

## MEDIAEVAL INTENTIONALITY AND PSEUDO-INTENTIONALITY

Wilfrid Sellars, in his essay “Being and Being Known,”<sup>1</sup> sets out to explore “the profound truth contained in the Thomistic thesis that the senses in their way and the intellect in its way are informed by the natures of external objects and events” [§1]. Profound truth there may be, but Sellars also finds a profound error in the mediæval treatment of the intentionality of sensing on a par with the intentionality of thinking:

There are many reasons for the plausibility of the idea that sense belongs to the intentional order. . . It is primarily due, however, to the fact that sensations have what I shall call a *pseudo-intentionality* which is easily mistaken for the genuine intentionality of the cognitive order. [§18]

Sellars argues that thought is genuinely intentional, for it is (in good linguistic fashion) about the world, whereas sense merely *seems* to be about the world but in fact is not, although it is systematically correlated with the world—the ‘pseudo-intentionality’ he alludes to here. On Sellars’s reading, the ‘Thomistic’ view gets certain things right that the later Cartesian view gets wrong, such as distinguishing mental acts intrinsically rather than by their ‘content’, but it also gets some things wrong in its own right, notably in its claim that sensing has “genuine intentionality” the way thinking does, and so to take sensing as properly belonging to “the cognitive order” (*i. e.* to qualify as a kind of *knowledge* strictly speaking). Sellars is out to right the Thomistic wrongs, beginning with intentionality, where the mistake is easily made. For Sellars has his eye not only on intentionality, but on the consequent claim that episodes of (intentional) sensing play a foundationalist epistemological role, a view he elsewhere famously calls ‘The Myth of the Given’.<sup>2</sup> There is no question that Sellars wants to make room for his own brand of social epistemology; his agenda is not historical but systematic.

Yet in “Being and Being Known,” Sellars puts his case in historical rather than systematic terms. He can therefore be called to account on his historical claim: that the philosophers of the High Middle Ages, or at least some of them, made a serious philosophical error in not recognizing

<sup>1</sup> W. SELLARS, “Being and Being Known” in *The Proceedings of the American Catholic Philosophical Association*, 34 (1960), pp. 28–49. Reprinted in his *Science, Perception, and Reality*, Routledge & Kegan Paul Ltd. 1963, pp. 41–59. Citations are to the section numbers of the essay.

<sup>2</sup> W. SELLARS, “Empiricism and the Philosophy of Mind” in *Science, Perception, and Reality* cit. pp. 127–196.

the pseudo-intentionality of sense. I'll argue that by not getting the history straight, Sellars has made a rather interesting and serious philosophical error of his own—although in the course of working it through he raises a deep and challenging issue for mediæval philosophy of psychology.

### 1. The Neo-Aristotelian Synthesis

Sellars speaks only of 'Thomism' and 'the Thomistic tradition'. On the most charitable reading,<sup>3</sup> his intended historical target is what elsewhere I have called the 'neo-Aristotelian synthesis in psychology'<sup>4</sup> (one representative of which was indeed Thomas Aquinas), a synthesis of Greek, Arabic, and Christian elements in philosophical psychology which became widely held at the start of High Scholasticism.<sup>5</sup> The guiding principle of the neo-Aristotelian synthesis is that psychological phenomena are to be explained in terms of the internal mental mechanisms that bring them about. In the case of cognition, these mechanisms are subpersonal and semi-autonomous, causally connected to one another and analyzed in terms of potency and act; their existence and nature is deduced from the functions they discharge. Typically, these psychological modules—usually called 'faculties'—transfer information among themselves, a process the Scholastics described as the 'transmission of form' and, when information-preserving, they described as 'having the same form'. The vehicle for the form is a kind of mental representation, usually called a *species*, that mediates among the several faculties of the mind.<sup>6</sup> Therefore, the neo-Aristotelian synthesis explains psychological phenomena by appealing to functionally-defined subpersonal mechanisms which operate on representations.

Mediæval philosophers generally accepted two broad and cross-cutting divisions of psychological phenomena: cognitive and affective on the one

<sup>3</sup> Two discarded alternatives: [1] Sellars is not concerned with the historical movement of the late nineteenth and early twentieth centuries that is sometimes called 'Thomism' and sometimes 'neo-Thomism'; that would make hash of his remarks about the later Cartesian tradition. [2] Sellars is not making specific claims about Thomas Aquinas in particular; that would make it idle to speak of an '-ism' and miss the sweep of ideas embraced by more than one thinker.

<sup>4</sup> P. KING, "Thinking About Things" in G. KLIMA (ed.), *Intentionality, Cognition, and Representation in Medieval Philosophy*, Fordham University Press, 2009. The position laid out here is described in more detail there.

<sup>5</sup> There were competing psychological theories, the most popular of which were 'augustinian': rejecting mental mechanisms, these theories began with introspective data and the mind as the active principle in all cognition, intellectual and perceptual.

<sup>6</sup> The cognizer need not be conscious or aware of these mental representations: such transformations occur *prior* to the occurrent act of cognition.

hand, sensitive and intellective on the other. We'll put aside affective phenomena (emotions and volition) for now in order to concentrate on cognition, both sensitive and intellective, with particular attention to intentionality.

