

Peter Auriol and Adam Wodeham on Perception and Judgment

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Although not as well known today as his younger contemporary William of Ockham, the Franciscan philosopher and theologian Peter Auriol (1280-1322) was one of the most original and influential thinkers of the early fourteenth century.¹ One area where Auriol's originality is particularly evident is his cognitive psychology, in particular his account of misrepresentation and sensory illusion. Indeed, where medieval thinkers traditionally develop their analysis of sensory cognition by starting from successful cases of veridical cognition, treating misperceptions as unfortunate exceptions to the rule, Auriol turns this procedure upside down.² For Auriol, it is precisely the cases where perception goes wrong that can teach us the most about the mechanisms of sensory cognition. In particular, Auriol believes that what these cases teach us is that the immediate objects of perception enjoy a mind-dependent kind of being, which he often described as 'intentional', or 'apparent' being.

Auriol's claim that the direct objects of perception enjoy a mind-dependent kind of being elicited strong reactions from his contemporaries. In this paper, I will concentrate on the critical response to Auriol in his fellow-Franciscan, Adam Wodeham (1298-1358). For a long time, Wodeham has been known mostly as Ockham's personal secretary. Increasingly, however, he is being recognized as a highly skilled philosopher in his own right.³ As we will see, Wodeham launched an interesting critique against Auriol's theory of the apparent being. The apparent being, he argued, would lead to scepticism, and was in fact unnecessary to account for the cases of perceptual error Auriol had discussed.

According to Wodeham, these cases can be accounted for without ontological heavy lifting once we realize that perception and judgment are structurally linked together. All by itself, this idea is not original in Wodeham, and can be found in thinkers such as Ockham as well.⁴ Even so, Wodeham develops the idea in an interesting way, and draws two general

¹ See Friedman 2015.

² See Denery 2005, 118-19.

³ On Wodeham's life and work, see Courteney 1978.

⁴ See, for example, *Ordinatio* 1.27.3 (*Opera Theologica* IV 243-50).

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lessons from the interconnectedness of perception and judgment. The first is that the psychological mechanisms underlying what seem to be similar kinds of behaviour in human beings and other animals are in fact importantly different in a number of ways. The second is that ordinary sense perception can give us but a qualified, or conditional, kind of certainty and knowledge about the world we live in.

The paper proceeds as follows. Section 1 introduces Auriol's notion of apparent being and some of the most important objections that were raised against it by contemporaries such as Wodeham. Section 2 turns to Wodeham's alternative account of perceptual error. Finally, sections 3 and 4 explore the two lessons Wodeham draws from the interconnectedness of perceptual acts and fallible judgment.

Auriol and the Apparent Being

Auriol introduces his notion of apparent being by considering the following illusion. Imagine you are traveling by boat, and that you stand on the deck and look at the green trees on the shore. As the boat is carried further down the river, the trees that are now present in your visual field will slowly pass out of sight again, and this gradual passing in and out of sight of trees may create the impression that the trees on the shore are moving. A close analysis of this illusion, Auriol believes, will teach us some important facts about the basic mechanisms of perception.

Auriol starts his analysis with the assumption that all cognitions involve both an act and an object of cognition. The act, as it were, targets its object, and the object thereby becomes present to the act. In the case of the trees that appear to be moving, the act of cognition is an act of seeing, and what is present to this act is some kind of motion. And this raises a question. What is the ontological status of the motion that has become present to your act of seeing? After all, there is no real motion where you are looking. In the following passage, Auriol reviews some possible answers:

When someone is transported over water, the trees that exist on the shore appear to move. This movement, which is in the eye as an object, cannot be said to be the vision itself; otherwise a vision would be the object of sight, and a vision would be seen, and

vision would be a reflexive power. But it cannot be said to really exist in the tree or in the shore either, because then they would really move. Neither can it be said to be in the air, because movement is not attributed to the air, but to the tree. Therefore it only exists intentionally, not really, in seen being and in adjudged being.⁵

The first option Auriol sees is that the motion that is present to your act of vision somehow is an inner state of your visual system. But this cannot be the case. If it were, after all, what appeared to you in this situation would be an inner state of your visual system, not trees in motion.

The next option is that that the motion that appears to you is somehow in the air. But that cannot be right either. For if it were, it would be the air that appeared to be in motion, not the trees. The remaining option is that the motion that has become present to your act of seeing is somehow a product of your own cognitive system. Indeed, according to Auriol, as a result of the motion of the boat and your position with regard to the trees on the shore, your cognitive system produces a kind of motion to serve as an object for your act of vision. To be sure, this is not a real motion, in the sense that no real thing is displaced as a result of what goes on in your mind. Rather, the motion that your cognitive system produces to serve as an object of your act of vision, is what Auriol calls an 'intentional' motion, or a motion with 'apparent' rather than real being.

Other perceptual illusions receive a similar treatment. For instance, when I see a stick that is partially merged into water, it will appear crooked to me. Again, Auriol infers that there must therefore be an instance of crookedness that is present to my act of seeing. But the being of this crookedness that appears cannot be reduced to that of any of the really existent objects involved in this situation, such as the water, the stick, or my visual apparatus. Therefore, it must have a special kind of intentional, or apparent being that is somehow a product of my cognitive system itself.⁶ Again, when I hallucinate golden mountains, there is

⁵ '[C]um quis portatur in aqua, arbores existentes in ripa moveri videntur. Iste igitur motus, qui est in oculo obiective, non potest poni quod sit ipsa visio; alioquin visio esset obiectum visus, et visus videretur, et esset visus potentia reflexiva. Nec potest poni quod sit realiter in arbore vel in ripa, quia tunc realiter moverentur. Nec potest poni quod sit in aere quia aeri non attribuitur, sed arbori. Est igitur tantum intentionaliter, non realiter, in esse viso et in esse iudicato'. *Scriptum* 3.14 (Buytaert, 696).

