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‘Another I’: Representing Conscious States, Perception and Others¹

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What is it for a thinker to possess the concept of perceptual experience? What is it to be able to think of seeings, hearings and touchings, and to be able to think of experiences that are subjectively like seeings, hearings and touchings?

This question is of philosophical interest for multiple reasons. Here are a few, in order of increasing generality. To understand, explain, and predict the thought and action of others, you must know what they perceive. This requires you to possess the concept of perception, or at least to represent in some form that the other person perceives. Each of us every day rests his life on his correct application of the concept of perception. When you cross the road, or drive, your future depends on your ability to know that someone else sees you.

The concept of perception is also crucial to more first personal projects of thought. To assess critically the way you reach your own judgments, to revise and improve your methods of reaching beliefs, requires you to be capable of thinking of the perceptual experiences that led to make or withhold various judgments. For this too it is necessary that you be capable of thinking of your own perceptions.

The question of what it is to possess the concept of perception is also of interest to the philosophy of mind more generally. Perception is one of the mind’s states that relate it most directly to the non-mental world. Can a good treatment of possession of the concept of perception provide a model for possession of concepts of other mental states with distinctively close relations to the world? Do features of a good treatment

generalize? And do they permit us to make sense of the striking empirical phenomena displayed by children's acquisition of the concept of perception? These are some of the questions I will be attempting to address.

A perceiving thinker who has the capacity to appreciate that others also perceive is on the way to thinking of others as subjects like himself – to thinking of another person as 'another I', in Zeno's phrase. 'Another I' was reportedly Zeno's answer to the question 'What is a friend?'. If we strip the notion of thinking of someone as 'another I' of the elements of identification and sympathy that Zeno no doubt intended, Zeno's phrase captures perfectly what is involved in thinking of another as a subject like oneself. It is a real challenge to say what is involved in such thinking. I will try to indicate in the course of this talk points at which the approach aims to contribute to meeting that challenge. There are respects in which the concept of perception is deeply first-personal.

My plan for this talk is first to present what I call the 'Core Rule' for the first-person case, and to discuss some of its epistemic and metaphysical ramifications. I go on to contrast the Core Rule with a proposal made by Gareth Evans. Then I move on to the role of the Core Rule in the explanation of some developmental phenomena. I conclude with a discussion of possible generalizations of the model to the self-ascription and other-ascription of other mental states, in particular action and intentionality.

1. The Core Rule

Aristotle held that it is by sight that you perceive that you see.² The heart of Aristotle's idea seems to me right, provided that we understand it as follows: it is by sight that you know that you see. Suppose you see that

That desk is covered with papers.

This visual knowledge about the world gives you a good reason to make the self-ascriptive judgment

I see that that desk is covered with papers.

This is a transition you are entitled to make, from a conscious state you enjoy to a judgment. If a thinker comes to judge, by this means, that he sees that that desk is covered with papers, his judgment can thereby be knowledge.

This is the starting-point of a general model of self-ascriptive knowledge of one's own perceptual states. Because the thinker sees that

p

he moves, rationally, to the judgment

I see that *p*

and thereby gains knowledge that he sees that *p*. If a thinker comes to judge that he sees that *p* in this way, and does so for the reason that he sees that *p*, then he is following what I call the Core Rule. More specifically, it is the Core Rule for vision, for the case of seeing-that. One can equally formulate the Core Rule for other sense modalities. Here sense modalities are regarded as individuated by their phenomenology, rather than by the identity of the sense organs whose states cause perceptions in the modality.

Following the Core Rule for seeing does not require the thinker to have the concept of seeing-that in advance. It just requires a differential sensitivity to the cases in which one sees that something is the case, as opposed to perceiving it in some other modality, or knowing it not through the senses at all. A thinker may also be error about whether a state is a seeing-that. But in any case in which he seems to be seeing-that something is the case, he is entitled, *ceteris paribus*, to make the transition to a self-ascription of a seeing.³

It would be a misunderstanding of the Core Rule to think that following it involves making a transition from a belief or judgment that one is seeing. Rather, following the Core Rule involves making a transition from a seeing-that itself. Since the conclusion of the Core Rule is that one sees that *p*, that misunderstanding of the Core Rule would construe it as making a transition from one content to the same content again. It would also be a transition from a state that presupposes that the thinker already has the concept of seeing.

I suggest that following the Core Rule for any given sense modality is part of (one clause of) the possession condition for the concept of perceptual experience in that modality. To possess the concept of visual experience, the thinker must be following the Core Rule for vision; and so forth.

The Core Rule is not, and could not be, an exhaustive account of what it is to be able to judge the content 'I see that p '. That content contains the first person, and the present tense, which also have a life outside judgments of 'I see that p '. The Core Rule is just one piece of a jigsaw. Other pieces of the jigsaw must be in place for a thinker to have full mastery of 'I see that p '. The other pieces would be accounts of mastery of the other conceptual constituents of 'I see that p '. It is a more general task in the philosophy of mind to describe these other pieces correctly, and to show how they interlock to form a full picture of mastery of 'I see that p '.

