IS PERSPECTIVAL SELF-CONSCIOUSNESS NON-CONCEPTUAL?

By Alva Noë

As perceivers we are able to keep track of the ways in which our perceptual experience depends on what we do (e.g., on our movements). This capacity, which Hurley calls perspectival self-consciousness, is a special instance of our more general ability as perceivers to keep track of how things are. I argue that one upshot of this is that perspectival self-consciousness, like the ability to perceive more generally, relies on our possession of conceptual skills.

I. PERSPECTIVAL SELF-CONSCIOUSNESS AND THE MASTERY OF SENSORIMOTOR CONTINGENCIES

To be a perceiver, one must be capable of keeping track of the ways in which one’s perceptual experience depends on what one does, and also more generally on one’s relation to the world around one. For this reason, perception requires what Susan Hurley calls ‘perspectival self-consciousness’.1

Examples are ready to hand. An object looms larger in the visual field as we approach it, and its profile deforms as we move about it. As perceivers, we are masters of the patterns of sensorimotor contingency that shape our perceptual interaction with the world. We expect changes in such things as apparent size, shape and colour to occur as we actively explore the environment. In encountering perspective-dependent changes of this sort, we learn how things are, quite apart from our particular perspective. Our possession of these skills is in part constitutive of our ability to see (and, more generally, to perceive). This is confirmed by the fact that we can disrupt a person’s ability to see by causing changes in the patterns of sensorimotor contingency, even as we leave the rest of the perceptual apparatus intact. This is what occurs, for example, when one puts on inverting lenses of the

sort used by Stratton, Kohler and Taylor in their well known experiments. Eventually one masters the new patterns: one adapts, and vision is restored. Or again, the effects of cataract surgery to restore sight in the congenitally blind are that patients acquire relatively functioning eyes, but are not yet fully able to see. In case studies, patients are described whose eyes move around aimlessly in their sockets, unintegrated with the exercise of attention or with the guidance of thought and movement. Sight is only fully regained when patients acquire, in addition to healthy sensory stimulation, a practical mastery of the ways in which sensory stimulation depends on movement. It is noteworthy that one post-operative patient expressed astonishment at the way a coin appears to change its shape when rotated.

These examples illustrate the ways in which the ability to see (or to perceive) depends on the ability to keep track of the interdependence of perception and action. Can this ability be a non-conceptual one, as Hurley argues (ch. 4)? In what follows, I shall raise some doubts about this proposal.

II. IS THE CONTENT OF PERCEPTUAL EXPERIENCE CONCEPTUAL?

Non-human animals and human infants enjoy perceptual experience. As Hurley notes (p. 136), however, they lack the sort of ‘richly normative conceptual and inferential capacities’ possessed by adult humans. This seems to show that perceptual experience (at least that of animals and infants) is (or could be) non-conceptual. But this does not follow. For it is far from obvious that animals and infants lack conceptual and inferential skills altogether. Indeed, as Hurley emphasizes (e.g., pp. 141–2), it is a condition of our treating a creature as a conscious subject of experience at all, as opposed to a mere locus of neural or psychological processes, that we view the creature as an integrated whole, situated in an environment, suitably responsive to features of that environment, with reasons by which it is capable of being moved, even when it is not capable of fully understanding

---


© The Editors of The Philosophical Quarterly, 2002
those reasons. In short, it is only when they are viewed as simple agents, in possession of what are in effect rudimentary conceptual and inferential skills, that we can even make sense to ourselves of the idea that animals are full-blooded perceivers.