There was broad consensus in the neo-Aristotelian synthesis about the details of sensitive cognition.<sup>7</sup> When Sylvester the Cat encounters a mouse, the following train of events is set in motion. First, the mouse comes to affect Sylvester's sense-organs by having a causal impact on the intervening medium. Exactly how an external object exercises its causality through the medium is dealt with by the appropriate branch of natural science for the sense-faculty in question; in the case of vision, which I'll use as the main example here, the relevant branch is the science of optics (*scientia perspectiua*). In normal circumstances, light reflected from the surface of an object, such as the mouse, affects the proximate layer of the medium, informing it with the 'likeness' of (visual aspects of) the mouse. This layer then causally affects the next layer of the medium, which in turn affects the next, and so on. The 'likeness' in question is referred to indifferently as the *species* or the *intentio* of the mouse—perhaps its original use in the Latin tradition, deriving from the Arabic commentators on Aristotle.<sup>8</sup> Eventually, the causal impact is transmitted through each layer of the medium via the *species*, all the way up to Sylvester's various sense-organs, in particular his eyes.

At this point, each of Sylvester's affected sense-organs is put into one of its possible determinate states  $\delta_i$  according to the transmitted *species*. Each particular sense-organ is the locus of a particular sense-faculty in the expected way: the eye is the sense-organ of the faculty of vision, the ear the sense-organ of the faculty of hearing, and so on. In general, a sense-faculty is the *form* of its associated material sense-organ, which is a particular instance of the form-matter relation between soul and body. When a sense-organ is animated by a sense-faculty as part of a living whole, it is receptive to a range of causal influences and responds differentially to differential causal input. In the case of vision, for example, the rods and cones in the eye fire in patterns that are correlated with distinct external causes (and undergo complex integration for binocular vision). The receptivity of the

<sup>7</sup> The following account of sensitive cognition is ultimately derived from Aristotle, who likens the process to the impression of a seal in wax by a signet-ring: ARIST., *De anima*, II, 12, 424<sup>a</sup> 17–24.

<sup>8</sup> For details see K. TACHAU, *Vision and Certitude in the Age of Ockham: Optics, Epistemology, and the Foundations of Semantics 1250–1345*. Studien und Texte zur Geistesgeschichte des Mittelalters, Band 22. E. J. Brill 1988. For the Arabic background, see the contribution of D. BLACK to this volume.

sense-faculty just is its associated sense-organ's differential responsiveness to stimuli, such that the sense-organ is able to be in a range of determinate states  $\delta_1, \dots, \delta_n$ . Each state  $\delta_i$  corresponds to an act of 'seeing'  $\sigma_i$  of a given sort of visual appearance.<sup>9</sup> Sylvester's encounter with the mouse may therefore be described in three equivalent and theoretically rich ways:

- The mouse causes Sylvester's eye to be in state  $\delta_i$ .<sup>10</sup>
- Sylvester's faculty of vision, which is in potency to  $\sigma_i$ , becomes actually  $\sigma_i$ .
- Sylvester sees the mouse.

So too, *mutatis mutandis*, for the other senses.

The particular states of each sense-organ then have a further causal impact, each affecting in its own way, in material fashion, the sense-organ associated with the 'common' sense (the heart), which unites the diverse external sense-modalities by coördinating their deliverances through the common sensibles, such as shape and number, which are able to be sensed by more than one faculty, in contradistinction to the proper sensibles, able to be sensed by only a single sense-faculty. The net result of the causal impact of the various sense-organs is a composite determinate configuration of the heart, itself taken as a sense-organ. This composite determinate configuration reduces the heart's associated common-sense faculty from potency to act in the overall sensing of the object. In the case at hand, it is the combined sight and sound (perhaps smell) of the mouse. The overall sensing of the mouse by the common sense is known as the *sensible species*, which is stored for later reference in memory whence the imagination can draw it forth (in which case it is known as the *phantasm*). The systematic correlation of sensible objects with such sensible species is part of the information-preserving aspect of perception: a given sensible object regularly causes sensitive cognition of a given kind, and the sensible species is a concrete particular preserving the relevant information about the external sensible object. In short, the object and the sensible species are what Sellars describes as isomorphic—they have literally the same form, which is just another way to say that the representation of an object encodes information about that object uniquely.

To summarize: the neo-Aristotelian analysis of sensitive cognition turns first on an exact understanding of the form-matter relation of the sense-

<sup>9</sup> The given determinate state of the sense-organ  $\delta_i$  is known as the *species impressa*, and the corresponding determinate actualizing of the sense-faculty's potencies  $\sigma_i$  is known as the *species expressa*.

<sup>10</sup> More precisely: the mouse is a partial co-cause of Sylvester's eye being in state  $\delta_i$ , the other co-cause being Sylvester's faculty of vision itself.

faculty and its associated sense-organ, treating this relation as a variety of the act-potency relation. The object and the sensing are ‘formally identical’. Initially the sense-faculty is merely passive with respect to sensing. In general, something is reduced from potency to act only by an agent cause, that is, whenever there is some actualizing process going on, there is an agent which causes the occurrence of that process.<sup>11</sup> In sensitive cognition, the sensed object is therefore the agent cause of the determinate actualization of the potencies of the sense-faculty. External objects are actually sensible; in standard circumstances, they causally bring it about that they are actually sensed. The distinction of external and internal senses seems required by the evident facts of experience. Each faculty, whether internal or external, is given the same kind of potency-act-cause analysis. The account of sensing given here applies equally to humans and to other animals: Socrates sees the mouse in exactly the same way Sylvester does, to the extent that their eyes are physiologically similar.

I have laboured the details of this account, familiar as they may be, because Sellars does not. Now mediæval philosophers generally agreed that sensitive cognition works along the lines sketched here. Past this point, when the same line of reasoning and conceptual apparatus is mobilized to explain intellectual cognition analogously, there is much less agreement. But for our purposes, the differences among their various accounts of thinking, as opposed to sensing, do not much matter; a quick sketch can give the flavour of the neo-Aristotelian views of intellectual cognition.