I further suggest that what I shall call 'the Extended Core Rule' for vision is a component of the possession condition for the concept of visual experience, considered as applicable both in perceptual and in the illusory, or more strictly non-perceptual case. The Extended Core Rule, in the case of vision, states that if the thinker is in a state that is subjectively as if he sees that p (at least in respect of his visual experience), or subjectively as if he sees an object given under mode of presentation m (in respect of his visual experience), then he is entitled to judge

I have a visual experience as of p 's being the case

or

I have a visual experience as of m

respectively. A subject's judgment of such a content, made for the reason that he is in the entitling state, can in ordinary circumstances be knowledge.

The Extended Core Rule will, perhaps surprisingly, not cover all cases in which someone is entitled to self-ascribe an experience with a given content. Consider an experience as of looking at the 'impossible' object constructed by Penrose. This is a triangular 3D model, similar to prototypes drawn by Escher, which when viewed from a

certain angle gives an experience in which corner A seems to be closer to the viewer than corner B, corner B seems to be closer than corner C, and yet corner C seems to be closer than corner A.⁴ (It is not really so, of course.) Now a thinker cannot soundly reach a self-ascription of this experience by regarding it as subjectively of the same kind as an experience in which he sees that this content holds. Since the content is inconsistent, there are no such genuine seeings that it holds, nor could there be. Hence there are no experiences that are subjectively similar to such genuine seeings.

One way to attribute the correct content to the experience, *e*, of seeing the model is as follows. (I do not claim it is the only solution to the problem; there may well be others.) *e* is subjectively similar to a genuine seeing *e'* that A is closer than B; it is subjectively similar to a genuine seeing *e''* in which it is seen that B is closer than C; and it is subjectively similar to a genuine seeing *e'''* in which it is seen that C is closer than A. The content of *e* is thus determined by its subjective similarity relations to several genuine seeings, and not all of these seeings can be identical with one another. We call this 'the multiple similarity' solution to the problem. We will henceforth take the Extended Core Rule to employ a notion of subjective similarity for an experience that allows such similarity to be determined by multiple similarities to different genuine seeings.

There are many attractive consequences of incorporating the Core Rule into the possession condition for the concept of experience.

(i) It explains and justifies the sense in which one's own perceptions are not given to one in any mode other than is made available simply by the ability to have the perception itself. A fortiori, the perception is not given in some further perceptual mode. Despite some divergences to be noted later, this is a point on which I am in agreement with Gareth Evans when, in *The Varieties of Reference*, he writes: "[The subject's] internal state cannot in any sense become an *object* to him. (He is *in* it.)' (p.227).

Evans' remark is a little Delphic, but it has a natural elucidation. Whenever we perceive some spatial, material object or event, we perceive it in some sense modality. When something is perceived in some sense modality, it becomes an object to the subject. The modality in which one perceives some particular chair – be it by sight, or touch – is not in any way a priori determined by the object or the event itself. In the case of a

particular perception, however, there is a way in which the perception is given in thought that does not involve any sense modality not fixed by the event itself. The mode in which the perceptual experience is given to the thinker who enjoys the experience is a priori determined by the perception itself. No further sense modality is involved. I refer to this feature of thought about perception as its unadorned character.

What is the explanation for difference between the unadorned character of a subject's thought about his own perceptions, and the adorned character of his perceptual thought about spatial, material objects and events? Perceptual experience is itself a conscious state that can thereby itself function as a reason for the thinker to make judgments. It can enter the possession condition for concepts in a way that spatial, material objects, events or states of affairs in themselves, not considered as given in any particular sense modality, cannot.

(ii) Incorporating the Core Rule into the possession condition is the first step towards capturing the respect in which the concept of perception is first personal. If the Core Rule is part of the possession condition for the concept of perception, then there is a clause dealing specifically with first person application in the possession condition.

It is important to formulate sharply the sense in which the concept of perception is first personal, if the Core Rule is correct. Quite generally, it is not sufficient for a concept *F* to be first-personal that there is a special way of coming to know that one is *F* oneself. There is a special way, in ordinary circumstances, of coming to know that one is touching one's own toes, but the general concept *x is touching x's toes* is not one that involves the first person in any deep way. One's knowledge of what it is for an arbitrary thing to be touching its toes does not in itself have specific connections with the first person. The deeper sense in which the first person is involved in the general concept of seeing something to be so is that one's knowledge of what it is for an arbitrary thing to have that property makes reference in one way or another to what is involved in first person ascription of that property.

I say 'makes reference in one way or another', because there is more than one way in which there can be such a connection to first person ascriptions. One way is that so famously criticized - with what justice, we will touch upon later - by Wittgenstein, the idea that your conception of what is involved in another person's having a certain sensation is that they are having the same type of experience as you when you are in pain,

that is, when you can truly self-ascribe 'I am in pain'. But that is not the only way in which there can be a special connection between the understanding of the general property and the first person, and I shall describe another way a few paragraphs hence.

For enthusiasts of the study of first person thought, I note also that the occurrence of the first person in 'I see that p ' when it is reached in this way is representationally-independent, in the sense I used in *Being Known*.⁵ That is, when the thinker is following the Core Rule, his reason for judging as he does is not that he is in some state with the representational content 'I see that p ', which he then takes at face value. His reason is simply his being in the state of seeing that p .

(iii) The clause containing the Core Rule can explain why self-ascriptions of perception made in this way are rational, and can yield knowledge. Any context in which a thinker follows the Core Rule for, say, the visual case, will be a context with respect to which the self-ascription 'I see that p ' will also be true. The entitlement to make a self-ascription of a seeing in the given circumstances respects the general principle that corresponding to every entitlement, there is an objective norm of correctness.⁶ Self-ascriptions of seeings made by following the Core Rule are correct.