⁶ 'Actus sensus exterioris ponit rem in esse apparenti'. *Scriptum* 3.14 (Buytaert, 697).

no real object to serve as the terminus of my act of cognition. Instead, the terminus of my act is supplied by my own visual system, which generates intentional or apparent mountains of gold to give content to my hallucination.

In these cases, Auriol thus assigns a special ontological status to that which appears to a subject. But importantly, Auriol believes that illusions and veridical perceptions are cognitive acts of one and the same kind. And because illusions and veridical perceptions are acts of the same kind, they involve the same cognitive systems, and the entities that play a basic role in the analysis of illusion will have to feature in the analysis of veridical perception as well.⁷ In particular, Auriol reasons that when John appears to me in a veridical act of vision, John will have apparent being. Even in veridical vision, that is, ‘the exterior sense puts the thing in intentional being’.⁸ The difference with perceptual illusion is that when the trees appear to move, the motion that is present to my act of seeing has apparent being only. When I see John, however, the same object has both a real being independently of me, and an apparent being that is produced by my cognitive system. Seeing John thus involves the following entities:

- i. My act of vision
- ii. John in real being
- iii. John in apparent being

Although a veridical vision of John thus involves both John in real being and John in apparent being, Auriol would not take this to mean that the act is directed at two distinct objects.⁹ For according to Auriol, in a veridical perception of John, a relation of identity obtains between the second and third items in this list: it is John in both cases, just in a different kind of being. As Auriol himself puts it:

⁷ Auriol would thus reject disjunctivist accounts of perception, which deny that illusions and veridical perceptions are the same kind of cognitive act.

⁸ ‘Actus sensus exterioris ponit rem in esse apparenti’. *Scriptum* 3.14 (Buytaert, 696).

⁹ Thus, I don’t think Auriol would say that in veridical perception, we see apparent John *and* real John.

There is no distinction between an image or a thing in apparent being and a real being, because in veridical vision they coincide.¹⁰

Because what has real being and what has apparent being thus coincide in veridical perception, Auriol maintains, the fact that the exterior senses generate their objects in apparent being does not make perception indirect.¹¹ The very external thing that appears to me begets apparent being by the act of the external senses. Ordinary sense perception does not involve the mediation of some kind of inner image that is different from the perceived object. Indeed, the introduction of such images in the analysis of sense perception, Auriol fears, would interpose a 'veil' between the perceiver and the perceived object.¹² It is precisely the interposition of such a veil that Auriol's own theory seeks to steer clear of:¹³

A thing that is seen when it really exists, also has adjudged and seen being. But this does not introduce any difference or distinction or plurality regarding that reality with respect to anything absolute, but it adds that intrinsic and indistinguishable relation that is called 'objective appearance'. Therefore, sight does not terminate at the thing that is its object through the mediation of something absolute, as if there were some veil or medium between the vision and the wall that is seen.¹⁴

¹⁰ '[N]on distinguitur imago seu res in esse apparenti ab esse reali, quia simul coincidunt in vera visione'.

Scriptum 3.14 (Buytaert, 698).

¹¹ Cf. Denery 2005, 130-1 and Perler 2006, 279.

¹² Worries about a 'veil of perception' are often associated with early-modern theories of perception according to which mental representations or 'ideas' are the immediate objects of perception. As I argue in Adriaenssen 2017a, however, the worry representational devices will veil external objects rather than provide us with access them, was hotly debated as early as in the thirteenth and fourteenth centuries. See also Pasnau 1997, chapter 7 and Perler 2006, 49.

¹³ On Auriol's criticism of indirect realism, see Adriaenssen 2017a, chapter 3.

¹⁴ '[R]es quae videtur, cum hoc quod realiter existit, habet etiam esse iudicatum et visum, quod quidem non ponit varietatem aliquam aut distinctionem, vel numerum cum realitate illa quantum ad aliquid absolutum, sed addit respectum illum intrinsecum et indistinguibilem, qui dicitur "apparitio obiectiva". Non igitur terminatur visus ad rem obiectam mediante aliquo absoluto, quasi sit aliquod pallium vel medium inter visionem et parietem qui videtur'. *Scriptum* 27.2 (Electronic *Scriptum*, lines 598-9). Henceforth, the Electronic *Scriptum* will be abbreviated as ES.