There are two main points of difference between sensitive and intellectual cognition. First, the intellectual soul is immaterial and therefore has no associated ‘organ’. Although the close connections between the brain and thought were recognized, the brain is not the organ of thought the way the eye is the organ of vision or the ear the organ of hearing. Second, an agent cause must be postulated for intellectual cognition, the operation of which is analogous to the causal activity of the external object in sensitive cognition; this is the agent intellect, in contradistinction to the possible intellect (less commonly ‘material intellect’). The possible intellect is the faculty that is potentially able to think—that is, the faculty whose actualization is an occurrent act of thinking, just as the sense-faculty associated with a given sense-organ is potentially able to sense an object. No intermediate step of affecting matter is needed, since intellectual cognition does not depend on

<sup>11</sup> Unless there were an agent cause for the actualization of the potency, there would be no more reason for the potency to be actualized at one time rather than another; hence the process would either always be actualized or never be actualized, each of which is evidently false.

an organ, or indeed on the body at all. By the same token the processes of sensitive cognition do not of themselves set in train the events constitutive of intellectual cognition.

On this account, the agent intellect must itself accomplish two things. First, it must transfer the information present in sensitive cognition, in the sensible species, so that it may be used by the intellect. Many philosophers take this to be a matter of generating a separate mental representation, namely the so-called intelligible species (*species intelligibilis*), which has the ‘same’ form as found in sensitive cognition. Second, the agent intellect must impress the intelligible species on the possible intellect, reducing it from potency to a determinate act, so that there is an occurrent act of thinking.

Not all philosophers who adopted the neo-Aristotelian synthesis agreed on the need for two stages in intellectual cognition, or on the functions discharged by the agent intellect. Aquinas for one endorses what Sellars calls the “abstractive theory of concept formation” [§17], and so takes the first step to be a matter of the agent intellect ‘abstracting’ the universal features present inchoately in the sensible species to produce the intelligible species.<sup>12</sup> This step reflects what Aquinas and many other mediæval philosophers held to be the salient difference between the two cognitive levels, namely that sensing is of particulars whereas understanding is of universals. Aquinas thus neatly specifies the difference between sense and intellect, and holds on to the idea that literally the same form is present in the object cognized and in both the sensitive and the intellectual cognition of it. Hence the name ‘conformality’ for the heart of Aquinas’s theory.

Three difficulties in Aquinas’s account were pointed out right away. First, the universal character of intellectual cognition seems to be a barrier to the possibility of singular thought. Second, given that the sensible species is particular and the intelligible species universal, it is hard to see how they can be literally identical, or even ‘formally’ identical, in the robust way his account requires. Third, it is hard to explain how a form can inhere ‘immaterially’ in the intellect, in contrast to the straightforward way in which it can be instantiated in material properties of the sense-organ for sensing. These difficulties eventually brought Scotus to reject the simple model of conformality in the neo-Aristotelian synthesis, in favour of a mental-content approach buttressed by the addition of intuitive and abstractive cognition—that is, Scotus proposed that the forms of cognized

<sup>12</sup> Sellars puts this claim succinctly: “the intellect can get its basic vocabulary from sense because this basic vocabulary already exists in the faculty of sense where it has been brought about by the action of external things” [§17]

objects are somehow ‘contained’ in the cognitions of those objects, rather than informing the intellect (or its cognitive acts) directly.<sup>13</sup>

In Sellars’s view, Scotus has already gone off the rails by introducing mental content, although Sellars associates the mistake with Descartes rather than Scotus.<sup>14</sup> His reason is that Aquinas’s conformality account, in which one and the same form explains both why a thing is what it is and how a cognition is ‘of’ or ‘about’ the thing (its intentionality), distinguishes mental acts by their intrinsic features and thereby avoids all the well-known and, in Sellars’s view, insuperable difficulties that beset naïve representationalism. For Sellars, the key advantage of the neo-Aristotelian synthesis is that talk of the nature’s (immaterial) presence in cognition is no more than a way to talk about the cognition having that nature insofar as it is the kind of cognition it is.

So described, it looks as though the neo-Aristotelian synthesis should admit intentionality in both sensitive and intellectual cognition: Socrates and Sylvester each senses the mouse in exactly the same way, and Socrates can in addition think about mousehood, and perhaps about the very mouse itself, occasioned by the sight of the mouse. So what is the mistake Sellars finds in all this?

## 2. The Pseudo-Problem of Pseudo-Intentionality

Sellars claims that sensing does *not* exhibit intentionality, but only a pale counterfeit, ‘pseudo-intentionality’, even though he grants that sensing is caused by the external sensible object. Hence he must reject the claim that the nature informs the sense-organs in a case of sensing the way it informs the intellect in a case of thinking. That is to say, Sellars rejects the idea that sensing is *about* anything, although thinking surely is.

It is hard to see why Sellars insists on this point. According to the neo-Aristotelian synthesis, sensing and thinking are very much on a par, the differences between them due to the immateriality of the intellect as opposed to the materiality of the sense-organs. Furthermore, it seems quite impossible that the nature of the object could inform the intellect if, as Sellars insists, it were *not* present in the intermediate stage of sensitive

<sup>13</sup> For Scotus’s invention of mental content, see P. KING, “Duns Scotus on Mental Content” in O. BOULNOIS, E. KARGER, J.-L. SOLÈRE, and G. SONDAG (eds.), *Duns Scot à Paris*. Brepols 2004, pp. 65–88. Scotus’s attempt to deal with the problem of singular thought is discussed in KING, “Thinking About Things” cit.