This is so for a priori reasons. In the spirit of a rationalist account, the account also holds that transitions respecting the Core Rule lead to true belief because of the nature of the states and concepts involved in the transition.⁷

(iv) All experiences with representational content, whether genuine perceptions or illusions, are, in respect of the sense modalities in which they occur, subjectively as if they are perceptions. (This is why there is such a thing as taking perceptual experience at face value in the first place.) Not only is this a feature of the subjective experiences themselves; it is also a feature that is immediately obvious to us when we think of perceptual experience as perceptual experience. If our account of possession of the concept of perceptual experience incorporates the Core Rule and the Extended Core Rule, we can explain this fact. The Extended Core Rule implies that anything that is thought of as a perceptual experience is thought of as the same, subjectively, as an experience in which one genuinely perceives something to be the case. Incorporating the Extended Core Rule and the Core Rule into the account of possession of the concept of perceptual

experience explains our appreciation of the primacy of the genuinely perceptual case in the phenomenology of perceptual experience. This primacy of the fully veridical case must be present in any other domain to which the Core Rule and Extended Core Rule generalize.⁸

(v) Incorporating the Core Rule into the possession condition for the concept of seeing plausibly implies that one cannot fully possess the concept of seeing unless one knows what it is like to see. A plausible account of knowing what it is like to be in a given kind of conscious state is that one possesses a capacity to recognize that one is in that state, on the basis of being in that state. But this is precisely what one does in following the Core Rule.

(vi) Perceiving that *p* is certainly an externally individuated state, for many reasons. Whether someone is perceiving that *p* depends on their relations to external states of affairs. Perceiving that *p* is a form of knowing that *p*, and whether one knows something depends in part on what could easily have been the case (on what happens in nearby possible worlds, as one says). What could easily have been the case is something that depends on multiple conditions concerning matters far outside the perceiver's head. If, as I am suggesting, the concept *x perceives that p* is individuated by its connections with the externally-individuated relation of perceiving that *p*, then it follows that the concept is also externally individuated. So this is another case in which not only the intentional content of a state is externally individuated, but so is the psychological relation to the intentional content.

More specifically, on the present treatment the concept of perception is what I have called 'instance-individuated', in the sense I discussed in 'Explaining Perceptual Entitlement'.⁹ Although a possession condition for the concept of perception that incorporates the Core Rule emphatically does not treat it as an observational concept, it does share one feature with observational concepts. It entails that in order to possess the concept, the thinker must be willing to apply the concept in response to instances of the concept. Some psychological concepts, as well as observational concepts, have this property. As one might put it, we have here an internal externalism. This internal

externalism is consistent with the unadorned character of a subject's thought about his own perceptions.

(vii) As Mark Crimmins noted to me, a thinker can employ the Core Rule for seeing without having much idea at all of how sight works, either of its neurophysiological and computational bases, or of light as the environmental medium of transmission of the information of visual information. This attractive feature will be present in some of the later applications of the Core Rule.

(viii) The Core Rule vindicates the Aristotelian-like doctrine that it is by sight that you know that you see. It does this without any regress in the content of seeing, and without any attribution of reflexivity in the content of the seeing.¹⁰

2. *A Contrast with Evans's Account*

Evans gives a different account of how a thinker can attribute a content to his perceptual experience. In *The Varieties of Reference*, he writes: "He [the subject – CP] goes through exactly the same procedure as he would go through if he were trying to make a judgment about how it is at this place now, but excluding any knowledge he has *of an extraneous kind*. (That is, he seeks to determine what he would judge if he did not have such extraneous information.)" (p.227). Evans' idea is that if the subject, using this procedure, determines that he would judge that *p* under these conditions, then he can ascribe the content *p* to his perceptual experience.

To explain what he means by 'extraneous information', Evans mentions an example of Dummett's.¹¹ If you see a pile of newspapers at the Smiths' front door, you may judge 'I see the Smiths forgot to cancel their newspapers'. But, under Evans's approach, the content *the Smiths forgot to cancel their newspapers* is not to be counted as part of the content to be ascribed to your experience, because it is 'extraneous'. Also, if you know that your visual experience is an illusion, that knowledge is also extraneous information that is to be excluded in assessing what you would judge when you apply Evans's criterion (fn 39, p.228).

It seems to me that the condition Evans formulates is not necessary for an experience to have a given content. Something can be in the content of a given experience without the subject being willing to make the corresponding judgment Evans mentions. Several different kinds of example show this.

Consider recognitional concepts of individuals. A person can have the capacity to recognize the former Iraqi dictator Saddam Hussein. When he sees Saddam, his visual experience has a content specified in part by using that recognitional concept: it seems to him that Saddam, so thought of, is in front of him. Other things equal, he will take such visual experiences at face value, and judge that Saddam is in front of him. But his willingness to do so rests, and rationally rests, on his belief that there is only one person, at least in this part of the world, who looks that way. This, seemingly extraneous, belief is essential for our subject to be willing to move from the experience to the judgment that Saddam is in front of him. When our subject comes to learn that Saddam actually employs three look-alikes, he will not move from the experience to the judgment that Saddam is in front of him. But his visual experience will continue to have that content all the same. So it seems that Evans's condition is not necessary.

