gives for this fourth way in which "intention" is used, namely, a similitude, can, of course, be a *mental* likeness or image on his and other thirteenth- and fourteenth-century theories of knowledge (as I have shown elsewhere);¹⁶ in such instances, the similitude will also be a concept, and so be called an "intention" according to the third as well as fourth uses of the term. Here, however, at *Sentences* 2.13, by stating that the species of light in a medium are intentions in the fourth sense,

ut sensus sit sed ut visio sit Itemque illa animi intentio quae in ea re quam videmus sensum tenet atque utrumque coniungit non tantum ab ea re visibili natura differt quandoquidem iste animus, illud corpus est, sed ab ipso quoque sensu atque visione quoniam solius animi est haec intentio"; again, De Trin. 15.2.5.124-31: "Quae cum ita sint, tria haec quamvis diversa natura quemadmodum in quandam unitatem contemperentur meminerimus, id est species corporis quae videtur et imago eius impressa sensui quod est visio sensusve formatus et voluntas animi quae rei sensibili sensum admovet, in eoque ipsam visionem tenet" (my emphases). The first of these passages was surely familiar to Roger Bacon, who quotes an optical observation from the same chapter in his Perspectiva, 2.2.3, ed. Lindberg: 188, lin. 121-27. I am grateful to Prof. Mary Sirridge for drawing our attention to these passages at our Symposium.

¹⁴ As Scotus also suggests elsewhere, e.g., at *Rep.* 2.38.1: "Intendere enim dicit 'in aliud tendere;' hoc potest accipi generaliter sive ab alio habeat quod in illud tendat, sive a se movente se in illud potest etiam tendere in aliquid, sicut in obiectum praesens, vel ut in terminum distantem vel absentem. *Primo modo convenit omni potentiae respectu sui obiecti*; secundo modo magis proprie sumitur pro illo scilicet quod tendit in aliud (my emphasis)" I quote this passage from Verhulst 1975: 8.

15 As Verhulst 1975: 7, remarked: "Le mot [intention] est dérivé, comme il apparaît clairement, du verbe 'intendere,' lui-même un composé de 'tendere.' ... [Duns] Scot est encore parfaitement conscient de ses origines"

¹⁶ Tachau, 1988: 62-66, 215-16, 251.

¹⁷ Scotus, Ord. 2.13 (McCarthy 1976: 26), elaborates on the statement quoted above, note 11: "Notandum est quod ... intentio dicitur hic <i.e., quarto modo> 'illud per quod tamquam per principium formale in obiectum tendit sensus.' Et sicut quidquid est signum est res, secundum Augustinum De Trinitate et De doctrina Christiana, licet non econverso – et ideo in distinctione rei et signi, 'res' accipitur pro illa re quae non est signum (licet illa quae est signum sit etiam res) – ita in distinctione rei et intentionis ... tamen illa dicitur 'intentio' quae non est tantum res

Scotus explicitly refers to *extramental* similitudes¹⁷ – in this case, to the radiating light (lumen) in the transparent medium as the likeness of its *generating* source of light (lux).¹⁸

On such an understanding of light precisely as what generates and is generated, it is reasonable to treat luminosity as what is conceived – that is, a *conceptum* – by the agency of light. In other words, on this account, objects – not psychological faculties – generate the concepts which represent those objects to the mind. I take it that this is Scotus's position, too, regarding "first intentions," which he explicitly calls "concepts" made by the extramental "thing" independently of any "working or act of the intellect." ¹⁹

I stress this point because, to philosophers of the twentieth century, it seems at least odd if not altogether mistaken to refer to *concepts* as produced by objects, rather than by minds regarding objects (or their secondary qualities). Some fourteenth-century thinkers – notably, Pierre Auriol – would concur with this modern evaluation, but they were rare. After all, what was at stake was whether the world objectively *is* as our psychological faculties of sense and intellect perceive it. Since the eighteenth century, philosophers have largely been willing to accept that there is a

in quam sensum tendit, sed est ratio tendendi in alterum cuius est propria similitudo. Hoc modo dico quod lumen est proprie intentio sive species propria ipsius lucis sensibilis. Quod probatur: tum quia si non esset intentio, tunc suprapositum sensui prohiberet sensum ... et ita lumen suprapositum oculo impediret ipsum videre." (My punctuation.)

¹⁸ Thus see, e.g., the title under which Scotus treats *Ord.* 2.13 (McCarthy 1976: 24): "Circa distinctionem 13 quero simul de luce et de lumine. Et quero primo, utrum lux *gignat* lumen tamquam propriam speciem sensibilem sui." After standard principal arguments, Scotus sets out his division of the question: "Hic sunt tria videnda. Primo, quid sit lux; Secundo, quid sit lumen; tertio, qualiter lumen a luce gignatur."

¹⁹ Scotus, *Ord.* 1.23.un. (ed. Balić: vol. V, 360): "Omnis enim conceptus est intentionis primae qui natus est fieri immediate a re, sine opere vel actu intellectus negotiantis, qualis est conceptus non tantum positivus sed etiam negativus." Thus, while I am grateful to Dominik Perler for the new texts and information that he has brought to the investigation of thirteenth- and fourteenth-century discussions of intentions, I cannot concur in his suggestions that participants in those centuries' disputes often approached the "problem of explaining how intentions come into existence" by asking "how are the intentions produced *by the intellect?*" in Perler 1994: 229 (emphasis mine) and p. 228. Nor do I agree that on Roger Bacon's theory all "intentions are [precisely those] species formed by the intellect and existing in the intellect," as Perler seems to say (1994: 238).

fundamental divide between the actual structure of the universe and our perceptions and/or ideas of it; but for Christian theologians of the thirteenth and fourteenth centuries, there were important soteriological constraints motivating them to seek some way of establishing the veridical correspondence between extramental and intramental reality, the latter in important senses comprising *images representing* the former. What the perspectivist account of light's propagation offered, because it held that such species are *not* essentially products of the mind's operation, is a theoretical defense of the position that these images would exist even if there were no percipient creatures.²⁰ These are – in modern terms – objective features of the world.