Hurley indicates that a hallmark of adult human conceptual skills is the ability to deploy concepts in a manner which is context-free and general: ‘Someone with conceptual abilities who can judge that a banana is green and that a sofa is soft can also in principle judge that a banana is soft, that a sofa is green, that it is not the case all bananas are green, that if a banana is green then it is not soft, and so on’ (p. 138). But it seems that putative animal conceptual capacities satisfy this ‘generality constraint’, at least to some extent. For example, we ought, surely, to refuse to characterize a monkey as recognizing another monkey as of high status (something which ethologists ascribe regularly\(^5\)), if the monkey’s capacity to recognize status did not generalize to other conspecifics encountered on other occasions. And similarly we would take a lion’s general unresponsiveness to the presence of gazelle, or its stalking behaviour in relation to tree stumps, as reasons (although perhaps inconclusive) to refrain from describing the lion as stalking a particular gazelle on a particular occasion. In short, to the extent that we view an animal as subject to what Hurley refers to as the constraints of normativity and holism, as flexibly responsive to its environment in ways constrained by intentions and primitive practical rationality, to that extent we must admit that it possesses, to at least some degree, conceptual and inferential capacities that differ from our own only in degree.

One source of the desire to withhold ‘richly normative conceptual and inferential skills’ from non-human animals and infants is our adherence to a too exalted conception of our own conceptual skills. We think of concept-possession on the model of the possession of concepts such as that of square, to possess which a thinker must know the criteria that govern (and justify) its application. But not all concepts are like this. As Wittgenstein’s considerations on rule-following demonstrate, at the base of our conceptual practices are conceptual skills that do not fit this Socratic or Fregean model. When I judge that something is red, for example, I do not do so on the basis of criteria. I can give no reason for my judgement that it is red other than the fact that, for example, I can see it. I judge an argument to be valid because I recognize it to be an instance of modus ponens. I do not then owe an explanation of what it is that makes modus ponens valid. That is, my grasp on validity does not in general require it. This is true even if it is the case, as it is, that there are standpoints from which one can reasonably ask ‘What makes a

thing red (e.g., what physical properties)?', 'What makes modus ponens valid (e.g., what metamathematical properties)?'. For, crucially, one is not required to take up this sort of physical or metamathematical stance, respectively, when deciding the colour of a thing or when evaluating an argument’s validity.\(^6\)

The significance of this point is that our possession of such basic conceptual skills is strikingly situation-dependent and context-bound. We can tell by looking that a thing is red, or an argument valid, even when we cannot articulate a general basis for these judgements. Moreover, this situation-dependence and context-boundedness are features that human conceptual and inferential skills seem to share with the much more primitive skills of animals. For this reason, the observation that a particular animal cognitive skill is a ‘context-bound island of rationality’ will in general provide little support for the claim that the animal lacks the relevant conceptual skills altogether. An example is the case of Boysen’s chimpanzee Sheba,\(^7\) discussed by Hurley in a recent article.\(^8\) She describes Sheba as displaying ‘an island of instrumental rationality that does not generalize’, and she suggests (p. 426) that this case might count as a concrete example of intentional agency in the absence of conceptual skills:

Sheba was allowed to indicate either of two dishes of jellybeans, one containing more than the other. The rule was: the jellybeans in whichever dish Sheba indicated went to another chimp, and Sheba got the jellybeans in the other dish. Sheba always chose the dish containing more jellybeans, even though this resulted in her getting fewer. Despite her apparent frustration, she seemed unable to indicate the smaller amount in order to get the larger amount. Boysen next substituted numerals in the dishes for actual jellybeans. She had previously taught Sheba to recognize and use the numerals ‘1’ through ‘4’. Immediately, Sheba began to choose the smaller numeral, thereby acquiring the correspondingly larger number of jellybeans for herself. The substitution of numerals seemed at once to free her to act in an instrumentally rational way, as she had been unable to when faced directly by the jellybeans. When the numerals were again replaced by jellybeans, Sheba reverted to choosing the larger number.

Does this case lend support to the idea that Sheba lacks the relevant quantitative concepts? I think not. As described, the case seems to show that Sheba, although lacking full-fledged inferential skills, has some partial grasp on what it is for one dish of jellybeans to hold more than another. After all, she chooses the dish with the greater number of jellybeans, and she does so,

apparently, because it has the greater number of jellybeans, and because she cannot help herself from reaching out for the greater number.