Perhaps Evans could add the requirement that the judgment he mentions can rely on information if that information is necessary if the subject is to be willing to employ the concept in judgments at all. That would save the Saddam example, but it would not help with others.

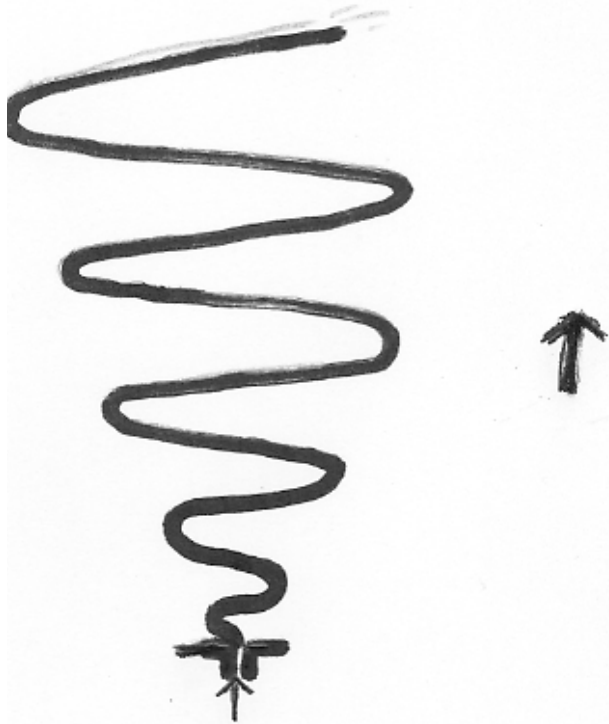
Suppose you hear the sounds 'Peter leaped'. It is in the representational content of your experience that someone said that Peter leaped (its sense, not merely the sound and phonemes). But, we can suppose, it is only because you take yourself to be amongst English speakers that you also judge that the speaker said that Peter leaped. If you took yourself to be amongst German speakers, you would judge not that someone has said that Peter had made a certain kind of jump, but rather that someone had said that Peter is in love ('Peter liebt'). So Evans's procedure fails to attribute to the experience the content that someone said that Peter leaped.

This is not a problem for the Core Rule, for in such examples a person can certainly hear that someone has said that Peter leaped, and move from that to a self-ascription of such a hearing. He can do this independently of whether he needs additional information before endorsing the content of the experience in a judgment.

There is a range of other examples of a similar sort. If you can see something as a car, a computer, or a phone, it is only because of your background knowledge of the function of these perceptually-recognizable objects do that we judge that the seen things are cars, or phones, and so forth. If this background knowledge were not there, some of us would not make the judgment that it is a car, or phone, or computer that is in front of us.

A hard line with these examples would be to take the unintuitive line that you do not really see the object as a computer, say, but only as something of a certain size and shape. But not all examples can be handled by such a hard line. The example of ‘Peter leaped’ cannot. It would be a huge misrepresentation of our auditory experience to say that we do not really hear words as having certain senses.

There is a third kind of case demonstrating the non-necessity of Evans’s conditions. In case of this third kind, the content of the experience is so outlandish that we would never judge it to hold, given our background knowledge. A competent magician can make it look as if three pigeons have just come out of his jacket sleeve. We do not judge that they were there. If it is said that we must exclude knowledge of how physical objects behave, or what sorts are around us, we will thereby exclude all sorts of features of our visual experience. We see an occluded object as having a certain shape, as continuing in a certain way behind the occluding object; and our willingness to take these experiences at face value this relies on our background information. Another example is provided by such experiences as that of the rising, but apparently curving, rising zigzag jet of water in the display that is, or used to be (circa 1983-4), in the Exploratorium in San Francisco. It had this shape:



The effect was produced by rising jet of water that was in fact continuously moving back and forth across the arc of a circle, but under carefully timed, and unnoticed, stroboscopic lighting that produced the visual effect of an unsupported continuous jet of water in the zigzag shape. The experience of this striking display was undoubtedly of the curving zigzagging jet of water. We are going to get the right answer from Evans's procedure only if we ask such questions as 'What would I judge if I did not think that the laws of motion did not hold?'. It is impossible to believe that such barely assessable questions have to be answered before we can pronounce on the question of the content of our perceptual experience in looking at such a display.¹²

I conclude from this range of cases that it is one thing for a judgment to have a certain content in the circumstances described by Evans, and it is another for the experience to have the same content, even though there is sometimes overlap between the two. There would be complete coincidence if 'extraneous information' meant 'any content that is not in the content of the perceptual experience': but that would be a very different procedure and criterion from that which Evans suggested. That different procedure would not be genuinely circumstance-dependent, in the way Evans's procedure

is. For example, if one just requires someone to judge only what is in the content of the perceptual experience, one would not need Evans's instruction that if one knows one's experience is illusory, one should prescind from that information. Just requiring sensitivity to the content of the experience would be enough, whether it is a genuine perception or not. That alternative approach would not also preserve the primacy of the genuinely perceptual case in the self-ascription of experiential content, an attractive and important feature of Evans's approach.

Evans's approach is not the only treatment to preserve the primacy of the genuinely perceptual case. The possession condition that incorporates the Core Rule and the Extended Core Rule also attributes explanatory primacy to the genuinely perceptual case. It does so in two respects. The genuinely perceptual states of seeing-that, feeling-that, hearing-that and the rest are the initial states from which transitions are made in the Core Rule when the thinker makes a self-ascription of an experience. The treatment of thought about illusions as states that are subjectively similar to genuine perceptions also gives an explanatory primacy to the genuinely perceptual case.