Let us return to the notion of the generation of light. That a light source, such as the sun or stars, *generates* its likeness which then multiplies is more than a metaphor for many thirteenth-century authors who, following Robert Grosseteste, Roger Bacon, and other perspectivists, explicated the causal agency of light upon the world in ways that harmonized Aristotelian and Neoplatonic physics and metaphysics (including those of Augustine). For Grosseteste, *lux* gives birth to *lumen*; so, for instance, Grosseteste states in his Commentary on the *Posterior analytics*:

Moreover, I think that a universal's unity in many particulars is similar to the unity of the light in the generating, begetting light source (*lux*) and the light generated and born. For the light that is in the sun generates from its substance light (*lumen*) in the air; and yet, it is not that something new is created in order for there to be light (*lux*) in the air, but rather the sun's light is multiplied and propagated. And

²⁰ Despite the research of David Lindberg, and my earlier work extending it, the seminal significance of Bacon's integration of optical theory into the study of theology and philosophy has yet to be understood by many historians of philosophy, who – directly or indirectly following Étienne Gilson – mistakenly treat perspectivist theory as relatively peripheral to the supposed "central" story of the interaction of Augustinian and Aristotelian theories of the mind. Yet, Gilson's framing of the complexities of Latin readers' assimilation of the immense flood of new materials from the Arabic has long ago been superseded. I am therefore dismayed by the uses of my work in the recent study of L. Spruit (1994), whose historical research is debilitated by two assumptions stated at the outset of his book (his p. 1): first, his construal of the history of debates over "the nature and function of the mechanisms" [e.g. species] "that provide the human mind with data concerning physical reality" as "the history of a problem in *Peripatetic* cognitive psychology;" second, his consequent taking *intelligible* species as the crucial mechanism.

21 Tachau 1988; Lindberg 1976.

so there is one light in the sun and another light in the air; nevertheless they are not so different that there is not in some way an essential unity in the light that generates and the light that is generated. Otherwise the light that is generated would be created completely $de\ novo$ and $ex\ nihilo.^{22}$

While Grosseteste's treatment of light in various works evidently propelled medieval theologians to the study of optics, the resultant discipline of *perspectiva* was developed and propelled by the work of Roger Bacon. Until recently, historians of thirteenth-century philosophy have usually missed altogether (1) the extent to which discussions of light – and the visual, psychological, and epistemological processes it made possible – were brought by exponents of the new, thirteenth-century science of perspectiva to levels of technicality beyond any available from classical or patristic authors; and (2) the extent to which the resulting scientific theories of light's agency were integrated into and diffused by many scholastic genres, including Sentences lectures. Thus, just as no Latin scholar discussing the mind's faculties after 1270 would ignore Aristotle's De anima and its Arabic commentators, so such a scholar teaching Parisian students in the 1270s would not have overlooked the views of Alhacen and other perspectivi when considering the nature of light.

Yet Roger Bacon's efforts to reconcile all his classical and Arabic

²² Grosseteste, *Comm. Post. anal.* 1.17 (ed. Rossi: 244-45, lin. 114-121): "Et puto quod unitas universalis in multis particularibus assimilatur unitati lucis in luce generante et generata sive gignente et genita. Lux enim que est in sole gignit ex sua substantia lumen in aere; nec est aliquid novum creatum ut sit lux in aere, sed lux solis est multiplicata et propagata. Alia itaque est lux in sole et alia in aere, non tamen sic penitus est alia quin aliquo modo sit unitas essentie in gignente et in genita luce; aliter enim lux genita esset totaliter de novo creata et ex nichilo. Ergo universale non est figmentum solum, sed est aliquid unum in multis." (The punctuation is mine. My translation modifies that of Marrone 1983: 182; I also amend Rossi at lin. 115, replacing his *lucem* with *lumen*, attested in the apparatus by two manuscripts.)

On the distinction between *lux* and *lumen* as one between generator (parent) and offspring, see most recently: Lindberg 1986: 15-20. Compare too Grosseteste's text here to his remarks in *De luce*, ed. Baur: 54, lin. 18-55, lin. 27. Also important is McEvoy 1974: 62-63, and 69-70 (where McEvoy draws attention to the parallels between Grosseteste's *De operibus solis*, 6 and passages from his *Comm. Post. anal.*, 1. 17). When distinguishing *lumen* from *lux* in *Rep.* 2.13 (McCarthy 1976: 39), Scotus alludes to a related Neoplatonic commonplace (derived from Ibn Gabirol's *Fons vitae*): "Secundo dico, supponendo quod lux dicitur ut est in fonte, lumen ut in medio" See Pecham, below, n. 43.

sources raised perhaps as many problems as it opened new and fruitful directions for speculative theology. The ontology of light was not the least of the difficult legacies of Bacon's ecclecticism, and it sparked considerable debate among Franciscan theologians active in Paris from 1267-78. During these years, Roger Bacon, who had been a master in the university for nearly thirty years and a member of the Parisian Franciscan community for just over a decade, was elaborating his proposals for the reform of all Christian higher education in his various treatises - all of which gave pride of place to the scientific study of light and its effects.²³ Given his residence in the Parisian convent, it is hardly surprising that his confrères there were among the first theologians to absorb the theories of the newly developed science concerned with light into their thinking. Thus, we find the resonance of Grosseteste's and Roger Bacon's theory of the multiplication of species in the Quodlibetal Questions and Sentences lectures of such Franciscans as Guillaume de la Mare, Mattheus ab Aquasparta, and John Pecham. Guillaume de la Mare, studied (and taught?) at Paris during the academic years 1268-69 and was perhaps magister regens at the convent during 1274-75.24 Matthaeus ab Aquasparta, future head of the Order and eventual Cardinal, probably lectured on the Bible and Peter Lombard's Sentences during 1269-70 and 1270-71 (when Bacon was revising his *Opus maius*) and ruled as master of theology (i.e., was magister regens) at Paris in 1277-78 before being sent by the order to teach at Bologna. 25 John Pecham, future