<sup>14</sup> Sellars characterizes such “erroneous” mental-content views as holding that “intellectual acts differ *not* in their intrinsic character as acts, but by virtue of being directly related to different relata” [§3].

cognition. But if it is so present, then why deny that sensing is about the object sensed?

A careful look at the way Sellars states his claim will, I think, reveal his reasoning. For he grants that “the expressions by which we refer to and characterize sensations do show a remarkable analogy to the expressions by which we refer to and characterize items belonging to the intentional or cognitive order” [§19] (notice his pairing of ‘intentional’ with ‘cognitive’). The term of art that does the work for Sellars here is ‘sensations’—the selfsame word he used to state his initial claim, namely that “sensations have what I shall call a *pseudo-intentionality*...” (§18). Sellars is careful not to say anything about sensing, but to talk only of sensations.<sup>15</sup> His example is not the everyday case of a cat seeing a mouse, but rather of the sensation of something white and triangular. Now in the case of what we call ‘sensations’, particularly colour-sensations, it is arguable that all there is to the sensation-of-white is its phenomenal appearance: the very occurrent whiteness, just as there is nothing more to the sensation of pain than its occurrent painfulness. These are, after all, paradigmatic instances of *secondary qualities*, not things to be found in the external world. Yet if whiteness and pain are exhausted in their phenomenal appearances as the qualia or raw feels that they are, then there is nothing ‘in the world’ for them to be about. Hence their apparent or putative reference to something external must be merely apparent—and so a case of *pseudo-intentionality*, in contrast to the genuine intentionality of, say, the thought of Vienna. The mediæval mistake, according to Sellars, is the failure to recognize that sense, as a matter of sensations, consists only of phenomenal content. Thus the pseudo-intentionality of sense stands revealed as the pure phenomenality of sensations. To be sure, interaction with the world occasions the sensations we have; there is, as Sellars puts it, a kind of isomorphism between sensations and the external world (which he calls ‘picturing’). But sensations do not represent the external world, even if we can make use of them to get around in the external world. Hence they are not intentional.

Such, I think, is Sellars’s reasoning.<sup>16</sup> He is quite correct that there is

<sup>15</sup> In his “Phenomenalism” and “Empiricism and the Philosophy of Mind,” Sellars also speaks of ‘sense-impressions’—which comes to the same thing as ‘sensations’, as far as I can tell.

<sup>16</sup> Remarkably, Sellars never says what ‘pseudo-intentionality’ means. He comes closest in the following remark: “once the supposed intentionality of acts of sense has been exposed as a pseudo-intentionality, *i. e.* once it is recognized that acts of sense are intrinsically non-cognitive and do not present anything to us as being of a kind—*e. g.* white or triangular...” [§27]. They do not “present anything to us as being of a



an interesting and serious philosophical mistake in all this. But the mistake is not, I think, mediæval at all. It is rather Sellars's own mistake, and it is the consequence of his not getting the history straight. In a nutshell, Sellars's use of 'sensation' (or 'sense-impression' or even 'sense-datum') is not neutral. It carries mind/body dualism along with it. If we reject such cartesian dualism, as they did in the Middle Ages *avant la lettre*, then we can also reject Sellars's claims about pseudo-intentionality and preserve the common mediæval view that sense is as intentional a cognitive faculty as intellect.

I have argued elsewhere that there was no mind/body dualism in the Middle Ages, and that 'sensation' is a philosophical term of art designed for, and only applicable in the context of, such dualism.<sup>17</sup> For mediæval philosophers, sensing is always a state of the percipient subject, having to do with the actualization of a sense-faculty that is essentially bound to its sense-organs; the proper sensibles for each sense, and for that matter the common sensibles as well, are genuine qualitative states of external things.<sup>18</sup> Sylvester *sees* the mouse, as noted above, in virtue of his eyes responding in the correct fashion to the colour and shape of the mouse. (We could also describe this as saying that Sylvester sees the mouse in virtue of his eyes being affected by a shaped grey expanse: see the three equivalent theoretically rich descriptions in §1.) From Augustine to Ockham, the possibility of there being an act of the sensitive soul in separation from the body is roundly rejected. Sensing is something the compound subject as a whole does, and it does so through its sense-organs. We cannot speak of the isolated and hypostasized 'seeing-of-a-mouse' but only of Sylvester's seeing a mouse, even if Sylvester sees the mouse only by having his faculty of vision informed by the relevant shapes and colours. He could, of course, be in error; a mouse-façade, a holographic mouse-projection, even a mere pattern of shadows could deceive Sylvester. The conclusion to draw from such puzzles is not that Sylvester is 'really' sensing some mere phenomenal content, that is, that Sylvester has nothing but sensations, but instead that cats make mistakes; imitation mice can be mistaken for the real thing—hardly a surprise. There is no reason to let epistemological worries (about

kind" because they only present phenomenal content, which just is what it is.

<sup>17</sup> P. KING, "Why Isn't the Mind-Body Problem Medieval?" in H. LAGERLUND (ed.), *Forming the Mind*. Springer Verlag 2007, pp. 187–205. The next few paragraphs are derived from this article.

<sup>18</sup> Pain, the best candidate example for a 'raw feel' or pure phenomenal quality, is according to Aristotelian philosophy produced by a damaged or overloaded sense-organ, and is therefore just as tied to embodiment as the five senses are.

knowledge and certainty for example) drive the analysis of perception.

The term ‘sensation’ (Latin *sensatio*) seems to be a late coinage, apparently entering via Michael Scotus’s translation of Averroës’s greater commentary on Aristotle’s *De anima*, dating from 1220–1230, where it is used to mean something like the aftereffect of sensing—the way the odour of onions may remain in the cheese after they have been side-by-side for too long. Aquinas uses the term only twice, and it is not commonly found in High Scholasticism.