3. *The Possession Condition, Empirical Phenomena of Development and Other-Ascriptions*

What should be the relation between the possession condition for a concept and empirical psychological phenomena involving possession of that concept? The relation between the two is complex and multifaceted. Here I want to emphasize one of the tasks of a theory of possession conditions that is particularly pertinent to issues surrounding possession of the concept of perception. (Some of the other tasks I have discussed elsewhere.¹³)

A statement of a possession condition for a concept is responsible in the first instance to the epistemic phenomena involving possession of that concept. These phenomena involve the rationality or irrationality, in given circumstances, of judging certain contents containing that concept. The fact that it can be rational, and correct, to apply an observational concept to an object even when the object is not perceived must be explained by the possession condition for the observational concept. The fact that we can rationally come to accept new axioms for some logical or mathematical concept, axioms that are not implied by what we previously accepted, also has to be explained by

the possession conditions for the logical or mathematical concepts in question. If the identity of a concept is answerable to Frege's informativeness condition, and a possession condition individuates a concept, then these tasks of a theory of possession conditions are demanded simply by the nature of the subject matter of a theory of possession conditions.

These explanatory tasks are philosophical, and have an a priori character. The rationality or otherwise of judging something in given circumstances is an a priori matter. So these tasks have the characteristic epistemic status of much of philosophy that aims to be explanatory. The task is to explain a set of a priori truths – truths about what is informative in given circumstances, truths about what contents involving a given concept it is rational to judge in those circumstances – from more fundamental principles that individuate the concept in question.

Some of the phenomena displayed by possession of a given concept by actual human thinkers are, however, empirical phenomena that could not be excogitated simply from the a priori nature of the concept. If these phenomena are special to the concept in question, the possession condition for the concept should contribute to an explanation of how these phenomena are possible. One way in which this task can be implemented is illustrated by a treatment I will offer of some empirical phenomena involving possession of the concept of perception.

All of the following phenomena are displayed by children employing the concept of perception, and are well attested by psychological research. Some of these phenomena will be familiar to any parent.

(i) Toddlers between the ages of 24 and 30 months do not appreciate that they can see something that someone on the other side of an opaque screen cannot see.¹⁴ Asked to hide a toy from another person, who is on the other side of the screen, a child of this age will often put the toy in a position in which the child himself cannot see it, on the other side of the screen where the other person can see it. These are what Hughes has called 'projective' errors, and Flavell calls 'Level 1' errors.¹⁵

(ii) In playing hide-and-seek, a child of this age will be willing to hide under a table, in a location in which it is evident to any adult that he can be seen in the room, even though he himself cannot see the rest of the room. We can call this phenomenon 'incompetent hide-and-seek'. Incompetent hide-and-seek is plausibly an instance of the

same inability displayed in projective errors. It is the special case in which there is failure to grasp the conditions under which the seeker sees something.

(iii) Somewhat older children, who do not make these errors, nonetheless make a different error. In a situation in which one of these older children sees an object, and appreciates that someone else also sees the same object, they nevertheless fail to appreciate that the other person will see a different side of the object than they themselves see - even though they know that the object is different on its two sides.¹⁶ Hughes calls these 'perspective errors', and Flavell calls them 'Level 2' errors.

These phenomena (i) – (iii) are all empirical phenomena involving the concept of seeing, and we can contribute to their explanation by drawing on the possession condition for the concept of seeing. They can all be explained by drawing on the Core Rule, in both its positive and negative parts. I propose what I call 'the Same Rule Hypothesis':

the child, in attributing seeings to others, applies the same Core Rule to others as he does in self-ascribing experiences, but does so taking as input to the Rule not another's seeing-that *p*, but his own.

That is, the child moves from his own

seeing that *p*

to

the other person sees that *p*.

The Same Rule Hypothesis is an empirical hypothesis that makes crucial use of a priori information about the possession condition for the concept of seeing. It is a hypothesis that involves a partnership between philosophy and psychology.

A natural extension and partner of the Same Rule Hypothesis is that the child uses the same procedure in judging that the other person does not see as she uses in judging that she herself does not see.

The Same Rule Hypothesis is another example of one of the ways in which a thinker's grasp of a general property can be essentially first personal. Our young thinker has some understanding of what it is for another to have some property because he knows that it can be attributed by applying the same rule for others as he employs in making self-attributions.

The Same Rule Hypothesis explains the 'projective' errors in (i). If a child uses these procedures in accordance with the Same Rule Hypothesis, he will judge that another person sees something, or sees something to be the case, precisely when he himself sees it, or sees something to be the case. Equally, if the child uses the negative part of the Core Rule in the same way, he will judge that the other does not see something in exactly the same conditions as he does not see something.

The Same Rule Hypothesis also explains the phenomenon of Incompetent Hide-and-Seek. If our child judges, using the Core Rule, that he does not see anyone in the room, then if he uses the same Rule in the way indicated to make judgments about the visual experience of the other player in the game, he will judge that the seeker equally does not see anyone in the room.

Perspectival errors can be explained using the same resource. Suppose the child sees one side of an object, and applies the Core Rule to judge that he himself sees that side. Applying the same rule in other-ascription then would yield the result that he ascribes to the other a view of that same side.