²³ Against an older scholarly tradition that located Bacon at Oxford for much of his productive academic career, consensus is emerging among historians that most of his teaching and writing took place in Paris. Thus, he taught Arts at Paris from 1240 onwards, where he entered the Franciscan order ca. 1256. All of the works most pertinent for the present essay were composed at Paris, probably after Bacon's conversion to the Franciscan life. The *De multiplicatione specierum* should be dated to "the late 1250s or early 1260s," according to its most recent editor, Lindberg (1983: introduction to the text, pp. xxxii-xxxiii). The so-called *Opus maius*, nearly complete in 1267, was probably under revision in the 1270-71 academic year, given Bacon's reference (*Opus maius* 6, ed. Bridges: vol. II, 390), to the Mongol conquest of Baghdad in Feb. 1258 (1257, on the Gallican calendar used in Paris) as "thirteen years ago"; the *Opus minus* and *Opus tertium* were drafted ca. 1267.

²⁴ Kraml, "Introduction" to de la Mare, *Scriptum*, 1989: 13*; Doucet, "Introductio critica" to Aquasparta, *Qq. de gratia*: xvi.

²⁵ Doucet, "Introductio critica" to Aquasparta, Qq. de gratia: xi, xv-xviii.

Archbishop of Canterbury, served as *magister regens* from Spring 1270-spring 1271,²⁶ and soon thereafter produced the *Perspectiva communis*, the first perspectivist textbook thoroughly indebted to Roger Bacon.²⁷ The arguments advanced and authorities cited in these works can still be found in *Scotus's* treatment of light in *Sent*. 2.13. Moreover, not only does he clearly know the standard perspectivist treatments of the multiplication of light,²⁸ but, in the *Ordinatio* of book 1, Scotus also employs the vocabulary of generation when elaborating how *objects* generate their *images* in the intellect.²⁹

All of these authors take as givens that light *radiates*, i.e., travels or "multiplies," along geometrically explicable rays; that radiant light (*lumen*) requires a transparent medium (*diaphanum*); and that *lumen* is the "*species*" or "likeness" of its *generating* source of light (*lux*). These are claims that could be drawn from Grosseteste, as from the passage that I quoted above. Grosseteste's con-

²⁶ Etzkorn, "Introduction," to Pecham, *Quodl.*: 21*; Brady, "Introductio critica," to Marston *Quodl.*: 9*-10*.

²⁷ See Lindberg 1971: 66-83. As Lindberg notes, Pecham may have composed his *Perspectiva communis* while teaching theology at the papal curia in Viterbo or shortly thereafter. See, too, Paravicini-Bagliani 1975.

²⁸ See, for instance, Duns Scotus, Ord. 2.13 (McCarthy 1976: 27), addressing the third article promised at his divisio quaestionis (above, note 18): "Et quantum ad tertium articulum qui declarat istum secundum modum <quo lumen gignitur a luce>, notandum quod secundum triplicem radium - <i.e., 1> rectum, <2> fractum, et <3> reflexum, secundum ipsum Alacen <i.e., Alhacen> in Perspectiva sua - gignitur lumen a luce. Rectus radius est qui diffunditur a luminoso in medio eiusdem diaphanitatis per rectum radium et continuatur corpori terminanti quantum durat virtus luminosi. Radius reflexus est qui, occurrente opaco antequam terminetur virtus activa luminosi, diffunditur in partem oppositam, non ex electione sed naturaliter Radius fractus est qui, occurrente medio alterius dyaphanitatis non tamen omnino opaco, multiplicatur in illo medio sed non secundum lineam rectam, sed incidit ibi angulus. Quando autem occurrit medium densius, frangitur radius ad perpendicularem ... quando autem occurrit medium rarius, frangitur radius a perpendiculari propter oppositam causam. Dico tunc quod lumen multiplicatum secundum istos tres radios immediate gignitur a luce ipsa, et etiam immediate est species sensibilis ipsius lucis." The Reportatio omits nearly all of this explanation.

²⁹ Duns Scotus, *Ord.* 1.3.3.1 (ed. Balić: vol. VI, 232): "Ad secundum, de praesentia, respondeo quod obiectum respectu potentiae primo habet praesentiam realem, videlicet approximationem talem ut possit gignere talem speciem in intellectu, quae est ratio formalis intellectionis; secundo, *per illam speciem genitam, quae est imago gignentis*, est obiectum praesens sub ratione cognoscibilis seu repraesentati." (My emphasis).

cern in that passage to exclude the production of entities de novo is a consequence of his view that the generation of light is that of the eternal creative instant at which light emanates from its source, the divine light, after which there is no further creation ex nihilo. This is the point of departure for John Pecham's first Quodlibet, q.7, where he inquires whether luminosity (lumen) (1) is in the continual process of being brought about or, rather (2) has some kind of "permanent" being.30 Pecham notes that there are already three lines of response to this question. The first of these, which Pecham's editors do not identify, was attributed by Matthew of Aquasparta to Roger Bacon, in his early De multiplicatione specierum.³¹ On this view, "illumination is almost a 'simple alteration,' in that *lumen* is drawn out of the potential of the [transparent] medium."32 The second view, which can also be found in Roger Bacon's oeuvre, 33 as well as in Grosseteste, is that "what is luminous alters the 'part' [of the medium] next to it, and, having been altered, this second 'part' alters the next ['part'] and so on,

³⁰ Pecham, *Quodl.* 1.7, "Utrum esse luminis sit in continuo fieri aut habeat esse manens" Etzkorn, 20: "Quaeritur de creatura pure corporali et hoc de caelesti et de terrestri et de media." Cf. Pecham, *Perspectiva communis*, pars 1, props. 6, 26-27, 51, (ed. Lindberg: 82, 108, 132).