Nor do mediæval philosophers seem to have the notion of a ‘sensation’ (with or without a handy term for it), that is, for the external causal product of an act of sensing, taken in isolation. Instead, they held that sensing is always internal to physiological change in ‘animated sense’, as Suárez would later put it. Ockham thought the idea of sensing without a body to be nonsense, a *reductio ad absurdum* of mind/body dualism three centuries before Descartes.<sup>19</sup> There are acts of sense, and human souls may persist in the absence of their bodies, but there can’t be acts of sense in human souls in the absence of their bodies, any more than the dancer’s dancing can be separated from the dancer. Sensing is an act that has the composite, the embodied soul, as its subject, even if its source is the soul itself. The capacity to sense is rooted in the soul but, as Aquinas argues, it can be realized only in the embodied soul, much as whittling depends on knowledge but can be realized only in the body.<sup>20</sup> From Augustine to Suárez, mediæval philosophers agree that sensing is an act of the subject as a whole. Socrates and Sylvester each see the mouse in virtue of their faculty of vision being causally activated, once their eyes have been affected in a determinate ‘mouse-like’ colour-and-shape configuration (perhaps requiring integration with other sense-modalities through the common sense).

The neo-Aristotelian synthesis, then, rejects the terms in which Sellars frames his criticism. Mediæval philosophers haven’t made a *mistake* in failing to notice that acts of sense are isolated instances of phenomenal qualia, somehow confusing them with acts that have genuine representational content. Instead, mediæval philosophers quite consciously and deliberately maintained that acts of sense have representational content, exactly the way in which acts of thought have representational content, in the subject in which they occur. There are no ‘contentless’ pure phenomenal appearances, at best only contingently tied to the body, which are the full measure of sense. Instead, the ‘Thomistic tradition’ held that subjects sense external

<sup>19</sup> WILLIAM OF OCKHAM, *Quodlibeta* 2.10 (Opera theologica, 9, p. 158, ll. 42–53).

<sup>20</sup> Aquinas, *Summa theologiae* 1a q. 77 art. 8).

objects, or more exactly that subjects perceived external objects by sensing their perceptible qualities. The same considerations apply to sense and to thinking; cognition is intentional all the way down.

To be fair, there is an ontological gap in the Middle Ages. But it is not located between the mind and the body—or, more precisely, it is not located between the intellective and sensitive souls on the one hand, and the body they inform on the other hand. Rather, it is found between the intellective soul, which is capable of separate existence in virtue of the fact that it does not require a bodily organ, and the sensitive soul which is tied to the body. This ‘dualism’ between the intellect and the living, sensing body, which is also found in ancient philosophy, offers neither aid nor comfort to Sellars’s argument.

### 3. Mediæval Intentionality

If Sellars is mistaken, what then *is* the robust mediæval conception of intentionality which applies to sensing and to thinking? No single approach gives an adequate answer, but a combination of three separate approaches allows us to give a general account of intentionality.

The first clues are provided by etymology. The Latin word *intentio* is derived from the verb *intendere*, ‘to tend (towards)’.<sup>21</sup> Hence intentionality must include the idea of motion or direction towards something. This movement is of course metaphorical, but for all that it captures an important aspect of intentionality—perhaps the most important aspect. For the key to intentionality is to see that it is a state of a subject that is somehow tied to something else, something beyond itself. In short, for mediæval philosophers it is fundamentally *relational*.

We can get a handle on what an *intentio* is related to by looking at the context in which the term was introduced into philosophy.<sup>22</sup> Interestingly, it first turns up in natural science, in particular in Latin translations of Arabic treatises on optics, where it is used to describe the *species in medio*. This is not unrelated to its use in psychology, since optics was taken to be part of the science of vision, itself part of the natural science of perception. So it was that Latin writers, ignorant of the Arabic originals, found them-

<sup>21</sup> There are subtle shades of meaning to differentiate *intendere* from *adtere*, each of which captures the sense of motion or direction towards something, but they do not affect the account given here.

<sup>22</sup> The qualification is important. In addition to the ordinary use of *intendere* to describe resolution, in logic there was a practice of talking about ‘first intentions’ and ‘second intentions’, and this latter usage cross-bred with the Arabic notions in complicated ways.

selves with a new and somewhat surprising piece of vocabulary to describe the processes that underlie vision: the *intentiones* of the things that are seen, which are found in the intervening medium. These *intentiones* sometimes come into contact with appropriate subjects, which make them into perceivers, though what is perceived is the object and not its *intentiones*. What is more, such *intentiones* are not restricted to directly perceptible properties. At least some non-perceptible properties can be grasped by a subject through *intentiones*. The famous example of such a non-perceptible *intentio* is the one by which the sheep recognizes the wolf's harmfulness, namely by grasping the wolf's *intentio* of harmfulness through its 'estimative power' (*uis aestimatiua*). Whether the properties are perceptible or not, the *intentio* is meant to be a causal intermediary in the explanation of how we come to know things about objects. Although '*intentio*' went on to acquire other meanings, it never shed this early usage as an intermediary entity residing in the medium. Hence in addition to being a relational phenomenon, it is part of the notion of intentionality from its very beginnings that it need not occur in a cognizer. For the medium has no cognitive capacities, and *intentiones* are certainly found there—indeed, they were postulated as intermediate entities that exist primarily in the medium. While they explain the possibility of cognition, they need not occur in the souls of animate beings. Just as not all representation is mental representation, given that a statue-of-Hercules represents Hercules without being a mental representation (rather a physical one), so too not all intentionality is mental intentionality.