Under this approach, increasing knowledge about the conditions under which others see, and what features of an object they see, is attained by the child's coming to qualify the conditions under which the Core Rule can be applied in other-ascription in this naïve way. The Core Rule works in other-ascription of seeings only for someone in roughly the same location as oneself, in the same conditions, with unobstructed sight. Eventually, for full knowledge, the child must come to appreciate that for a third person ascription of seeing to be correct, the other person must be in the same state in relation to the world as he, the child, is when he sees. This is the end-state that has to be reached as the naïve applications of Core Rule in other-ascriptions are progressively qualified by conditions on the other's relations to the objects and states of affairs perceived. The very qualifications on the use of the Core Rule in other-ascription also give a special role to the first person. The conditions under which the subject himself does not see are used in

formulating the conditions under which the Core Rule is to be qualified in its use in ascriptions to others.

It may be objected that the empirical phenomena (i) – (iii) could equally be explained by the hypothesis that the child uses the Core Rule in self-ascribing experiences, and then infers to the occurrence of experiences in others by using the principle that others see something to be the case if and only if he himself does. I suggest, however, that at these early stages the child has no conception of what it is for another person to see something to be the case other than that such other-ascriptions can be reached by applying the Core Rule to others. If that is the child's conception of other-ascriptions and their correctness conditions, it will indeed be a consequence of the procedures for self- and other-ascription of experiences that he sees something to be the case if and only if another person does. But the child does not have an independent conception of perception for which this coincidence is believed to hold.

The fact that the Core Rule also provides a means for ascribing perceptions to other people is of more general philosophical significance than making some sense of the empirical data of acquisition. The fact that one can use the Core Rule in other-ascription shows how a possession condition for a concept, whilst being essentially first personal, can nevertheless contain the seeds of a procedure for other-ascription. This is one very clear way in which a concept can be shown to be unambiguous as between first- and third person applications, whilst still displaying an explanatory primacy for the first person case in the account of possession. The possession condition for the concept of seeing that I have offered entails that one could not be capable of self-ascriptions of seeings without both having the resources to grasp, and having the materials for a procedure for making, other-ascriptions of seeing.

If someone other-ascribes in accordance with the Same Rule hypothesis, he is taking one step to seeing the other person as 'another I'. In applying the same rule in attributing seeings to others as he applies to himself, he thinks of the other's seeings as states of the same kind that he himself enjoys.

Other-ascribing in accordance with the Same Rule hypothesis does not, however, take a thinker the whole distance to thinking of the other person as 'another I'. Travelling the whole distance also involves thinking of the other as capable of self-ascribing too, that is, capable of moving from the states ascribed in accordance with the Same Rule

hypothesis to self-ascriptions, in accordance with the Core Rule itself. Here the subject has to think of the other person as employing the first person way of thinking. That is, the subject has to refer to, and not merely employ, the first person way of thinking.¹⁷

The Same Rule Hypothesis was put forward as an empirical account that could explain children's developing understanding of another person's perception. But applying the Same Rule in other-ascription, however tempered with qualifications about same conditions, or perspective, can never capture our full, mature understanding of what it is for another person to be seeing. We understand the hypothesis of the inverted spectrum, that what I see as red, you see as green. We understand this hypothesis even in the case in which your situation and perspective on an object are precisely those in which I see it as red. Applying the Same Rule in other-ascription of experience builds in an implicit presumption of sameness of experience in two people in the same given external conditions and relations. No doubt in pre-philosophical thought we rely on the Same Rule, which is why it is surprise when the hypothesis of the inverted spectrum occurs to us, or is suggested to us. But we certainly understand it. A formulation of a possession condition for the concept of seeing that would make it unintelligible would be erroneous. I suspect that grasp of identity, applied to a given category of item, is not to be reduced to grasp of something else. The fact that the Core Rule applied in the third person cannot capture the full extent of our understanding is itself just one plank in support of the case for such irreducibility. Saying there is irreducibility is, however, consistent with one's saying much more about what such grasp involves. Further development of this position would need to supply this further elucidation. At the least, the further account would have to say how the thinker latches on to the property itself, whose application in the third person is in question. A thinker's grasp of the Core Rule says how his own case provides a means of doing so. It is uniquely the property of seeing that *p*, nothing weaker or stronger, that is the basic one that the thinker must have for use of the Core Rule to result in a true self-predication. The claim that a thinker's understanding involves some grasp of an identity relation is also one answerable to what it can explain about his judgments and other actions. This explanatory power can be present without any reduction of identity to something else. All these telegraphic remarks would have to be expanded in a full treatment of this position.

4. *The Model Generalized: and Action as an Instance*

When the Core Rule is embedded in a possession condition for the concept of perception, the result is an instance of a general form of account. In the general account, the thinker is in some intentional state S with the content p . This state is one with representational content: in being in the state, it seems to the thinker that p holds of the world. The thinker then makes a transition from his

S-ing that p
to the self-ascription

I S that p .

We can call this general schema the ‘Outside-In’ model. There are two variants of the general Outside-In model, according as the state S is factive or not. Are there any other instances of the Outside-In model, of either variant?

I suggest that certain concepts of action provide another instance of the Outside-In model, even in its stronger, factive variant. Suppose the thinker makes a self-ascription of the form

I am . . ‘-ing.