In spite of this and similar passages, however, many of Auriol's early readers feared that with his apparent being, Auriol had introduced precisely the kind of interface between subject and object of perception he claims he has avoided. Thus, according to William of Ockham, it makes no sense to say that John in apparent being is identical with John. Hence, when John in apparent being is present to my act of seeing, what I have in front of me is something other than my friend, John. The reason that it makes no sense to say that John in apparent being is identical with John, according to Ockham, is that if a and b are identical, it is impossible for either one of them to exist or come into being without the other. But on Auriol's own avowal, the apparent version of an object can exist even when that object does not currently enjoy real being. Indeed, this is precisely what happens when we remember, or imagine the presence of, things that no longer exist. Hence, no genuine identity can obtain between the two.¹⁵

In a similar spirit, Ockham's contemporary, the Franciscan thinker Walter Chatton, claimed that in Auriol's theory of cognition, visual perception always involves an entity 'in some kind of being distinct from the act of seeing and the seen object itself'.¹⁶ This entity will function as 'an intermediary between the cognition and the external thing'.¹⁷ And as such, Chatton concluded, this intermediary will block rather than enable our cognitive access to the external world, and 'impede the vision' of distal objects.¹⁸

We find a similar line of criticism in Wodeham. Auriol's apparent being amounts to an interface between us and the external world, and it makes direct perception of objects impossible. To be sure, Wodeham knew well enough that Auriol's intention had never been to introduce a kind of interface between subject and object of perception. Indeed, he cites a passage where Auriol had claimed that for x to have apparent being just is for x to appear to

¹⁵ *Ordinatio* 1.27.3 (*Opera Theologica* IV 239).

¹⁶ '[P]onatur res in quodam esse distincto ab actu videndi et ipsa re visa'. *Reportatio et lectura*, prol. 2.2 (Wey, 87).

¹⁷ '[M]ulti alii ponunt unum esse obiectivum huiusmodi, medium inter cognitionem et res extra, deminutum quoddam. Etiam quidam hoc ponunt in cognitione intuitiva, ut tactum fuit in Prologo. *Reportatio* 1.3.2.1 (Wey and Etzkorn, 233).

¹⁸ '[I]mpediet visionem albedinis'. *Reportatio et lectura*, prol. 2.2 (Wey, 87).

some subject. On this view, to say that x has apparent being just is to identify a relation that holds between x and some subject of cognition, S . It is not to introduce a third thing that somehow mediates between x and S .¹⁹

But according to Wodeham, this line of argument will not work. Relations, he points out, have what he called ‘foundations’. The relation ‘appears to’, for example, has two foundations, which occupy the empty spaces in the following expression:

(1) . . . appears to . . .

Now, when x appears to S , one of the foundations of this relation is S :

(2) . . . appears to S .

But what is the other foundation? On Auriol’s account, Wodeham reasons, it cannot be x itself. For if it were, the relation would not survive the disappearance of x . But it does. The very point of Auriol’s decision to move illusions to the heart of his account of sense perception was that an object x can appear to a subject S even when x no longer exists.²⁰

But if the empty space in (2) is not saturated by x , it must be some other entity, y , that serves this role. Hence we get:

(3) y appears to S .

¹⁹ He quotes Auriol’s claims to the effect that an apparent being ‘non claudit in se aliquid absolutum nisi ipsam realitatem’ [sc. the reality that appears], and that it ‘claudit tamen aliquid respectivum, videlicet apparere, quod non debet intelligi ut affixum aut superpositum illi rei’. *Lectura secunda*, prol. 4.4 (Wood, 90-1). See Auriol, *Scriptum* 27.2 (ES, line 586). See also Grassi 2005, 132.

²⁰ ‘[Q]uaeso: In quo fundatur? Aut immediate in ipsa realitate vera, et tunc non posset manere realitate illa ad nihilata per potentiam Dei, cum respectus non possit esse modo sibi competenti sine fundamento existente, cuius oppositum tu dicis, ponens apparitionem obiectivam etiam naturaliter ubi res visa nihil est’. *Lectura secunda*, prol. 4.4 (Wood, 91).

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But that is to claim that y 'mediates between a vision and whatever true external thing'.²¹ We thus seem to have arrived at precisely the kind of indirect realism Auriol claimed he could steer clear of when he wrote that the apparent being is not some kind of veil between subject and object of perception.

Indeed, according to Wodeham, the only way in which Auriol can avoid this outcome is to say that x does not appear in virtue of an object y different from it, but rather in virtue of x in apparent being, as follows:

(4) Apparent x appears to S .

But this, Wodeham argues, will not do either. After all, Auriol had wanted to say that for x to exist in apparent being just is for x to appear to S . Hence, to say that x appears to S in virtue of x in apparent being is to say that x appears to S in virtue of the fact that x appears to S . Or as Wodeham puts it:

But that mode of being of which you speak just is to appear objectively. Hence, the relation that is the appearance of the object would be a relation that founds itself.²²

Hence, it only remains that, as in (3), x appears in virtue of an object y different from x . What remains, then, Wodeham concludes, is that 'there will as it were be an intermediary veil here'.²³

Of course, with the dismissal of Auriol's theory of apparent being also came a challenge. For whatever its disadvantages, Auriol's account did offer an analysis of perceptual error that may well have some intuitive appeal: when things are not as they seem to be, what is cognitively present to us is not real things themselves, but something mind-dependent. As we will see in the next section, in order to account for sensory error without appealing to

²¹ '[I]gitur realitas absoluta mediat inter visionem et quamcumque rem veram extra'. *Lectura secunda*, prol. 4.5 (Wood, 92).

²² 'Contra: ille modus essendi, de quo est sermo, non est nisi apparere objective. Igitur respectus ille qui est apparitio obiecti esset respectus fundandi se ipsam etc'. *Lectura secunda*, prol. 4.5 (Wood, 92).