We can characterize intentionality in purely mediaeval terms, along lines suggested by Aquinas, as follows. The presence of a (material) form in matter makes a hylomorphic composite to be what it is. The form of mousehood in appropriate mouse-matter, for instance, results in a live mouse, a composite substance. But if the relevant form is somehow present in what is *not* the appropriate matter, it results in something that is 'directed' at its (natural) state of being in the appropriate matter. Put a different way, substantial forms either make something what it is or point towards making something a substance of that sort. Hence the presence of the mouse's substantial form, without its appropriate mouse-matter, in (a) the intervening medium, (b) Sylvester's sense-faculty, or (c) Socrates's intellect, results in something whose intentional content is a mouse. In (b) and (c) it results in a sensing of a mouse or a thinking of a mouse, respectively. (There is no special terminology for (a), the state of the medium informed by the mouse-intention.) In technical terms, an intention is a third-mode aris-

totalian relative term (the relation of “the measurable to the measure”).<sup>23</sup> The object at which it is directed has only a nominal converse relation to it: Sylvester’s sensing of the mouse brings about only the notional converse relation *being sensed by Sylvester* in the mouse, which in fact is not a property or feature of the mouse at all, but merely another description of Sylvester’s relation to the mouse—a classic instance of a ‘Cambridge change’. Metaphysically there is no new entity involved in intentionality: the form of the external object is present in that object and in whatever is intentionally directed towards it. Just as the height of an object is the ground of its being taller than another, so too the presence of the form in anything other than its appropriate subject results in an intentional relation to something of that sort, *i. e.* where the form produces the appropriate composite. This holds even if there is nothing of the sort in the vicinity—the “intentional inexistence” of (at least some) cognitive acts.

Mediæval intentionality, therefore, is a relational state of a subject (not necessarily a cognitive subject), directed at something that has the form properly. This is the robust conception of intentionality that the neo-Aristotelian synthesis identifies in sensing and in thinking, with the further advantage that it allows a clear causal account of the processes of cognition to be told.

It is worth briefly contrasting this robust conception of intentionality with the account given by Franz Brentano when he famously re-introduced the term into the philosophy of psychology. Brentano declares:<sup>24</sup>

Every mental phenomenon is characterized by what the Scholastics of the Middle Ages called the intentional (or mental) inexistence of the object, and what we might call, though not wholly unambiguously, reference to a content, direction towards an object (which is not to be understood here as meaning a thing), or immanent objectivity. Every mental phenomenon includes something as object within itself, although they do not all do so in the same way. In presentation something is presented, in judgment something is affirmed or denied, in love loved, in hate hated, in desire desired, and so on. This intentional in-existence is characteristic exclusively of mental phenomena. No physical phenomenon exhibits anything like it. We could, therefore, define mental phenomena by saying that they are those phenomena which contain an object intentionally within themselves.

Brentano’s ‘reference to a content’ gives a specific sense to the way in which one thing might “tend (towards)” something else, broadly termed its ‘object’. But he goes too far: “the Scholastics of the Middle Ages” did not all

<sup>23</sup> See ARIST., *Metaphysics*, V, 15, 1020<sup>b</sup>26–32.

<sup>24</sup> F. BRENTANO, *Psychologie vom empirischen Standpunkt*. 1874. L. MCALISTER (ed. and transl.), *Psychology From an Empirical Standpoint*, London: Routledge & Kegan Paul Ltd. 1995: pp. 88–89.

think that intentionality required the notion of mental content. Aquinas for one did not. As noted above, it is only with Scotus that we have a clear formulation of the notion of ‘mental content’. Furthermore, while Brentano rightly points out that the object of an intentional act need not exist, or not exist in any ordinary way, he makes the false claim that intentionality is the mark of the mental (as we would put it), that it is “characteristic exclusively of mental phenomena.” As we have seen, for mediæval philosophers who adopt the neo-Aristotelian synthesis, the intervening medium is filled with *intentiones*. Hence intentionality cannot be the mark of the mental. Brentano’s scholarship is no better than Sellars’s when it comes to “the Scholastics.”

Broadly speaking, then, mediæval intentionality is a matter of one thing standing in a (third-mode) relation to another thing that is its object. (There are questions about the ontological status of the object, but put them aside for now.) As we have seen, mediæval intentionality covers more than the mental, since the form in the medium is intentionally related to the object that engendered it. And this point brings us back to Sellars’s arguments against the intentionality of sense.

#### 4. What is Cognition Like?

Even though Sellars has illegitimately imported a version of mind/body dualism into the Middle Ages, his argument in “Being and Being Known” includes an insight that might be thought to pose a difficulty for mediæval philosophy of psychology, even with the robust conception of intentionality sketched in the preceding section.

Sellars grants that acts of sense, which respond differentially to features of the surrounding environment, can properly be said to reflect that environment. Furthermore, he grants that an organism’s sensory apparatus can be fine-grained enough to track the environment closely, to the point of being a kind of isomorphism. However, Sellars denies that the isomorphism between sense and the environment is sufficient for conceptual thought: he distinguishes different kinds of ‘isomorphism’ that hold between sensations and the world and those that hold for “the conceptual order.”<sup>25</sup> Roughly, acts of sense are responses to the surrounding environment, and they can picture or ‘depict’ it more or less accurately, depending on the subject’s sensory apparatus. The eyes register coloured shapes, the ears pitched sounds, and so on. A living organism may even be ‘wetwired’ to respond differen-

<sup>25</sup> Sellars describes the former as ‘picturing’ and the latter as ‘signifying’, but there is no need to follow his idiosyncratic usage.

tially to different sensory inputs. Cats seem to be set up so that the sight of mice, or things sufficiently like mice, trigger a hunting response; sheep avoid wolves without having first learnt that they are dangerous; and so on. So much is straightforward, and it dovetails with mediæval talk about the *intentiones* that figure in perception.