Instances of this will be ‘I am walking’, ‘I am typing’, ‘I am moving from the waiting-room to the exit’, ‘I am working out the sum of this column of numbers’. These instances are not all ones that in themselves imply that the subject’s . . ‘-ing is an action. You might be moving from the waiting room to the exit on a moving walkway, onto which you had stepped unintentionally. I do, however, want to suppose, as part of the specification of the range of cases about which I am talking, that the subject has the kind of distinctive awareness of . . ‘-ing that is made available by its in fact being an action on this particular occasion.

This kind of awareness can be present even when one is not perceiving that one is .·'-ing. One can be aware that one is raising one's arm, even when one's afferent nerves are severed, and there is no proprioceptive feedback, and one is turning one's head away from one's arm so that one cannot see it either. This distinctive phenomenology of action is what makes possible illusions that one has raised one's arm even when, unknown to oneself after some terrible accident, one has no arm. The phenomenology of action involves states with representational content.

A natural first suggestion would then be that another instance of the Outside-In model is one in which the thinker moves from 'I am .·'-ing' to

I am .·'-ing intentionally.

This, however, is too strong. We need to treat the cases of basic and non-basic actions differently. I may intentionally transfer one-third of my assets to my son. But there is no distinctive action-awareness of transferring one-third of my assets to my son. The action-awareness in such a case is action-awareness of moving my hand, and (say) of signing my name. These actions may be intentionally transferring one-third of my assets; but that does not give me action-awareness of conditions involving proportions of my assets.

Where .·'-ing is an action (type) that is basic for the subject, we have the Core Rule for the case of basic actions. From the subject's action-awareness

I am .·'-ing

for a basic-action type, the subject can rationally move to the judgment

I am .·'-ing intentionally.

There is a Core Rule for ascriptions of intentionality in the case of non-basic actions too. Suppose that \angle -ing is a non-basic action type for the agent. Suppose too that there is some basic action type .·' such that

- (i) the subject has an action-awareness of his .·'-ing, and
- (ii) in .·'-ing, the subject is ≍-ing, and
- (iii) the subject means to be ≍-ing as part of his plan in .·'-ing.

From the action-awareness in (i), and the conditions (ii) and (iii), the subject may make a rational transition to the self-ascription

I am ≍-ing intentionally.

(Here known but unintended consequences must, for the purposes of (iii), not be understood as part of the agent's plan.)

The ability to follow the Core Rule in the case of non-basic action involves a sensitivity, on the part of the thinker, to the nature of his own plans. In this it takes a significant step beyond what is involved in following the Core Rule for the case of basic actions. The capacity to follow the Core Rule for non-basic actions thereby represents in an intermediate state, located between that of having no sensitivity in one's judgments to one's own plans and decisions, at one extreme, and having full conceptualization of one's own plans, decisions and intentions on the other extreme.

The Core Rules for the action case involve transitions a thinker is entitled to make. When these transitions are made from action-based awareness that he is .·'-ing, these transitions will be truth-preserving. They will also be capable of yielding knowledge that he is .·'-ing intentionally when the further conditions (ii) and (iii), for the non-basic case, are also known.

The explanatory attractions of the Outside-In model applied in the action case parallel some of those that are present for the Core Rule in the case of the concept of seeing. You do not have perceptions of your tryings – they do not become an object for you, any more than your seeings do; and so forth.

In the case of the concept of seeing, we identified a practice of using the same rule in other-ascriptions of seeings as is used in self-ascriptions. There is something analogous in the case of basic actions. You can perceive the movement of someone else as being of a kind that you yourself can perform. This is not a matter of personal-level inference, but is rather part of the content of your experience of the other person's

movement. When you see someone waving in a certain way to hail a cab, you see his action as of a kind that you could perform. If asked to wave in the way he waves, you could do the same, without any inference or calculation. The famous ‘mirror’ neurons identified by Rizzolati and his co-workers are likely to be involved in the possession of such capacities to act and to perceive. Such underlying representations are also the sort of thing required for the explanation of the ability, even of newborns, to imitate such gestures as sticking out one’s tongue.¹⁸

Suppose a subject sees someone else as performing an action of kind φ that is basic for the subject himself, and suppose too that this perception is of a sort that involves the subject experiencing the other’s action as of a kind that he could perform himself. In such a case, our subject can move from the third person content

That person is φ -ing

to the conclusion

That person is φ -ing intentionally

and also to the conclusion

That person is trying to φ .

In making these transitions, our subject would be applying the same rule in the third person case as he applies in self-ascription, that is, the same rule as he applies in the first person case. The only differences between the first person and the third person cases are that that the awareness of action is as of another’s action, and that ‘that person’ is substituted for ‘I’. Again, our subject thinks of the other person as another I. The ability to see another’s actions as ones of a sort one can perform oneself supplies the cantilevering from the case described in the Core Rules to the case of other-ascription.

Under this approach, the concepts of acting intentionally and of trying are first personal in the deeper sense I tried to articulate in the case of seeing. A philosophical

account of one's general understanding of what it is for an arbitrary person to be acting intentionally or trying makes reference to what is involved in making first person ascriptions of these properties, so thought of.

5. Concluding Remarks: Wider Issues

I conclude by remarking on two features present in this treatment of self- and other-ascription of certain psychological properties that are of wider application and interest.