³¹ For Aquasparta, see below, note 42; For Bacon, see *De mult. specierum*, 3.1 (ed. Lindberg: 180, lin. 37-46): "Quapropter cum medium sit principium materiale in quo et de cuius potentia per agens et generans educitur species, non poterit hec species habere aliam naturam corporalem a medio distinctam."

³² Pecham, *Quodl.* 1.7 (ed. Etzkorn: 21): "Hic est triplex modus dicendi. Quidam dicunt quod illuminatio est quasi quaedam alteratio simplex et quod lumen educitur de potentia medii, et isti necesse habent dicere quod lux habeat esse manens sicut et calor."

³³ Bacon, *De mult. specierum*, 2.1 (ed. Lindberg: 90, lin. 10-17): "Et hec multiplicatio habet veritates multas Et prima est quod prima pars patientis transmutata et habens speciem in actu transmutat partem secundam, et secunda tertiam, et sic ulterius;" also 1.3 (ed. Lindberg: 44-46, lin. 27-30, 50-54); 1.4 (62-64, lin. 116-19): "Tertia conclusio est quod omne agens attingit aliquam partem patientis quam potest alterare, ita quod plus non alteret. Nam agens non proicit nec infundit aliquid in patiens, ut prius probatum est, sed ipsum per sui contactum transmutat;" 3.1 (ed. Lindberg: 180-82, lin. 68-75): "Dicendum est quod <<species>> non est idem numero in prima parte medii et secunda et aliis; nec illud quod est in parte prima exit eam, nec similiter quod est in secunda vadit ad tertiam, sed quelibet in suo quiescit loco. Et ideo non est aliquid quod moveatur ibi de loco ad locum, sed est continua generatio nove rei ..." Again, Bacon, *Perspectiva*, 1.9.4. (ed. Lindberg: 140, lin. 263-83). This modifies Grosseteste's view, *De luce* (ed. Baur: 55, lin. 1-35).

to the end of the [transparent medium]."³⁴ The third position is that the very "rays [of light] themselves have a [per]manent, 'fixed' being (*esse manens et fixum*);" on this view, each ray in its entirety "moves with the motion of the sun," their source. This view, which Pecham considers untenable, he attributes to the pseudo-Dionysius and to an obscure work of Augustine in which, Pecham notes, Augustine says that "luminosity is a *body* (*corpus*)."³⁵ Yet, Pecham insists, Augustine is speaking loosely when he states that *lumen* is a body, "for he calls 'body' everything that, either in itself or through something else, has dimension(s)."³⁶

When we pick up Matthew of Aquasparta's *Quaestiones disputatae de gratia* (q.8), we find an echo of the position of Grosseteste and Bacon that "by natural necessity luminosity proceeds from a luminous [body]." Indeed, Aquasparta insists, "every corporeal thing (*res corporalis*) is born to multiply, generate, and diffuse its *species* through the given corporeal medium circularly, [i.e.], alongside

³⁴ Pecham, Quodl. 1.7 (ed. Etzkorn: 21): "Dicunt quod luminosum alterat partem <<medi>>> sibi propinguam, et altera pars alterata alterat alteram usque in finem." 35 Pecham, Quodl. 1.7 (ed. Etzkorn: 22): "Alii dicunt quod radii habent esse manens et fixum sed moventur cum motu solis, iuxta quod dicit Dionysius quod sol convellit secum radios suos. Et huic concordat quod dicit Augustinus lumen esse corpus, ut ipse dicit De origine animae ad Vincentium, libro II. - Sed istud non potest stare, quia secundum hoc duo corpora starent in eodem <loco>." This passage bears comparison to Bonaventure, Sent. 2.13.3.1, vol. 2: 324: "Secunda vero positio est, quod lumen est corpus, et similiter radii, et processus ipsorum radiorum a sole est sicut ramorum a radice ... et tamen dicerentur semper rami ab illa radice exire, non quia de novo egrediantur, sed quia cum sua origine continuantur: sic dicunt et in solis radiis se habere. Cum enim Deus solem tanquam originem et principium luminis fecit, simul cum hoc ramificationem radiorum sibi dedit; et sol continue dicitur illos radios emittere, quia illi radii nunquam separantur a sua origine; sed sicut sol movetur, sic radii circumferuntur, non novi generatur; eosdem enim radios quos emisit a principio super terram, emittit etiam et nunc" (emphases mine). Bonaventure's editors do not indicate the source of this opinion.

³⁶ Pecham, *Quodl.* 1.7 (ed. Etzkorn: 22): "Augustinus autem large utitur nomine corporis, appellans corpus omne quod per se vel per aliud est dimensionatum, omne etiam quod maius est in toto quam in parte. Ergo impossibile est lumen esse corpus. Sed est lumen similitudo genita a luce sicut species coloris a corpore ... Beatus autem Dionysius loquitur metaphorice. Dicitur enim sol evellere radios suos pro tanto quia non manent." Cf. Bacon, *De mult. specierum*, 3.1 (ed. Lindberg: 178, lin. 3-25); *ibid.*, 4.3 (222, lin. 35-57); Bacon, *Perspectiva* 1.9.4. (ed. Lindberg: 140, lin. 264-77); Grosseteste, *De luce* as above, n. 22 and quoted in Lindberg 1986: 15-16 (at his n. 29). Whether the generation of spiritual light was *only* a metaphor remained controversial among thirteenth-century heirs to Neoplatonic sources.

every different position" [on its surface, one supposes]. Nevertheless, Aquasparta has already told the reader, there are "two modes of generation, namely a real [mode] ... as when a human being generates a human being; and an 'intentional' or some sort of 'spiritual' [mode], by which each and every thing (res) generates from itself its species or similitude, not a thing, as [for instance] when color generates its species and likeness." Aquasparta returns to this claim a few paragraphs later, this time specifying that "every form – whether corporeal or spiritual, real or intentional – has a 'generative and diffusive' force (vim), [and it has this force] either really, as [is the case for] corruptible and generable forms, or intentionally"

Thus, Matthew of Aquasparta, against Grosseteste and Bacon, argues in his *Qq. degratia*, q. 8, 212: "Sexto, quia gratia dicitur lumen non proprie, sed metaphorice, sicut et quaelibet forma, secundum Boethium, lux est, et maxime spiritualis; transumitur autem non propter irradiationem et multiplicationem sive huiusmodi diffusionem, sed propter pulcrificationem, quia inter alias formas lux vel lumen magis decora est et magis decorat."