Yet Sellars thinks that tracking the environment in this fashion is *not* sufficient for conceptual thought. That is, it is not enough for the result of causal interaction with the environment to have some sort of differential response from which the state of the environment can be ‘read off’. Thermostats can do that, in a limited way; by examining their limited responses we can tell roughly what the ambient temperature of the room must be. Sophisticated robots can track their surrounding environment in complex and nuanced ways, as Sellars argues in detail [§§36–52]. He imagines a robot whose “wiring diagram” sets it up to record different inscription-patterns on a tape depending on the state of the environment: “we might say, for example, that the tape pattern ‘::’ signifies *lightning*” [§44]. If sufficiently complex, Sellars points out that we might permit ourselves “to *talk* about it in human terms. . . in terms of what it thinks or knows” [§§39–40], *e. g.* that there is lightning at such-and-so a time. But that turns out to be the crucial move in the argument. As Sellars puts it: “But instead of exploring this way of talking about patterns on the robot’s tape, I shall explore instead the way of talking about human speech which is being stretched to cover the robot” [§45]. The remainder of “Being and Being Known” is devoted to proving that the key point is the extension of our intentional discourse to cover ‘Robotese’ sentences—that is to say, genuine intentionality is explicated in terms of membership in a linguistic community, in line with the social epistemology Sellars helped to pioneer.

We do not have to agree with Sellars’s solution to profit from his puzzle. Put it like this. Any system that exhibits differential and discriminative responses to its environment may reasonably be said to ‘depict’ it, and, in the mediæval sense, to have states of the environment as the intentional content of its own responsive (‘sensory’) apparatus. Yet as we have seen, this applies to thermostats, the intervening medium, and robots of different degrees of sophistication. What, if anything, sets *cognizers* apart from mere thermostats or robots?

The answer cannot be that cognizers have intentional states. As we have seen, intentional states are not unique to cognizers; they are present in the intervening medium, making cognition of an object possible. Yet even were that not so, for all its complexity the neo-Aristotelian synthesis in psychology does no more than describe a complex set of interlocking sub-

personal mechanisms, functionally defined, that might well be accomplished by cleverly designed machines—or, to put the point in another way, it offers as a complete explanation of psychological phenomena a complex array of functional mechanisms, which might be realized in multiple ways, even in different material. Cognition seems no more than a feature of certain such systems. Does mediæval philosophy of psychology have the resources to set cognizers apart from other complex intentional systems?<sup>26</sup> Admittedly, mediæval philosophers were not aware of robots, computers, and the like, but does not prevent us from asking whether there is anything more to cognition in their view than a complex system merely being in the relevant state with respect to its environment.

There are two traditional answers to this question that will not do. First, we cannot merely insist that cognition is a property restricted to living organisms. Unless there is some feature of cognition that depends on the subject being alive, or perhaps on its being biological, the insistence on life seems irrelevant. It is true that horses and humans are alive in ways in which computers and robots are not, but it is not at all clear why that should qualify the former as cognizers and the latter merely as processing information—especially when the former are doing no more than the latter in processing information. Nor does it seem profitable to shift the debate to what counts as life. Would a self-maintaining robot, programmed to build a successor, suddenly be endowed with cognition? Why should it? Nothing in its information-processing systems has changed with the addition of self-maintenance and the ability to build another robot. Without more by way of argument, this traditional answer is no answer at all.

Second, we cannot merely insist, along with mediæval philosophers and theologians, that the distinctive features of cognition depend on the immateriality of the intellect. (Sellars suggests as much: §56.) On the one hand, it is not clear what it is about immateriality that matters for cognition. Aquinas argues that the intellect must be immaterial because otherwise it could not know the natures of all material things (*Summa theologiae* 1a q. 75 art. 2). Yet even if we grant him his assumption that the human intellect is capable of knowing the natures of all material things, his argument only extends to human intellectual cognition, and leaves human perception, and animal cognition generally, out of the picture. Nor does it explain why a limited cognizer, not capable of knowing the natures of all material things, thereby fails to cognize the things that do fall within its limited

<sup>26</sup> See D. DENNETT, “Intentional Systems” in *Journal of Philosophy* 68 (1971), pp. 87–106.



range. There seems to be nothing special about ‘mind-stuff’ (or ‘soul-stuff’) that is relevant to the processes of cognition, at least as explicated by the neo-Aristotelian synthesis. For mediæval philosophers—and this is Sellars’s insight—are committed to the view that sensing and thinking are each genuine instances of (intentional) cognition. Hence any account of what makes something a cognizer, above and beyond the functional interplay of sub-personal psychological mechanisms, has to apply to animals as well as to humans, to perception as well as to thought.

These two traditional responses, then, fail to answer the question Sellars is pressing. What, if anything, sets cognizers *qua* cognizers apart from any other complex intentional systems?

Perhaps a contemporary response might fare better, along the lines proposed by Nagel, Jackson, Chalmers, and others.<sup>27</sup> Nagel puts the point with exceptional clarity (p. 436):

But fundamentally an organism has conscious mental states if and only if there is something that it is like to *be* that organism—something it is like *for* the organism. We may call this the subjective character of experience. . . It is not analyzable in terms of any explanatory system of functional states, or intentional states, since these could be ascribed to robots or automata that behaved like people though they experienced nothing.