²³ 'Et ita erit ibi quasi pallium medium'. *Lectura secunda*, prol. 4.5 (Wood, 92).

apparent beings or other special entities, Wodeham developed a theory of perception that assigns a crucial role to judgment and belief.²⁴

Wodeham on Sensory Illusions

According to Wodeham, no special ontology of apparent being is needed in order to account for the cases of perceptual illusion cited by Auriol. When the trees on the shore appear to be in motion, for example, all that is present to my act of vision, is motionless trees. That these motionless trees appear to be in motion can be explained as follows.

As you stand still on the deck and look at one of the trees on the shore, the angle between you and that tree will gradually change. In fact, it will change in just the way it would had you been moving away from the tree. Also, the distance between you and the tree varies in just the way it would had you step by step been moving away from it. Now because you do not experience being in motion yourself – after all, you are standing still on the deck – you are led to ascribe these effects, not to your own motion, but rather to motion in the trees. In other words, you are led to judge that it is the trees, not you, that are in motion. As Wodeham puts it, the appearance of moving trees is not the vision of some kind of apparent motion, but rather ‘an erroneous judgment that is caused as a result of the vision’ of immobile trees from a moving vantage point.²⁵

Other sensory illusions receive a similar analysis. The stick appears to be broken, for instance, not because there is a broken stick in apparent being that is present to my act of seeing, but rather because optic conditions are such that my perception of a straight stick is followed by a judgment to the effect that the stick is bent. Indeed, Wodeham believes that perception and judgment go hand in hand in a structural way. Acts of perception are such that they incline us to form judgments about the existence and properties of their objects. When these judgments are true, our perception is veridical. When they do not, we fall prey to an illusion. In short, falling prey to an illusion is the result of a fault in judgment rather than perception.²⁶

²⁴ Similar accounts can also be found in Ockham and Chatton. See Wood 1982.

²⁵ ‘Sed illa apparitio non est visio sed iudicium erroneum causatum mediante visione’. *Lectura secunda*, prol. 4.7 (Wood, 97).

²⁶ See *Lectura secunda*, prol. 2.2 and 3.1 (Wood, 35 and 65). For discussion, see also Wood 2002, 78.

At this point, the disagreement between Auriol and Wodeham to some degree resembles the disagreement, much later, in the twentieth century, between proponents of the sense datum theory of perception and its critics. From the fact a straight stick sometimes looks bent, proponents of the sense datum theory inferred that what we see in this case is not the stick itself, but rather a sense datum of a bent stick. From the further assumption that what is present to a perceiver in this sort of case has to be the same kind of thing that is present to a perceiver in standard cases of perception as well, they then concluded that in all perception, that which is directly present to the perceiver is a sense datum that pertains to an external object, rather than that external object itself.²⁷

Critics of this account, however, have argued that cases such as the illusion of the bent stick can be accounted for without recourse to theoretical entities such as sense data, by recognizing the way in which our perceptual experiences are shaped by our beliefs. According to George Pitcher, for example, the illusion of the bent stick is a case where what we see just is a straight stick merged into water, but where we are led to form the belief that the object in front of us is bent. Now with the proponents of sense data, Pitcher agrees that cases of perceptual error can teach us something about perception more generally. But what they teach us is not that perception is mediated by some kind of special entity, but rather that 'there is reason for thinking that perceiving and believing may be very intimately bound up with one another in all cases'.²⁸

Now as Pitcher himself points out, this account faces a difficulty in cases where subjects cannot believe their eyes, so to speak. Suppose, for instance, that an experienced traveller in the desert comes to visually experience an oasis. As a result of her experience, she will not come to believe that there is an oasis in front of her. On the contrary, the belief she will come to entertain is the belief that there is no oasis in front of her, and that health and isolation are affecting her ability to correctly map the objects in her direct environment. According to Pitcher, however, this apparently damaging objection to his theory can be dealt with by assuming that the traveller acquires an inclination to form the perceptual belief that there is an oasis in front of her, but that she somehow succeeds in suppressing it. It is in

²⁷ See, for example, Ayer 1963, 3-11.

²⁸ Pitcher 1971, 70.

virtue of the inclination she has that the oasis looks real to her. But it is because she can suppress this inclination that she does not believe her eyes.²⁹

The question here – how is it possible that things seem to be other than they are even when in fact we know better – is one that is raised by Wodeham as well.³⁰ To explain how it is possible that, for example, the trees on the shore appear to move even to someone who knows better, Wodeham refines his account of perceptual appearance. On his refined account, the appearance of motion is due, not to the judgment that the trees in motion, but rather to the mere formation of a mental sentence that says that they are. It is the mere entertainment of this sentence that leads to the appearance of moving trees, even though those who do not go on to assent to what it says will not be deceived by this appearance.

To be sure, the notion of an inclination to form a certain belief does not explicitly feature in Wodeham's analysis of this kind of case. Even so, there is a clear parallel in Wodeham with the analysis Pitcher and others would offer some seven centuries later. Here is Wodeham:

This appearance is some kind of sentence, which has the vision of the tree as either subject or predicate. And thus it is a very evident apprehension, in that as a result of it, it will appear to man, whether he wills or not, that things are as this sentence says they are, even though he is not able to assent or dissent to this. All by itself, however, this sentence is such as to be apt to cause an assent that things are thus, even though this judgment is corrected by some other experience, or by a reason that things are not the way they appear to be.³¹

The sentence we entertain in and of itself has an aptitude to trigger the judgment that things are in a certain way. Entertaining it thus makes us naturally inclined to assent to what it says.