³⁷ Aquasparta, *Qq. de gratia*, 8 (ed. Doucet: 211-12): "... Iam patet responsio, quoniam non est simile de lumine corporali et spirituali Quarto, quia influxus luminis corporalis est naturalis et naturae necessitate lumen a luminoso procedit, et ideo lumini communicat eandem virtutem multiplicativam et diffusivam; influxus autem gratiae est omnino gratuitus et voluntarius." Compare Grosseteste, *De luce* (ed. Baur: 51, lin. 10-52, lin. 9); discussed in Lindberg, 1976: 97; Speer, 1996: 77; Roger Bacon, *De mult. specierum*, 1.1 (ed. Lindberg: 18): "Tertio sciendum est quod agens naturaliter facit eundem effectum primum, ut speciem, in quodcumque agat, ita quod uniformiter agit a parte sua; quia solum agens quod agit secundum libertatem voluntatis et per deliberationem potest agere difformiter a parte sua. Sed agens naturale non habet voluntatem nec deliberationem" On the multiplication of grace as "especially manifested by the multiplication of light," cf. Bacon, *Opus maius*, 4 (ed. Bridges: vol. I, 216-17).

³⁸ Aquasparta, *Qq. de gratia*, 8 (ed. Doucet: 213): "Quaelibet igitur res corporalis nata est multiplicare, gignere, et diffundere suam speciem per medium istud corporale circulariter secundum omnem differentiam positionis, ita quod primo obiectum generat suam speciem in partem aeris sibi propinquam et illa pars in aliam sibi propinquam" See Pecham, *Perspectiva communis*, 1, prop. 6-8, 27 (ed. Lindberg: 82-84, 109); Grosseteste, *De lineis* (ed. Baur: 64, lin. 1-8); Bacon, *De mult. specierum*, 2. (ed. Lindberg: 90-92); also n. 46, below.

³⁹ Aquasparta, *Qq. de gratia*, 8 (ed. Doucet: 208): "Dicendum quod duplex est modus generationis, scilicet realis ... ut homo hominem; et intentionalis sive quodammodo spiritualis, quo unaquaeque res gignit de se suam speciem sive similitudinem, non rem, sicut color generat speciem et similitudinem." See, too, Bonaventure, *Sent.* 2.13.3.1, Solutio, vol. 2: 325.

⁴⁰ Aquasparta, Qq. de gratia, 8 (ed. Doucet: 214): "Omnis forma, et corporalis et

If, in this question, we encounter Aquasparta's views on the *propagation* of forms, we find the parallel account of the *reception* of what is propagated in the fourth of his *Quaestiones de anima separata*, where he claims:

For there are two [kinds of] reception: a real and an intentional one. Neither the soul nor the heavens receive [forces] by a 'real' reception, because that cannot [be brought about] without transmutation [which, of course, the heavens, being incorruptible, do not undergo]. But the soul does receive [influences] by an intentional and spiritual reception, for [the soul] has an apprehending and cognitive power (vim) – although the heavens do not.⁴¹

In these passages we seem to have a pretty clear contrast between the "real or corporeal" on the one hand, and "spiritual or intentional" on the other – but the spiritual or intentional object clearly has some kind of being, because it possesses some kind of power. (We might miss this point if we were not reading other discussions contemporary to Aquasparta's, or if we did not recognize behind his references to the ubiquitous "quidam" his quotations of Grosseteste, Bacon, and Pecham.) ⁴² Matthew tells us this more explicitly when he explains how the *lumen*, as the species of light, are generated: "Species are not generated *ex nihilo*," he begins (and here we recognize Grosseteste):

spiritualis, et realis et intentionalis, habet vim gignitivam et diffusivam: aut realiter, sicut formae corruptibiles et generabiles, aut intentionaliter" For Bacon the dichotomy is corporeality (or materiality) vs. spirituality (immateriality), as in *De mult. specierum* 3.2 (ed. Lindberg: 186-94).

⁴¹ Aquasparta, *Qq. de anima separ.* 4: 74: "Est enim duplex receptio: realis et intentionalis. Receptione reali nec anima recipit nec caelum, quia illa non est sine transmutatione; receptione vero intentionali et spirituali anima recipit, quia habet vim apprehensivam et cognoscitivam; caelum non recipit, quia non habet ..." Cf. Grosseteste, *De lineis* (ed. Baur: 60, lin. 24-29).