The Core Rule in both the perception and the action cases is truth-preserving; it is so a priori; it is so as a result of the nature of the states and concepts involved in the respective Rules. Other things equal, it is adaptive to follow truth-preserving rules. It also, if the present approach is correct, comes with the very possession of the concept of perception that one follows a truth-preserving rule. So in acquiring the concept of perception, one has not only the ability to discriminate in thought between those situations in which something is perceiving something to be the case and those in which he is not; one also has an ability to apply this distinction correctly. These points suggest a general account of the relations between grasp of transitions that are a priori, and adaptive advantage. Some special form of truth-preservation comes with possession of the concept, and brings adaptiveness in its train.

The other feature of this treatment involves a connection between the external individuation of mental states and epistemological relations on the other. Both perceptual experiences and tryings are plausibly externally individuated. What gives them the content they have is constitutively dependent upon certain of their causes, in certain circumstances, in the case of perceptual experiences, and upon certain of their effects, in certain circumstances, in the case of tryings. There is, unsurprisingly, a connection between external individuation of a mental state and what enjoyment of that state entitles one to judge. At the first order, perceptual experiences and tryings entitle one to make judgments about the external world and about what one is doing, respectively. But if the present approach is correct, external individuation also bears upon the entitlement to make second-order judgments, about one's own mental states – about whether one is perceiving, and whether one is acting. This follows immediately if the externally individuated mental states mentioned in the input to the Core Rules provide an

entitlement to judge the contents that are the output of the Core Rules. The Core Rules show how the occurrence of mental states that are externally individuated can lead to knowledge of those very mental states that are externally individuated, and can do so in rational ways.

¹ This material was presented in lectures at New York University in 2003, and I drew upon it in the first of my Immanuel Kant Lectures at Stanford University later in the same year. My thanks to José Bermudez, Michael Bratman, John Campbell, Victor Caston, Mark Crimmins, Alison Gopnik, Stephen Schiffer, Elliot Sober and an anonymous referee for helpful comments.

² *On the Soul* 3.2, 425b12-7.

³ Here, as in the case of entitlement to perceptual beliefs, I would argue that the factive entitling state is more fundamental in explaining the nature of the entitlement relation than is the non-factive state of having an experience as of seeing that *p*. I offer some reasons in support of this position in *The Realm of Reason* (Oxford: Oxford University Press, 2004), Chapter 4, Section 1 (d).

⁴ For photographs of Penrose's 'impossible object', see R. Gregory, *Concepts and Mechanisms of Perception* (London: Duckworth, 1974), p.369, and also his book *The Intelligent Eye* (London: Weidenfeld and Nicolson, 1970), pp.54-57.

⁵ *Being Known* (Oxford: Oxford University Press, 1999) pp.266-74.

⁶ There is a neo-rationalist treatment of these issues in *The Realm of Reason*, Chapter 1.

⁷ For more on such rationalist approaches, see *The Realm of Reason*, especially the second principle of rationalism, in Chapter 2.

⁸ I would argue that this feature is present for the generalization given in section 5 below.

⁹ In *The Externalist Challenge*, ed. R. Schantz (Berlin: de Gruyter, expected 2003); and in *The Realm of Reason*, Chs. 2-4.

¹⁰ For extensive discussion of issues of regress and reflexivity, and historical references, see V. Caston, 'Aristotle on Consciousness', *Mind* 111 (2002) 751-815. I believe the Core Rule meets many of the desiderata Caston formulates, and ought to be considered either as a possible interpretation of Aristotle, or as a thesis doing justice to his best insights on this matter.

¹¹ 'What is a Theory of Meaning? (II)', in *Truth and Meaning: Essays in Semantics* ed. G. Evans and J. McDowell (OUP, 1976), at p.95.

¹² Could Evans solve this problem by appealing to multiple-similarity relations, just I myself did in an earlier section? One needs to capture that the jet is going around curves, for this is given in the experience itself. That it is so perceived is not captured by similarities to other genuine seeings overlapping in contents.

¹³ See 'Theories of Concepts: A Wider Task', in *Foundations of Cognitive Science* ed. J. Branquinho, J. Saagua and A. Marques (OUP, 2001).

¹⁴ For an engaging overview, see A. Gopnik, A. Meltzoff, and P. Kuhl, *How Babies Think: The Science of Childhood* (London: Weidenfeld & Nicolson, 1999), pp.40-1; and the literature cited there. (In North America, this book has the title *The Scientist in the Crib*.)

¹⁵ See Z. Masangkay, K. McCluskey, C. McIntyre, J. Sims-Knight, B. Vaughn, and J. Flavell, 'The Early Development of Inferences about the Visual Percepts of Others', *Child Development* 45 (1974) 357-66; and I. Yaniv and M. Shatz, 'Children's understanding of perceptibility', in *Developing Theories of Mind*, ed. J. Astington, P. Harris, and D. Olson (Cambridge: Cambridge University Press, 1988).

¹⁶ See Masangkay et al..

¹⁷ See my 'Demonstrative Thought and Psychological Explanation', *Synthese* 49 (1981) 187-217.

¹⁸ A. N. Meltzoff & M. K. Moore, 'Imitation of facial and manual gestures by human neonates', *Science* 198 (1977) 179-92; A. Meltzoff, 'Elements of a developmental theory of imitation', in *The Imitative Mind: Development, Evolution and Brain Bases*, ed. A. Meltzoff and W. Prinz (Cambridge: Cambridge University Press, 2002).