²⁹ Pitcher 1971, 93.

³⁰ See also briefly Ockham, *Ordinatio* 1.27.3 (*Opera Theologica* IV 246).

³¹ 'Sed est ista apprehensio quaedam complexa, habens pro subiecto vel praedicato vel utroque visionem ipsam arborisIdeo est multum evidens apprehension, in tantum quod ipsa posita appareat homini, velit nolit, sicut ipsa esse significat, licet non competat eum assentire aut dissentire. Licet ipsa quantum est ex parte illius nata sit causare assensum quod sic sit, tamen per aliud rectificatur, puta per experientiam aliunde vel aliunde, vel ratione quod non sit ita sicut apparet esse'. *Lectura secunda*, prol, 4.8 (Wood, 100-1).

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The evidence we have gathered on other occasions makes us able to resist this evidence, and it is the combination of this natural inclination and our ability to resist it that accounts for the fact that the trees appear to us to be moving, even though we know better.

Human and Animal Perception and Behaviour

Having built his account of cases like the stick that appears bent around the notion of judgment, Wodeham goes on to ask the following question: do sticks look broken to dogs and other brute animals just as they do to human beings? At first, Wodeham grants, it would seem that they do.³² For when a dog tries to grab a stick that is merged into water and targets a portion of the stick that is beneath the water surface, it will often move its paw, not to the actual location of the stick, but to a place where the stick appears to be to a human perceiver. This suggests that the stick appears to be broken to the dog just as it does to humans.

However, Wodeham goes on, in order for a dog to have anything like the human appearance of a bent stick, it must be able to form a sentence saying that the stick is bent. Yet to say that brute animals like dogs have the ability to form sentences, according to Wodeham, is to turn them into rational animals. To say that they have the ability to form sentences, in other words, is to turn them into human beings.³³

One possible way out of this problem might be to say that dogs can in fact form sentences, even though they are not able to process these sentences to quite the same level we find in human beings. On this account, the stick looks bent to both men and dogs, and for the same reason: under certain conditions, both men and dogs are led to form a sentence that says that the stick is bent. But at the same time, this account maintains a clear distinction between the cognitive capabilities of dogs on the one hand, and human rationality on the other.³⁴

This, however, is not the line Wodeham takes. According to Wodeham, when a dog looks at a stick that is half merged into water, it receives what he calls a simple vision of the

³² *Lectura secunda*, prol. 4.8 (Wood, 99).

³³ *Lectura secunda*, prol. 4.8 (Wood, 99). This problem is briefly hinted at in Ockham's *Ordinatio* 1.27.3 (*Opera Theologica* IV 246). As Maria Elena Reina has pointed out, however, Ockham shows not genuine interest in the matter. See Reina 1986, 602.

³⁴ This seems to have been the account on offer in Wodeham's near contemporary, Gregory of Rimini. On Rimini on animal cognition, see Reina 1986, and Perler 2012, 45-9.

stick. We are given no detailed account of what this simple vision is, but arguably, Wodeham means that when the dog looks at the stick, it receives some kind of non-conceptual representation or visual image of a brown object with a certain size and shape. If it had the power of judgment, the reception of this simple vision would lead the dog to judge that the object of vision is brown, that it is long, or that it is bent. But according to Wodeham, brute animals like dogs lack the ability to form sentences and to judge of their truth. Their experience of sticks that are merged into water thus stops at the level of simple vision:

I concede that brute animals have simple visions, which if they were capable of such a complex of propositional apprehension, would normally be followed by a judgment.³⁵

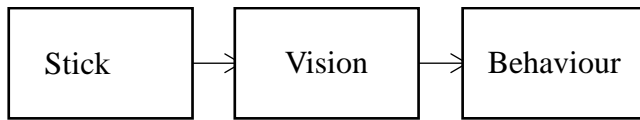
Because dogs lack the ability to form sentences such as ‘the stick is bent’, Wodeham concludes, it is wrong to say that the stick appears bent to them.³⁶ Even though, as we shall see, humans too are capable of something like the dog’s simple vision, Auriol’s position is that the cognitive state we are in when a stick looks bent to us, is something distinctively human that we do not share with other animals.

One implication of this is that there is no unified explanation for what would seem to be very similar behaviour in human beings and other animals. To see this, consider the case of a dog that grabs at a stick that is partially merged into water, and moves its paw in the direction of place where stick would have been had it been bent. What happens here is that, in a first stage, the dog’s eyes receive certain stimuli that provide it with a kind of visual image of a distal object. Now according to Wodeham, the dog is hardwired in such a way that visual images of a certain kind always lead to behaviour of a certain kind.³⁷ In this case, the visual image of a bent object leads the dog to move its paw to a place where the stick would have been had it in fact been bent. Schematically:

³⁵ ‘Concedo quod in brutis sunt visiones tales simplices, ad quas natum esset sequi iudicium . . . si talis apparitio collativa seu composita ipsis competeret’. *Lectura secunda*, prol. 4.8 (Wood, 99).

³⁶ ‘Assumptum est negandum’. *Lectura secunda*, prol. 4.8 (Wood, 99).

