QUINE AND DAVIDSON ON PERCEPTUAL KNOWLEDGE

One of the main differences between Quine's and Davidson's theories of knowledge and mind lies in their accounts of the content of perception and the way in which it contributes to our knowledge of the external world. Both thinkers are very sensitive to these differences and it has been the subject of discussion between them in recent publications. To put it very roughly, Quine holds firmly to the position that although we finally manage to get veridical knowledge of the external world, the content of our perceptions are just the triggerings of our sense receptors that give us reliable clues about the objects and happenings in our environment. Davidson considers this view to be a naturalized successor of an older defective empiricism which should be abandoned. In its place he proposes an externalist theory of perceptual content, according to which content is fully determined or constituted by the objects and events in the external world. This move, among other things, bypasses many of the troubles that Quine's approach faces and gives a solid ground for our intersubjective communication. In other words, if the central concern of Quine's epistemological project is epistemology naturalized, so the central concern of Davidson's corresponding project is epistemology externalised.¹

In the present essay I shall outline, in the first part, Quine's view of perceptual knowledge, and subsequently, in the second part, Davidson's arguments against it and his own positive account of perceptual content. In the third and final part I shall try to say why I find both of these options unacceptable, and then make some suggestions towards what I take to be a more satisfactory solution.

1. NEURAL INTAKE AND OBSERVATION SENTENCES

Quine believes that someone who has given up the idea of philosophy as independent of and prior to science, and who accepts its continuity with science, has only one available option in epistemology: she must endorse a non-mentalistic version of empiricism; one transformed into the physics of stimulus and response. Of course, this does not mean that she is restricted, while doing epistemology, to rely exclusively on the theories and hypotheses of contemporary physics; by no means - she can draw upon such disciplines as neurology, psycholinguistics and evolutionary genetics. That is, the task of a scientific or naturalized epistemologist is to adhere to the ancient slogan nihil in mente quod non prius in sensu but to give it a distinctive and broadly understood physicalist turn.

The assumptions from which the naturalist epistemologist starts would pass today as hardly disputable truisms or platitudes. We are highly complicated living

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organisms, animals of some sort, interacting with the environment in various ways. How do we get information about this environment and the external world? Quine writes:

Science itself teaches that there is no clairvoyance; that the only information that can reach our sensory surfaces from external objects must be limited to two-dimensional optical projections and various impacts of air waves on the eardrums and some gaseous reactions in the nasal passages and a few kindred odd ends.²

And more recently:

Our avenue of continuing information about the world is the bombardment of our sensory surfaces by rays and particles, plus some negligible kinaesthetic clues to the ups and downs of our footpath.³

The result of these causal impacts or bombardments by rays and particles are irritations of our surface or, more precisely, the triggerings of our exteroceptors. Confining our attention to a single subject triggered on a given occasion we can define the subject’s global stimulation, or neural intake, as the temporary ordered set of all firing of her exteroceptors on that occasion.⁴ These neural stimulations or intakes prompt the subject to assent to or dissent from various observation sentences, sentences such as “It is raining”, “That is a rabbit”, or simply “Mama”, “Milk”, “Cold” etc. These sentences play a central role both in learning a language and in testing our scientific theories about the world.⁵