A second source of our unwillingness to admit that animals and infants possess primitive conceptual and inferential skills is that we hold to an oversimplified conception (a caricature, really) of what it is to make use of a concept in thought and experience. We think of concepts as brought into play only in the context of what we might call explicit deliberative judgement. But conceptual skills can also enter thought as background conditions on the possession of further skills of one sort or another. For example, the monkey’s possession of the concept of a kin-group member is exhibited, we might say, in its differential treatment of its relatives, even when the monkey never engages in anything like explicit deliberative judgement that so and so is kin. This interpretation of the monkey’s cognitive accomplishment is compatible with its being the case that the monkey may lack knowledge which is usually taken to be necessary for possession of kinship concepts (e.g., knowledge of the biological basis of kinship, etc.).

This way of thinking about concept possession suggests that concepts can enter into an experience not so much because they are judged by the possessor of the concept to apply, but because their possession is a condition on the having of that experience. We would not credit a person with the visual experience as of an ant-eater, if we did not believe that the person has the concept ant-eater. This would be so even if no deliberative judgement is made in the context of perception. From this standpoint, we can agree with Hurley’s thought that one can have reasons for acting even though one is not capable of appreciating reasons for forming beliefs about what should be done (that is, even though one’s practical reasons do not display the inferential promiscuity of fully conceptualized reasons). This possibility, however, does not show that the reasons in question lack conceptual content. For there is a way of bringing concepts to bear in thought and reasoning other than their deployment in deliberative judgement.

III. THE IMPORTANCE OF TAKING ONE’S PERCEPTUAL EXPERIENCE AT FACE VALUE

To be a perceiver is to possess the ability to keep track of how things are by having experiences which one appreciates as relevant to how things are. This point is a phenomenological one. It is a basic fact about perceptual

experience that we take ourselves, in looking around, say, to have access to the world. Our experience presents itself to us as a form of contact with the world.

Of course it is not the case that things always look the way they are. Nor is it the case that when one has a visual experience, one is always inclined to judge things to be arranged in the way the experience represents them as being. Experience, it has often been noticed, is belief-independent. It can look to me as if the two lines of the Müller–Lyer illusion differ in length even when I have drawn them myself and know them to be of identical length. Nevertheless it would be a mistake to infer from this fact that perceptual experience is, as one might put it, belief-indifferent (see my ‘Thought and Experience’). For perceptual experiences, of their very nature, raise questions about how things are. In particular, they raise questions about what one ought to believe or what one ought to do in the light of the experience, given that one takes the experience at face value (as one does not, in the case of the Müller–Lyer illusion).

The idea that perception requires us to be able in this way to take our perceptual experiences at face value is of fundamental importance. First, it points to a way in which perceptual experience must be thought of as occurring in a space of reasons, to borrow the phrase from Sellars and McDowell. That is, only someone capable of appreciating how a perceptual experience presents the world as being could actually have the experience.

Secondly, and of particular relevance to the present discussion, it enables us to understand that our ability as perceivers to keep track of the ways in which our perceptual experience depends on what we do (perspectival self-consciousness) is a special instance of our more general ability as perceivers to keep track of how things are. Perceptual experience raises questions not only about how things are, but about how we stand in relation to how things are. In keeping track of how what we do affects what we experience, we are keeping track of what our experience tells us about the world. The fact then that perception depends in this way on our possession of sensorimotor skills is not a reason to believe that perceptual experience is non-conceptual.

IV. ATTENTION, PERCEPTION AND CONCEPTUAL CONTENT

A different route to the thesis that perceptual experience could be non-conceptual starts from the idea that the representational content of a

perceptual experience is much richer and more detailed than that which we can grasp in thought. Commitment to something like this idea comes out in Peacocke’s conception (ch. 3) of scenario content. The scenario content of a perceptual experience is the way of filling out the space around the individual in such a way that the experience is veridical. Scenario content is non-conceptual, it is held, because in order to have the experience, the perceiver need not possess the concepts required to capture in thought the ways of filling out the space which would make the experience veridical. For example, a creature without the concept sphere or the concept degrees left might have a visual experience as of a sphere some number of degrees to the left, an experience that would be made veridical by the presence of a sphere in that egocentric location.