³⁷ Wodeham compares this to the way in which, in human beings, the feeling of an itch directly leads to scratching behaviour without the mediation of any further cognitive act. *Lectura secunda*, prol. 4.8 (Wood, 100).



Now consider what at first looks to be a similar kind of behaviour in a human animal. Suppose a child sees a pencil that is half merged in a glass of water, and imagine that one of its parents asks the child to touch a submerged part of the pencil. The child then moves its fingers to a place beneath the water surface where the pencil would have been had it been bent. To its surprise, it finds that all its fingers touch is water, not the pencil.

According to Wodeham, what happens here is that, in a first stage, the child of course receives visual stimuli from the object in front of it, which lead to a simple vision of that object. But already at this level, we find a difference with the case of the dog. For in the case of the dog, simple vision is an act of its sensory soul: the principle that makes the dog a living and sentient organism. Not so in the case of the child. For according to Wodeham, the soul of a human being is an intellectual soul. It is the principle that makes a human being a living organism capable of thought. And it is in this soul that all human acts of cognition are realized, acts of perception included.³⁸

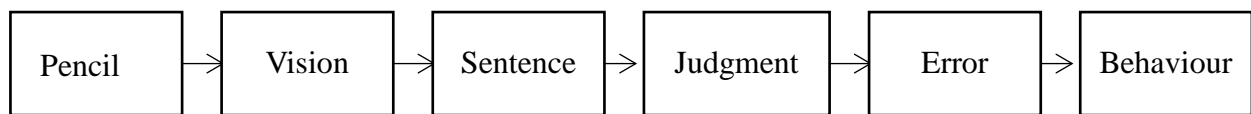
How does this make the simple vision in the child different from the simple vision of the dog? As we have seen, the simple vision of a stick in the dog arguably provides it with the image or impression of a brown object of certain colour and shape. There is no reason to believe, however, that this allows the dog to see the object as an object of a certain kind, or as a stick. For to see the object as a stick, the dog would have to be able to deploy the concept of being a stick, for which it lacks the cognitive abilities. Children, however, do have the ability to master and use concepts, and according to Dominik Perler, when Wodeham says that all human acts of perception take place in the intellectual soul, part of what he means is that the content of human acts of perception is always to some degree conceptual.³⁹ To see an object, for a human being, always is to see it as an object of a certain kind. Hence, if the child in our example has mastered the concept of being a pencil, it will see the object in front

³⁸ 'Omnis sensatio nostra recipitur immediate in intellectu et est actus sensitivus'. *Lectura secunda*, prol. 1.5 (Wood, 15).

³⁹ Perler 2008, 164.

of it as a pencil, rather than simply receive the image of a long object with a certain colour and shape.⁴⁰

As a result, the object of simple vision in the case of the child will immediately be available for the formation of sentences about pencils. Part of what this means, is that it will be able to connect its understanding of the pencil in front of it with other concepts, and proceed to form such sentences as ‘this pencil is bent’. This will cause the pencil to appear as bent to the child. If the child then proceeds to judge that the pencil is in fact bent, we say that it errs, and this error explains why its hand misses the pencil. Schematically:



Thus, the explanation of what looks like similar behaviour in the dog and the child in fact differs between both cases in a number of ways. First, the child behaves the way it does because it sees the stick. And so does the dog. But the child sees the stick in a way that the dog does not. It sees the stick as a stick, which makes the stick directly available for the subject or predicate position of mental sentences. Human seeing thus differs from canine seeing.⁴¹

Second, the child behaves the way it does because the pencil appears to be bent. The dog behaves the way it does because there is a hardwired connection between a certain kind of visual input and a certain kind of action. Third, the child behaves the way it does because its judgment errs. But the same cannot be said of the dog. To err for the child is to go wrong on the level of judgment. But dogs do not judge. Hence they do not err. Wodeham himself does not make this point explicit, but in his sympathetic summary of Wodeham’s views, his contemporary, the Parisian scholar Jean of Mirecourt, was happy to put the point as follows:

⁴⁰ One may wonder how this works for the perceptual acts of pre-linguistic toddlers. Indeed it is not clear that their acts of perception are informed by concepts in quite the way ours are. Still, it seems Wodeham can insist that the perceptual acts of even very young children are different from the simple perceptions of animals in an important way. Being realized in the intellectual soul, all human acts of perception have at least a basic potential for conceptual information that is lacking from the cognitive states of animals.

⁴¹ Jack Zupko (2008) discusses a similar ‘heterogeneity thesis’ in John Buridan.

The fourth conclusion is this: Through no sensation do [brute animals] form compositions or judgments, because then they would entertain sentences and the like, as is clear. The fifth conclusion is this: No brute animal is ever deceived. This is sufficiently clear from the foregoing conclusion. For every deception is an erroneous judgment, but brute animals have no such judgment.⁴²

To err, according to Wodeham and Mirecourt, is human indeed.

Perception and Knowledge

His engagement with Auriol led Wodeham to reconsider the mechanisms of misperception and the relation between perception and judgment. But Auriol's stress on illusion and perceptual error also provided fuel for discussions about the reliability of sense perception.

Starting with the Franciscan thinker Duns Scotus, many scholastic thinkers in the late thirteenth and early fourteenth centuries referred to sense perception as 'intuitive cognition'. Although there was disagreement about the precise definition of intuitive cognition, many thinkers held that intuition was the cognitive modality that provided us with access to contingent facts about the present, and thus served as our primary source of certainty about the world we live in.⁴³ But with Auriol's decision to place illusion and perceptual error at the centre of his theory of cognition, the question of just how much certainty intuitive cognition can actually provide us with, gained salience. Wodeham was one of the thinkers to offer a detailed discussion of this question.