⁴² At several other points Aquasparta draws upon or disputes details of the Grossetestian/Baconian theory of the multiplication of species, and it appears that Bacon sometimes responded to him. Consider, for instance, Aquasparta, *Qq. de productione* (ed. Gál: 160): "dicendum – quantum ad praesens sufficit, quia quaestio est valde difficilis – quod *quidam* posuerunt speciem cuiuscunque rei educi de potentia medii, et species coloris et species lucis. Unde radius non est quid fluens vel diffusum ex corpore luminoso, sed potius virtute illius eductus de potentia medii. – Sed ista positio mihi nunquam placuit. Certum est enim quod nunquam posset ex aliquo aliquid educi seu generari nisi virtus agentis attingeret usque ad profundum patientis. Primo igitur oportet virtutem immitti ab agente in passum quam aliquid educatur; et tunc quaero de illa virtute: unde educitur? Si de potentia medii, erit abire in infinitum" To identify Aquasparta's "quidam," his editor cor-

Nor are [species] generated from something materially, nor from something as from a seed, but from something by way of origin, as a ray is generated from the sun. [Species] are not generated from the potency of the medium, as some [i.e., Bacon] say When the Philosopher [Aristotle] says that form cannot generate by itself, he understands [thus] real forms having 'reified' (ratum) and 'fixed' being (esse fixum), not ... intentional forms having a being [that is] becoming (fiens) and emanating, as are the species or a ray. 43

Here one's attention may be drawn to the contrast between being "in fieri," and "fixed being," for this is terminology that reappears in fourteenth century texts, including Auriol's, when talking of "apparent" or "intentional" colors. The notion of species as having esse fiens captures another aspect of the perspectivist account that is more complex than I have suggested so far, but which the foregoing helps us to appreciate. For *perspectivists*, the multiplying *species* are not only what generate images, but they are also, as David Lindberg has stressed, *forces*.⁴⁴ This notion is among the

rectly guides us to Roger Bacon, *De mult. specierum*, 3.1 (quoted above, note 31); but see also *De mult. specierum* 1.3 (ed. Lindberg: 44): "Deinde manifestum est quod agens non creat speciem ex nichilo; neque accipit eam alicubi extra se et extra patiens, ut eam reponat in patiente, hoc enim ridiculosum esset. Quapropter improprie et male dicitur quod agens immititi aliquid in patiens et quod influit, nam tunc ab extra ingrederetur aliquid in ipsum patiens; quod non potest esse Et ideo oportet unam duarum viarum eligi, scilicet, quod per viam impressionis fiat species, aut quod per naturalem immutationem et eductionem de potentia materie patientis." A concommitant disagreement concerns whether a radiating *species*, upon striking a rough or unpolished surface, is destroyed and fades away (so Aquasparta, *Qq. de gratia*, 7 [ed. Doucet: 213]), or is deflected, i.e. is reflected or refracted (so Bacon, *De mult. specierum*, 2.1 [ed. Lindberg: 91-94, lin. 25-32, 40-47, 61-73]).

⁴³ Aquasparta, *Qq. de anima separ.* 4: 74: "Decimum tertium argumentum concludit quod nulla res possit gignere suam similitudinem, et maxime quod ex specie species gigni non possit nec virtute propria nec virtute animae. Dico ergo ad argumentum quod non sequuntur illa inconvenientia. Primum enim non sequitur: dico enim quod species gignitur non ex nihilo nec ex aliquo materialiter nec ex aliquo seminaliter, sed ex aliquo originaliter, sicut radius de sole. Non de potentia medii, ut quidam dicunt, sed de ipsa sua essentia, ut dicit Augustinus Quod enim dicit Philosophus formam non posse per se generari, intelligit de formis realibus habentibus esse ratum et fixum, non de formis intentionalibus habentibus esse fiens et emanativum, sicut est species vel radius." Compare Pecham, *Quodl.* 1.7, "opinio auctoris," (ed. Etzkorn: 22).

⁴⁴ Lindberg 1983: lvi, lxiii; again, Lindberg 1986: 19. Consider, e.g., Bacon, *De mult. specierum* 1.1, Lindberg: 2, 4: "Virtus' vero et 'vis' sunt idem, sed dicunt solum complementum operationis – et hic loquor de potentia que elicit actionem, non de illa que expedit Aliter sumitur 'virtus' pro effectu primo virtutis iam dicte propter similitudinem eius ad hanc virtutem, et in essentia et in operatione Et

legacies of al-Kindi's cosmology, in which forces radiate from all entities to effectuate all the interactions of the universe. Of the many passages in which Grosseteste and Bacon elaborate this claim, two are especially explicit. The first, from Grosseteste's *De lineis, angulis, et figuris* is well-known to historians:

A natural agent multiplies its power from itself to the recipient, whether it acts on sense or on matter. This power is sometimes called species, sometimes a likeness, and it is the same whatever it may be called For <the agent> does not act by deliberation and choice, and therefore it acts in a single manner, whatever it encounters, whether sense or something insensitive.⁴⁵

Bacon's explanation in his *Opus maius* of the multiplication of species or power is merely a variation on Grosseteste's theme:

Every efficient [cause] acts through its own power (*virtus*), which it exercises on the adjacent matter, as the light (*lux*) of the sun exercises its power on the air (which power is the light [*lumen*] diffused through the whole world from the solar light [*lux*]). And this power is called 'likeness,' 'image,' and 'species' and is designated by many other names, and it is produced both by substance and by accident, whether spiritual or corporeal This species produces all the workings of the world, for it works on senses, on the intellect, and on all matter of the world for the generation of things. [Moreover], one and the same [effect] is brought about by the agent no matter what it works upon, since [the agent] does not possess deliberation⁴⁶

Thus, for instance, if we read Grosseteste's or Roger Bacon's discussions of the multiplication of *species* as the propagation of *vires* or *virtutes*, the synonyms they expressly presented, we find our-

hec virtus secunda habet multa nomina: vocatur enim 'similitudo' agentis et 'ymago' et 'species' et 'ydolum' et 'simulacrum' et 'fantasma' et 'forma' et 'intentio' et 'passio' et 'impressio' et 'umbra philosophorum' apud Auctores de aspectibus Et, ut in exemplo pateat hec species, dicimus lumen solis in aere esse speciem lucis solaris que est in corpore suo Lumen vero est illud quod est multiplicatum et generatum ab illa luce, quod fit in aere et in ceteris corporibus raris que vocantur 'media' quia mediantibus illis multiplicantur species." (My repunctuation). 45 The translation is Lindberg's (1983: lv), of Grosseteste, *De lineis* (ed. Baur: 60, lin. 14-24).