This conception of the representational content of experience is problematic on both phenomenological and empirical grounds. It will be illuminating to discuss these in turn.

We misdescribe the character of our perceptual experience if we suppose that we do in fact have in consciousness all at once the environmental detail which would, as it were, make the experience veridical. For experience, as I shall put it, is intrinsically indeterminate. Objects in the centre of attention and focus are indeed experienced in detail, but we do not experience the whole visual field in this way as sharply focused and in uniform detail. At a given instant, the rest of the visual field may remain in the background as indeterminately present. To fill out the space around the perceiver in such a way as to make the current experience veridical would, then, be to attempt something impossible – to fill out the space, but indeterminately. This impossibility is the source of more than one cinematic joke. For example, in Woody Allen’s Deconstructing Harry, the character played by Robin Williams has gone out of focus, as it were, in real life.12

How can we square these phenomenological observations with the fact that we take ourselves, in experience, to come into contact with a densely detailed, high-resolution environment? This is a delicate point that requires careful consideration. First, it is true that we take ourselves in experience to come into contact with the detailed environment. It does not follow from this that we take our conscious experience to represent all that detail. Rather we take the detail to be there in the world, and we take ourselves, in experience, to have access to that detail. Secondly, experience as we actually encounter it (in contrast with the fantasy of experience described in some philosophical theories) is not a momentary occurrence, but a temporally extended encounter with the environment. (If you are asked to reflect on your visual experience, you will probably look around you and think about what

12 Thanks to Sean Kelly for discussion of some of the ideas in this paragraph.
is there.) Thirdly, experience in this more full-blooded sense, that is, experience thought of as a temporally extended episode of encounter with a densely detailed environment, is bound up with further capacities for thought, and is to that extent conceptual. Perception is itself an activity of exploration of the world, and this activity draws not only on our sensorimotor skills, but more generally on our understanding of how things are.

This conception of experience as a mode of activity, and these criticisms of non-conceptual scenario-content, gain support from recent work in psychology on the relation between perception and attention. In a series of experiments, psychologists have shown perception to be highly attention-dependent. Perceivers do not experience features of the scene, even features that are in the centre of the field of view and that are of great interest, if attention is directed elsewhere. Two examples will suffice to establish the point. In one study, perceivers are asked to watch a video tape of a basketball game, and they are asked to count the number of times one team takes possession of the ball.13 During the film clip, which lasts a few minutes, a person in a gorilla suit strolls onto the centre of the court, turns and faces the audience and does a little jig. The gorilla then slowly walks off the court. The remarkable fact is that perceivers (including myself) do not notice the gorilla. This is an example of what has been called inattentional blindness.14

In a second study, due to O’Regan and Auvray, a perceiver is asked to describe changes occurring in a video clip of a drawing.15 Because the changes occur very slowly, and thus do not attract attention, they tend not to be perceived. The net effect of the changes, however, can be very substantial, such as a change in colour of the central object in the image. This is an example of what is known as change blindness.16 The liability of normal perceivers in this

14 The term is due to I. Mack and A. Rock, *Inattentional Blindness* (MIT Press, 1998), containing a detailed study of the phenomenon. For further discussion, in connection with the themes of this paper, see Noë and O’Regan, ‘Perception, Attention and the Grand Illusion’.
way to fail to perceive what is going on around them because of misdirected
attention does not get us into trouble too often (although one might wonder
how often this sort of phenomenon is the cause, for example, of traffic
accidents). For our perceptual systems, and our cognitive system, are
designed to work together to enable us to direct our attentional and our
perceptual resources to where they are needed. In general, by the flick of an
eye, or the turn of the head, we are able to acquire the perceptual informa-
tion we need, when we need it.17 This attunement on the part of perceivers
to the environment enables us to preserve a deserved feeling of contact with
that environment, even though at any given moment we are conscious only
of fairly sparse amounts of detail.