According to Wodeham, for an intuition to give us certainty about the contingent present, is for that intuition to yield a judgment about the contingent present that is certain. Now for a judgment to be certain it must first be true. The notion of a judgment that is both certain and false 'includes a repugnancy' (*includit repugnantiam*).⁴⁴ But if truth is necessary for certainty, it is not sufficient. For if I correctly judge that John exists without seeing him,

⁴² 'Quarta est ista, quod nulla sensatione formantur complexa vel iudicia, quia tunc haberentur propositiones et similes, ut videtur. Quinta est ista: nulla bruta decipiuntur; ista statim patet ex praecedenti, quia quaelibet deception est iudicium erroneum, bruta vero non habent iudicium'. Franzinelli 1958, 433.

⁴³ See, for example, Scotus, *Ordinatio* 1.3.14 (*Opera* III 146).

⁴⁴ *Lectura secunda*, prol. 2.3 (Wood, 37).

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Wodeham would say that my judgment, though true, fails to be certain. As he also puts it, my judgment that John exists in this case will amount to ‘estimation’ (*aestimatio*), rather than certainty. But just what does Wodeham think is needed for certainty in addition to truth? This is a question that he himself does not explicitly address in any detail. What he does tell us, however, is that his distinction between certainty and estimation has its roots in ‘the Commentator and the Philosopher’.⁴⁵

More precisely, Wodeham’s distinction between estimation and certainty traces back to Averroes’s commentary on book VII of Aristotle’s *Metaphysics*. According to Aristotle, opinion deals with ‘what is capable of being otherwise’, but knowledge is about what cannot be otherwise.⁴⁶ Knowledge, in other words, is about what is necessary, and what falls short of necessity is in the domain of opinion. Or as Averroes put it:

It is impossible for knowing and not knowing to be of that which is not necessary. Of such things, there is only estimation.⁴⁷

When Wodeham traces back his distinction between opinion and certainty to Aristotle and his Commentator, then, the suggestion is that certain judgments, for him, are true judgments that necessarily obtain.

At first this makes it hard to see how intuition could possibly yield certainty. The very point of intuition after all is that it gives us access to contingent matters of fact about the here and now, so if certainty is defined in terms of necessity, there seems to be no way in which intuition could ever yield more than estimation. But at the same time, Wodeham makes it clear that intuition yields at least some kind of certainty, writing that intuition is that mode of cognition:

⁴⁵ *Lectura secunda*, prol. 1.5 (Wood, 14).

⁴⁶ *Metaphysics* 1040a1.

⁴⁷ ‘[E]st impossibile scire aut ignorare illud, quod potest non esse tale, sed est secundum existimationem’. In *Metaphysicam* VII.17 (Venice, 95).

in virtue of which the soul with certainty naturally assents that such a thing exists unless a miracle or some other impediment should stand in the way.⁴⁸

Wodeham's position seems to be as follows. Suppose you are seeing a man, and judge that he is tall. Also suppose that God does not intervene in nature to deceive you, and that there are no natural factors, such as poor optic conditions or health problems, that would incline you to error. In this scenario, Wodeham would say, you judge with certainty that the man is tall. To be sure, it is not a necessary truth that the man is tall. But given that nothing in this situation stands in the way of a correct judgment, you will never judge falsely. In claiming that intuitive cognition gives certainty then, it seems that what Wodeham is saying is not that:

if p is an intuition-based judgment unaffected by divine deception or natural impediments, p is necessarily true,

but rather that:

necessarily, if p is an intuition-based judgment unaffected by divine deception or natural impediments, p is true.⁴⁹

In this way, intuition-based judgments can at the same be certain, and pertain to contingent matters of fact.

The certainty that intuition can give us for Wodeham is thus a conditional kind of certainty. Intuition gives certainty, as long as certain conditions are met. Now Wodeham recognizes that it will often be very hard for us to tell, in a given situation, whether or not these conditions are in fact met. We may not be able to identify all of the natural defeaters for our perceptual beliefs, and there seems to be no way of ruling divine deception in any

⁴⁸ 'Anima naturaliter assentiret certitudinaliter quod tale existeret nisi obstaret miraculum vel aliud impedimentum'. *Lectura secunda* prol. 3.1 (Wood, 65).

⁴⁹ Presumably, 'necessarily' in this context means something like 'it is always the case that'. But nothing in my argument hinges on Wodeham's interpretation of modalities.

given case. This sensitivity to the possibility of undetected error becomes particularly clear in Wodeham's discussion of the kind of knowledge that intuition can give us.