When we turn to the issue of observation sentences and assent to them, we seem to leave the safe domain of commonplace scientific truths and enter a rather murky area, the field of real philosophical difficulties. One of the problems here is to get an account of observation sentences which ensures that they successfully meet the following requirements: (i) each such sentence should be associated affirmatively with some range of one’s stimulations and negatively with some other range; (ii) each such sentence should command the subject’s assent or dissent outright, on the occasion of an appropriate stimulation, without further investigation and independently of her interests, etc. (iii) each observation sentence must command the same verdict from all linguistically competent witnesses of the occasion.⁶ The first two conditions appear to be not very difficult to meet, provided that we keep in mind the adjective “appropriate” in the phrase “appropriate stimulation” (there can, of course, be cases when the subject confronted with a black swan cannot, without further investigation, say “That is a swan” or “That is not a swan”) and are able to distinguish from the wide class of observation sentences for various groups of speakers, with various scientific backgrounds, etc. a subclass of very simple and unsophisticated observation sentences common for all speakers of a given linguistic community. But the third condition, i.e. the condition of intersubjectivity, is not very easy to meet. This is because Quine has to get intersubjectivity out of the subjective and idiosyncratic stimulations of each particular member of the community. The quick reply would be to say that these stimulations are not subjective in the Cartesian sense: they are successfully investigated by the intersubjective methods
of neuroscience. But this reply is scarcely satisfactory if the observation sentences are supposed to be "the entering wedge in the learning of language". The very idea of a mother making recourse to complicated neurological tests in order to settle whether her child associates with a given observation sentence a stimulation of the right kind, strikes us as totally absurd. So the resolution to this problem certainly does not rely on taking the subjectivity of individual stimulations as merely apparent.

Quine has become increasingly aware of this difficulty. In *The Roots of Reference* he tries to remove it by the following account of observation sentences:

A sentence is observational insofar as its truth value, on any occasion, would be agreed to by just about any member of the speech community witnessing the occasion. This definition depends ... on the idea of membership in the speech community, but that presents no problem; we can recognize membership in the speech community by mere fluency of dialogue, something we can witness even without knowing the language.⁷

The account, as it stands, suffers from the ambiguity of the word "occasion". But further clarifications and the context of his whole epistemological project clearly suggest what Quine has in mind here: the occasions are simply sensory impingements, surface irritations, neural intakes, etc. Another defect of this account is more troublesome, namely the essential dependence of the definition of an observation sentence on the idea of membership in a speech community. Can fluency of dialogue function as a criterion or even a reliable indicator of belonging to the same speech community? Hardly. For example, Poles visiting the Czech Republic often engage in fairly fluent conversations (about matters of daily life) with the people living there, but this does not prove that they belong to the same speech community. There is only some affinity between their languages. So further refinements of the fluency criterion are needed. However, doing this membership in the same speech community comes to be based on agreement about which observation sentences are assented to or dissented from on any given occasion. If so, the above account becomes uninformative and circular.⁸

In his more recent writings (from the eighties and nineties) Quine explicitly recognizes that this way of defining observation sentences is faulty beyond repair. There is no other choice but simply to be satisfied with an account that says which sentences are observational for each individual speaker. Here is the passage applying this strategy:

An observation sentence is an occasion sentence that the speaker will consistently assent to when his sensory receptors are stimulated in certain ways, and consistently dissent from when they are stimulated in certain other ways. If querying the sentence elicits assent from the given speaker on one occasion, it will elicit assent likewise on any other occasion when the same total set of receptors is triggered; and similarly for dissent.⁹

When, however, a given sentence is observational not just for a single speaker but for a whole community (that is, for each and all its members)? The answer, at first sight, is simple: when it is observational for each individual member of the commu-
nity. And maybe this answer is really simple and easy to apply in deciding which sentence is observational, and which not, for someone who has extraordinary cognitive powers and capacities that enable her to look in the brains of all the speakers concerned and see whether they assent to a given sentence only when their sensory receptors are stimulated in a certain determinate way. But for ordinary speakers with ordinary cognitive powers and capacities this answer seems to be rather useless.

But Quine would reply that ordinary speakers are not in such an impoverished situation. They have empathy, a “gift of human nature”, that enable them to correlate, however fallibly, their observation sentences with the observation sentences of other members of the speech community. Empathy plays, for instance, an indispensable role in learning a language. The mother assesses the appropriateness of her child’s observation sentences by taking into account the child’s orientation and how the environment looks from there. And this use of empathy extends to various sorts of interaction between humans. To put it in Quine’s words: “We all have an uncanny knack for empathizing another’s perceptual situation, however ignorant of the physiological or optical mechanism of his perception”.10

So far I have been considering only one problem of Quine’s naturalized epistemology: the problem of defining observation sentences without abandoning objectivity. The other, which I merely mention now and to which I shall return briefly in the third part, concerns the nature of the relation of the triggerings of sense receptors or neural intakes to observation sentences. Is this a brute non-rational causal connection that makes us just happen to assent to various observation sentences? Or, is this not just a causal but also an epistemic relation where neural intake is evidence for or against a given observation sentence? Quine’s writings seems to be rather vague on that matter.