These facts have two relevant upshots. First, the attention-dependence of
perception further demonstrates that we misdescribe our experience as
having the sort of scenario content Peacocke imagines. The actual content
of a brief episode of seeing is much more sparse than that.

Secondly, these considerations bring forcibly to mind the fact that what is
seen depends on activity on the part of perceivers which is at least quasi-
conceptual. Attention seems to be allocated by perceivers on the basis of an
assessment of the meaning or significance of what they see. This is an important
theme in the change blindness literature. You are more likely to notice a
change to a scene if the change alters the scene's gist (see Simons and Levin).
Mack and Rock (pp. 18ff., and chs 5–7) give a striking example: inattentional
blindness is greatly reduced if the critical stimulus displayed outside the
focus of attention is one's own name or a smiley face. This sort of finding
suggest that whatever our general theory of attention, perceptual attention is
closely linked to perceivers' understanding of what they see.

V. THE HOLISM OF THOUGHT, ACTION AND PERCEPTION

I have urged that we should recognize that perspectival self-consciousness is
not so much a precondition of our ability to perceive, as it is an aspect of
that ability. But I have also urged that our ability to perceive, more
generally, should be thought of as drawing on our conceptual and inferential
capacities. In making this latter claim I am advocating a more thorough-
going holism than that which has been advocated by Hurley and others. To
view perceptual experience as a phenomenon of the personal or animal level
is, I suggest, to view it as integrated with broader capacities for thought as

17 See O'Regan, ‘Solving the “Real” Mysteries of Visual Perception: the World as an
Sensorimotor Account’.
well as for intentional action. In advancing this more far-reaching holism, I
hold fast to the idea that perception is in essence a capacity to learn how
things are on the basis of active exploration and enquiry.

Is there a sharp line to be drawn between the conceptual and the non-
conceptual? It seems not. Conceptuality comes in degrees. Nevertheless, to
the extent that we view a creature as capable of having experiences and
acting for reasons (whether it fully understands these or not), we view it as in
possession of rudimentary conceptual and inferential skills. To call into
question whether an agent possesses even the most rudimentary conceptual
and inferential skills would be to call into question whether it is a subject of
experience at all.

This way of thinking about the dependence of perception on conceptual
skills does not overintellectualize the mind in the way Hurley in her recent
article has suggested it may. For one thing, it does not require us to suppose
that perceivers must be capable of sophisticated inferential skills, or, for that
matter, of explicit deliberative judgement. For another, the conceptuality of
experience is compatible with the recognition that perception also depends
on sensorimotor skills which may not be themselves fully or even partially
conceptual. Many of the sensorimotor skills we exercise in perceiving are
subpersonal, and are therefore non-conceptual. An example is our mastery
of the laws governing the particular way the macular pigment and the non-
homogeneity of retinal sampling affect sensory input when the eye moves.
Perceivers, as distinct from their brains, lack knowledge of these laws, and so
they need not possess the concepts required to frame them.

Crucially, however, not all sensorimotor skills are like this. As I have
remarked, our ability to keep track of the dependence of what we ex-
perience on what we do (of the patterns of sensorimotor contingency) is a
feature of our more general capacity, as perceivers, to keep track of how
things are on the basis of our active exploration of the environment. Per-
ceivers themselves are familiar, at least implicitly, with the way appearances
change as a result of movement. This familiarity reveals itself in the auto-
matic way in which, when we are trying to get a better look at something,
we squint, pat our pockets in search of our glasses, and move closer. To be a
perceiver is, among other things, to know how to do all this. In this way our
capacity to keep track of the dependence of perception and action is firmly
integrated with personal-level conceptual and inferential skills.18

University of California, Santa Cruz

18 Thanks to Susan Hurley, and to an anonymous referee, for helpful criticism of earlier
versions of this paper.

© The Editors of The Philosophical Quarterly, 2002