A judgment counts as knowledge, Wodeham explains, when it is evident.⁵⁰ Now part of what it means to say that a judgment is evident, we are told, is that it is certain. But although some of his modern commentators have treated 'evident' and 'certain' as synonyms in Wodeham,⁵¹ he himself explains that for a judgment to be evident, it is necessary but not sufficient that it be certain: "every evident judgment is certain, though the converse does not hold."⁵²

Evident judgments, indeed, are those certain judgments that are also indubitable, allowing of no doubt whatsoever.⁵³ Clearly, this means that very few judgments can properly speaking be deemed evident. More to the point, judgments concerning contingent external states of affairs cannot properly speaking be evident. My perception of John, after all, may be impeded by an indisposition of my eyes, by poor visual circumstances such as mist or darkness, or just by the too great distance between John and myself. These factors can hinder the formation of a correct judgment, and I may not always be able to rule out that I have fallen prey to some kind of perceptual illusion or error. Moreover, even under the best possible natural conditions, there always remains a possibility that God should deceive me.⁵⁴ Some doubt remains possible, and it can never be fully evident to me that John is pale. Wodeham is aware of this, and writes:

I concede what is inferred about a judgment that regards a contingent truth about an external thing. For no such judgment is simply evident with an evidentness that excludes all possible doubt. Because if all possible cognitions and judgments would be caused by either God or nature, it would be possible that in virtue of God's absolute power, things are not such as they would be signified to be by such an apprehended cognition. And I concede that every created intellect is of such a low nature that it can

⁵⁰ *Lectura secunda* 1.1 and 1.2 (Wood, 206 and 219).

⁵¹ For example, Wood 2002, 78.

⁵² 'Omne iudicium evidens est certum, licet non econtra'. *Lectura secunda*, prol. 6 (Wood, 173).

⁵³ *Lectura secunda*, prol. 6.18 (Wood, 163-64).

⁵⁴ On this scenario in Wodeham, see also Karger 2004.

be deceived concerning any contingent truth about an external thing if it categorically assents to it being or not being.⁵⁵

In light of this, Wodeham concludes that it can never be categorically evident to us that a given external object exists, or that it has certain properties. The most we can evidently judge on the basis of an intuition, he thinks, is that:

Socrates is, or Socrates is white, and things like that, except when God miraculously intervenes here, or when there is an impediment due to the imperfection of that cognition, or due to some indisposition on behalf of the object, the medium, the power or the organ.⁵⁶

As he puts it later on, intuitive cognitions allow for evident hypothetical judgments, but not for evident categorical ones:

Though no categorical evident judgment that the moon is eclipsed may be had, yet a hypothetical evident judgment is had.⁵⁷

Wodeham thus recognizes that perception may lead us to judge falsely in ways that we cannot fully rule out. This does not, however, make him a sceptic. On the contrary, Wodeham believes that conditional certainty and hypothetical *evidentia* suffice, even for scientific

⁵⁵ 'Concedo illud quod infertur de iudicio correspondenti veritati contingenti, significanti rem extra. Nullum enim tale iudicium est simpliciter evidens evidentia excludente omnem dubitationem possibilem. Quia cum hoc quod Deus vel natura causaret in mente omnem notitiam et iudicium possibile, staret quod de de potentia Dei absoluta non sic esset in re sicut per talem notitiam apprehensam significaretur. Et concedo quod omnis intellectus creabilis est ita diminutae naturae quod decipi potest circa quamcumque veritatem contingentem de re extra si sic assentiat categorice esse vel non esse'. *Lectura secunda*, prol. 6.16 (Wood, 169).

⁵⁶ An intuitive cognition is described by Wodeham as a cognition 'virtute cuius potest cognoscere evidenter quod Sortes est vel quod Sortes est albus et huiusmodi -- nisi Deus miraculose operatur hic, vel nisi sit impedimentum propter imperfectionem illius notitiae vel propter aliquam indispositionem ex parte obiecti vel medii vel potentiae vel organi'. *Lectura secunda*, prol. 2.2 (Wood, 35).

⁵⁷ 'Licet non habeatur iudicium evidens categoricum quod luna eclipsatur, habetur tamen evidens iudicium hypotheticum'. *Lectura secunda* 1.2 (Wood, 222).

knowledge. Consider, for instance, an astronomer who witnesses a lunar eclipse, and wants to draw the general conclusion that the moon is the kind of celestial body that can be eclipsed. Now according to Wodeham, the astronomer will not be able to rule out all possibility of error, and the knowledge he obtains from his observation will be of the conditional, or hypothetical, kind. But this, Wodeham concludes, is all the astronomer needs. The hypothetical knowledge that the moon is eclipsed provided that the right epistemic conditions are met, suffices for the astronomer to conclude that the moon is an eclipsable body.⁵⁸

Conclusion

Auriol stands out in the context of medieval cognitive psychology by moving the phenomenon of perceptual error from the periphery to the heart of his theory of cognition. Illusions can teach us a lot about the mechanisms and ontology of sensory perception, Auriol believed. Even though many thinkers objected to the lessons Auriol drew, he did effectively move perceptual error to the centre of a number of discussions. We clearly see this in the work of Adam Wodeham. In response to Auriol, Wodeham develops an account of perception on which perceiving and judging go hand in hand. This explains cases of perceptual error, but also implies that animal behaviour and perception cannot be accounted for the way human behaviour and perception is. The state we are in when, for instance, a stick appears bent, presupposes a cognitive apparatus that is distinctively human, Wodeham believes. To explain the behaviour of animals in terms of how things appear to them, as a result, is problematic.

A final lesson that Wodeham drew from the interconnectedness of perception with our fallible power of judgment, was that intuitive cognition provides us with but a conditional certainty about the world. But even though this qualifies the kind of knowledge intuition can give us, according to Wodeham, conditional knowledge was knowledge enough for science.

⁵⁸ *Lectura secunda* 1.2 (Wood, 220).

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