Nagel, like Sellars, thinks that “robots or automata” are missing something essential to cognition, to what it is like to have “conscious mental states.”<sup>28</sup> We could try to accommodate these intuitions by re-admitting phenomenal content in a limited way, without countenancing simple mind/body dualism. In particular, we can admit the robust mediæval notion of intentionality and grant that sense-cognition is genuinely intentional, holding that *in addition* to the intentional content of sense there is also phenomenal content—something that it is or feels like to see green, or to spot a mouse in the corner, or to feel pain, or perhaps even just something it is like to be a cat, or more generally to be a cognizer. After all, to say that phenomenal

<sup>27</sup> See especially T. NAGEL, “What is it Like to Be a Bat?” in *The Philosophical Review* 83 (1974), pp. 435–450; F. JACKSON, “Epiphenomenal Qualia” in *The Philosophical Quarterly* 32 (1982), pp. 127–136; D. CHALMERS, *The Conscious Mind* (Oxford University Press 1996).

<sup>28</sup> This seems to be the best attempt to spell out what ‘awareness’ or ‘consciousness’, taken as an explanation of the difference between cognizers and their close counterfeits, might amount to. It is worth pointing out, though, that mediæval philosophers did not have these terms, nor anything much more than the rough-and-ready distinction between being asleep and being awake, or being knocked unconscious and not. There may well be a wealth of philosophical assumptions built into our modern vocabulary.

content is not the whole of sense-experience, as argued above, is not to deny that it may be a part of experience, even in the extended sense in which there is something it is like to be a bat, a cat, a mouse.

One difficulty for this approach is that ‘what it is like’ does not travel with intentionality—for the intervening medium does have *intentiones*, but there is not something it is like to be the air in the presence of a red, as opposed to a green, object. Yet drawing the line anywhere else seems arbitrary. Why restrict it to living things, things capable of movement, rational beings? All the problems that plague the traditional answers come up once again.

A further difficulty for this approach is that there does not seem to be any grounding in mediæval texts for the notion of ‘what it is like’. This is not decisive; we are interested in the conceptual resources of the mediæval programme, not how mediæval philosophers carried out their programme. But in the complete absence of textual support, it is hard to see any reason to ally mediæval philosophers with the contemporary approach.

Without some such notion, however, I do not see any way to draw a distinction between Sellarsian robots and mediæval cognizers. I can see two possible ways to go on from here.

On the one hand, we could simply bite the bullet and say that the neo-Aristotelian synthesis does not have the resources to draw the distinction. We might even think that not drawing the distinction is in fact a virtue. Having learned from Sellars that intentionality is not the mark of the mental, we might be inclined to get rid of the mediæval insistence on the immateriality of the intellect, and treat thinking, like sensing, as a material process—in effect, treating humans and other animals on a par with complex Sellarsian machines. Surprisingly, the outlines and most of the details of the neo-Aristotelian synthesis, which explains psychological phenomena in terms of the internal mental mechanisms (subpersonal and semi-autonomous) that bring them about, remain unaffected by jettisoning immateriality and reinterpreting it as a theory that might be realized in material (biological) ‘machines’. The result of this ‘de-materialisation’ of the neo-Aristotelian synthesis resembles nothing so much as modern cognitive science. We lose the idea that intellective cognition is the sole and unique property of human beings, but we gain analytical clarity about the nature of cognition, as well as learn a salutary lesson in humility.

On the other hand, we could say: so much the worse for the neo-Aristotelian synthesis. We might be tempted by one of the great mediæval alternatives instead—Ockham’s proto-pragmatism, which is nonreductive

and dispenses with mental processes as far as possible;<sup>29</sup> or ‘augustinian’ views that single out a certain type of cognitive episode, namely the private and inner experience of ‘illumination’, as the starting-point of cognitive psychology.<sup>30</sup> Roughly, the former eschews talk of ‘inner experience’ and ‘subjectivity’ altogether, whereas the latter begins with such notions and develops them into a full introspective psychology. It is with the late mediæval Franciscan augustinians, who take “acts of attention” as primary, that we come the closest to the views of Nagel and the rest. But these views are for the most part developed in opposition to the neo-Aristotelian synthesis, and cannot be integrated into it.

### Conclusion

Mediæval intentionality is not, as Sellars charged, no more than pseudo-intentionality. We have seen how Sellars was led to this claim by anachronistically importing cartesian mind/body dualism into a mediæval setting where it has no place. But mediæval intentionality, while it applies to sensing and to thinking, is not the ‘mark of the mental’, thus leaving it open just what is distinctively *psychological* about cognition.

Out of the frying-pan and into the fire? Perhaps. But it is progress, of a sort, to see how contemporary questions can shed light on mediæval concerns, allowing us to highlight issues that would otherwise remain hidden. Furthermore, it suggests new directions in which to push our research into mediæval philosophy of psychology—our knowledge of which is still in its infancy. And we get this through the genius of Wilfrid Sellars, whose arguments have the depth to be illuminating even when they are off-target.

*Peter King • University of Toronto*

<sup>29</sup> See P. KING, “Two Conceptions of Experience” in *Medieval Philosophy and Theology*, 11 (2003), pp. 203–226; and P. KING, “Le rôle des concepts selon Ockham” in *Philosophiques* 32 (2005), 435–447. These features of Ockham’s thought, along with his view that thinking is to be understood as essentially linguistic (Mental Language), make his views as close to Sellars as any mediæval philosopher could get.

<sup>30</sup> P. KING, “Augustine on the Impossibility of Teaching” in *Metaphilosophy*, 29 (1998), pp. 179–195.