⁴⁶ I modify the translation by Lindberg 1976: 113, of Roger Bacon, *Opus maius* 4.2.1 (ed. Bridges: vol. I, 111: "Omne enim efficiens agit per suam virtutem quam facit in materiam subjectam, ut lux solis facit suam virtutem in aere, quae est lumen diffusum per totum mundum a luce solari. Et haec virtus vocatur similitudo, et imago, et species, et multis nominibus, et hanc facit tam substantia quam accidens, et tam spiritualis quam corporalis. Et substantia plus quam accidens, et spiritualis plus quam corporalis. Et haec species facit omnem operationem huius mun-

selves reading the language which Newton also used to express "forces" at work in the universe.⁴⁷ Among the interpretive benefits of recognizing that the thirteenth-century perspectivist account purports to explain *inter alia* the universal radiation of forces, is that it may seem less problematic to us, for surely such forces have *some* extramental reality: they are not *nothing*.

Let us return, here, to thirteenth-century philosophers, and ask: what conceptual vocabulary did they have available to express the kind of reality forces have? If one wanted to claim that they only exist as mental constructs within psychological faculties of the soul, one could say that a vis or virtus has "spiritual" existence. 48 If one wished to distinguish the existence of force from objects in the world that we experience as solid, corporeal, material, one might deny that force is body (corpus), has "corporeal" existence, or "natural, sensible being." But is radiant light only force, or is it also material, somehow less "solid" than the windows through which it passes or the walls upon which it casts colors? It seems to me that the notion thus arose that there is an intermediary mode of existence, extramental but less "fixed" than body; for several late-thirteenth- and early-fourteenth-century scholars, this notion seemed to be expressed in the notion of "intentional existence," which they found, for instance, in Averroes' De anima description of light as "not a body, but the presence of an intention in the transparent [medium]."50 At first, Averroes' description was taken to be equivalent to saying that species had "spiritual being" extra-

di: nam operatur in sensum, in intellectum, et in totam mundi materiam per rerum generationem. <Et> [quia] unum et idem fit ab agente in quodcumque operetur, quia non habet deliberationem; et ideo quicquid ei occurrat facit idem. Sed si in sensum et intellectum agat, fit species, ut omnes sciunt"

⁴⁷ For the use of the Latin vis as a synonym for 'force,' see Westfall 1971: 323, 521-23, 535-47.

⁴⁸ Consider, e.g., the language of Henry of Ghent, as quoted in Tachau 1988: 33, or Olivi, in *ibid*.: 41.

⁴⁹ See, e.g., Bonaventura, *In Sent.*, 2.13.3.2, vol. 2: 328, who also treats 'natural' existence (*esse naturale*) as a synonym for 'corporeal' existence, which he explicitly contrasts with 'spiritual' being. This may be the source of Olivi's treatment of perspectivist species as having either 'sensible and natural being' or 'simple, spiritual, and intentional being;' see Tachau 1988: 43-46.

⁵⁰ Averroes, 2 *De anima* comm. 70 (p. 237): "Lux non est corpus, sed est praesentia intentionis in diaphano, cuius privatio dicitur obscuritas apud praesentiam corporis luminosi." But see my discussion of Bacon, in Tachau 1988: 15.

mentally; thus, Albertus Magnus states that "luminosity is an intention having spiritual being in what is perspicuous;"51 Roger Bacon, too, read Averroes as having held that light was "spiritual" rather than "corporeal and material." 52 Yet Bacon could also lead one to a slightly different appraisal of intentionality, as when he remarks that, by comparison to the objects from which it multiplies, a species, "in the common usage of those concerned with nature, is sometimes called an 'intention' on account of the debility of its being with respect to that of the thing itself, to say that it is not truly a thing (res) ... but its likeness."53 This notion of "intentional" existence as a kind of real, albeit "diminished being" (esse diminutum) was to have a long future, as I suggested in my Vision and Certitude. It is employed by perspectivists – and their readers - to deal with some of the most obdurate ontological phenomena for which an account of vision had to provide an explanation, such as virtual images, colors in the rainbow, or colors cast upon a wall by rays of light passing through stained-glass windows. Thus, for example, Roger Bacon asked of the last of these whether the resulting colored beams falling upon an opposing wall were "really" colored? To this, Bacon answered:

If a weak[er] solar ray passes through such a window, no such color appears; and hence there is more the appearance than the existence of true color There are two causes of this appearance: one is the multitude of light (*lucis*) penetrating the glass [that is, how much penetrates], for in weak light it does not appear thus; and it is innate to light to reveal colors and make them appear to us. The other cause is

⁵¹ Wallace 1959: 141. See also Albertus Magnus, *Sent.* 2.13 (ed. Jammy: vol 15, 137): "Ad aliud, dicendum quod lux est forma aeris quae semper sit praesente illuminante, et multiplicat se in medio et immutat illud quando non est oppositio recta ad illuminans primum, sicut patet in radio transeunte per fenestram;" again, *ibid.*: "et hoc praecipue est in luce et coloribus, ut dicit Commentator super libros *De anima*, quia magis secundum esse spirituale sunt in medio quam alia sensibilia"

⁵² Tachau 1988: 15. See Bacon, *De mult. specierum*, 3.2 (ed. Lindberg: 188, lin. 17-30; but see too 192, lin. 88-98): "Et ideo quod translatio imponit Averroys *Libro de sensu et sensato* et super librum Aristotelis *De anima*, quod species rei corporalis habet esse immateriale et esse spirituale in medio; dicendum est quod omnino intelligendum est de esse insensibili, ad quod vulgus vel translator traxit hoc nomen 'spirituale' propter similitudinem rerum spiritualium ad insensibiles."