I turn now to arguments Donald Davidson has put forward against Quine’s views of content, perception and observation sentences, and his own positive account of these epistemological issues.

2. EXTERNAL CONTENT AND OBJECTIVE MIND

Davidson presents two arguments against Quine’s epistemological views: (i) from the nature of justification, and (ii) from the threat of scepticism. Here is the first argument.

Let us suppose, says Davidson, that we have sensations, in the form of neural intake or stimulation, which justify our observation sentences, or more generally, our beliefs about the external world. According to that picture, having the sensation of seeing a green light flashing, or having the neural intake which amounts to that, may justify the belief or observation sentence that a green light is flashing. But now, Davidson asks, does the sensation or neural intake justify the belief? And he gives the following answer:

Of course, if someone has the sensation of seeing a green light flashing, it is likely, under certain circumstances, that a green light is flashing. We can say this, since we know of his sensation, but he can’t
say it, since we are supposing he is justified without having to depend on believing he has the sensation. Suppose he believed he didn’t have the sensation. Would the sensation still justify him in the belief in an objective flashing green light?11

The point of this passage can be put as follows: sensations or neural intakes as such do not play any role in the justification of our beliefs or sentences; only beliefs or sentences can justify or support other beliefs or sentences. We can refer to sensations or neural intakes while giving a descriptive and causal account of how people acquire their knowledge, but an individual thinker cannot put them at the bottom of justificatory relationships holding among her beliefs and sentences. Sensations or stimulations, claims Davidson, “cause some beliefs and in this sense are the basis or ground of those beliefs. But a causal explanation of a belief does not show how or why the belief is justified”.12 There is no way of transmuting a cause into a reason, and even positing various epistemological deliverances of the senses (e.g. sensations, sense data, the given, neural intakes) won’t accomplish this feat. If these deliverances are to stand in logical or justificatory relations to one’s beliefs or sentences, they must already be beliefs or sentences. If they are not full-fledged beliefs or sentences, they cannot serve as justificatory reasons for other beliefs or sentences. There are, of course, causal intermediaries between our beliefs or sentences and the external world, but there are no epistemic intermediaries.

Moreover, and this is the second argument, Quine’s naturalized epistemology with its reliance on neural intakes leads to scepticism in much the same way as traditional epistemologies invoking such mental entities as sense data, impressions, and the like, did. This is because it shares with them the idea that empirical knowledge requires an epistemological bridge between the external world and our beliefs, sentences or theories about it. Davidson shows how exceptionally easy it is to generate for Quine’s conception the old problem of scepticism concerning the senses:

[L]et us imagine someone who, when a warthog trots by, has just the patterns of stimulation I have when there’s a rabbit in view. Let us suppose the one-word sentence the warthog inspires him to assert is “Gavagai!” Going by stimulus meaning, I translate his “Gavagai!” by my “Lo, a rabbit” though I see only a warthog and no rabbit when he says and believes … that there is a rabbit. The supposition that leads to this conclusion is not absurd; simply a rearranged sensorium. Mere astigmatism will yield examples, deafness others; little green men and women from Mars who locate objects by sonar, like bats, present a more extreme case, and brains in vats controlled by mad scientists can provide any world you or they please.13

So scepticism arises because we have to start with the sensory stimulations of our receptors, that also give a meaning to our observation sentences, and then infer out of this how the external world is like or what is really the case out there. And since there are no rigid connections between what happens in the world and our neural intakes (i.e. it is not the case that the same kind of neural intake can be caused only by one particular kind of events in the world), these inferences may result in false claims about the external world.

Given the function which sensory stimulations or neural intakes have in Quine’s account of observation sentences, Davidson ascribes to him (with some
Knowledge, Language and Logic: Questions for Quine
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