⁵³ Bacon, *De mult. specierum*, 1.1 (ed. Lindberg: 4, lin. 54-56): "Intentio vocatur in usu vulgi naturalium propter debilitatem sui esse respectu rei, dicentis quod non est vere res sed magis intentio rei, id est similitudo."

the debility of the opaque color [of the opposing wall], and of its species, with respect to the strong color of the glass, and its species. So ... the species of the glass's colors can appear to the sense, even though those of the opaque [wall] do not appear.⁵⁴

I have written elsewhere about Pierre Auriol's denial of any *extra-mental* intentional existence; here I wish only to draw attention to two passages, where he is clearly continuing the discussion(s) we have signalled in the works of his earlier confrères. Auriol noted, for example, that:

Light (*lumen*) in the air and, similarly, the [sun's] ray, have truly real being rather than intentional being properly [speaking] One way of distinguishing intentional being is by opposition to real being (*esse reale*), and in this way of speaking *intentional being is nothing other than apparent being* [which is] not [really] existing. In this way, it is appropriate to say that a color in the rainbow has intentional being; similarly concerning the [apparent] doubling of a candle.⁵⁵

Now, Auriol thinks it indisputable that, under specifiable circumstances, such appearances occur ineluctably. To deny this, Auriol insists repeatedly, is tantamount to denying that illusions ever occur, and results in the "error of saying that all things exist which

⁵⁴ Bacon, *De mult. specierum*, 1.3 (ed. Lindberg: 54, lin. 178-201): "In duobus peccat. Unum est quod supponit colorem fortem esse generatum a vitro, sicut apparet. Non enim est ita fortis sicut videtur, nam quando radius debilis solis transit per huiusmodi vitrum, non apparet color talis; et ideo magis est in apparentia quam in existentia coloris veri; et est sola species Huius autem apparentie causa duplex est: una est multitudo lucis penetrantis vitrum, nam in debili luce non apparet sic, lux enim nata est detegere colores et facere no

si> apparere; alia causa est debilitas coloris opaci respectu fortis coloris vitri et speciei eius respectu speciei coloris vitri. Et ideo non solum color vitri apparet sensui fortis et bene sensibilis respectu coloris opaci, sed species coloris vitri potest sensui apparere licet species coloris opaci non appareat. Dico igitur quod huiusmodi apparitio est species, et non est ita vivus color sicut apparet; et habet satis parum de esse "This example is discussed also by Scotus, *Rep.* 2.13 (McCarthy 1976: 40); *Ord.* 2.13 (McCarthy 1976: 29).

⁵⁵ Auriol, *Rep. Paris.*, 2.13.un., ms. Firenze, A.III.120, fol. 66va-vb; Paris, lat. 15867, fol. 77rb-va: "Secunda propositio est quod lumen in aere et radius similiter habent esse vere reale et non proprie esse intentionale. Ubi considerandum quod 'esse intentionale' uno modo condividitur ex opposito contra 'esse reale,' et hoc modo 'esse intentionale' nihil aliud est quam 'esse apparens' non existens, quomodo convenit dici quod color in yride habet 'esse intentionale;' similiter dupleitas candele que apparet alicui cancellatis oculis; similiter de circulo apparente in aqua mota per baculum."

appear [to exist]."⁵⁶ This error, moreover, is not avoided by positing *extramental* apparent or intentional entities, for to do so is merely to deny that they have *un*diminished being or "fixed" being, but not to deny their reality in the nature of things. As Auriol puts the point,

Those who ask concerning the colors of a rainbow ... an image which appears in a mirror, or a candle appearing somewhere other than its location, whether these have real being or only intentional being, *mean to ask* whether these have only *objective* and fictitious or apparent being, or whether they have real and fixed being externally in the nature of things, *independent of any apprehension.*⁵⁷

This is indeed the ultimate epistemological and (meta)physical issue at stake, and Auriol was bringing helpful clarification to the discussion. For Auriol, if there were no percipient beings at all,⁵⁸ such phenomena would not exist, for they are dependent upon apprehension for coming into any being whatsoever.⁵⁹

⁵⁶ Auriol, *Scriptum*, 1.3.14 (ed. Buytaert: vol. II, 697, lin. 57-61): "Et universaliter qui negat multa habere esse intentionale et apparens tantummodo, et omnia quae videntur putat esse extra in rerum natura, negat omnem ludificationem et incidit in errore dicentium quod omnia sunt quae apparent."

⁵⁷ Auriol, *Scriptum*, 1.23 (Pinborg 1980: 133-34): "Preterea, sicut se habet suo modo intentio et esse intentionale in sensu, sic se habet in intellectu. Sed quaerentes de coloribus iridis, aut de coloribus qui sunt in collo columbae, aut de imagine quae apparet in speculo, aut de candela apparente extra situm, utrum habeant esse reale aut intentionale tantum, intendunt quaerere utrum habeant esse obiectivum tantum et ficticium seu apparens, aut habeant esse reale et fixum extra in rerum naturae absque omni apprehensione. Per quod patet quod esse intentionale non est aliud quam visio aut apparitio obiectiva. Ergo in intellectu erit aliud quam conceptus obiectivus?" (The preliminary edition in Perler 1994, omits several arguments, including this one.)

⁵⁸ That is, if there were neither a creating, apprehending God nor any creatures.

⁵⁹ See e.g. Auriol, *Scriptum*, 1.23, para. 64 (Perler 1994: 262): "Secundum hoc igitur patet quod intentiones non sunt ipsi actus intelligendi ... nec etiam obiectum cognitum ut fundat relationem ad actum intelligendi ... sed est ipsemet *conceptus obiectivus per intellectum formatus* claudens indistinguibiliter conceptionem *passivam* et rem quae concipitur per ipsam. Et idem est dictum 'intentio' quod 'conceptus,' et 'intentio prima' idem quod 'conceptus primi ordinis' *quos intellectus format* circa res non reflectendo se super suos conceptus. 'Intentiones' vero 'secundae' sunt 'conceptus secundi ordinis' quos intellectus fabricat reflectendo et redeundo super primos conceptus ..." (Emphases and punctuation mine.)

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