

18 *Reflections on Two Kinds of Consciousness*

In recent years, something like Ned Block's distinction between phenomenal consciousness and access consciousness has continued to show itself to be valuable and durable. Phenomenal consciousness is the sort of consciousness that consists in there being some way that it is like for an individual to be in a mental state. Access consciousness is the sort of consciousness that consists in a mental state's being accessible to—indeed, I think accessed by—an individual through his or her rational, cognitive powers. There appears to be mounting evidence that a person can have phenomenal consciousness even though the person has no rational, cognitive access to it. That is, a person can have a rich phenomenal consciousness—for example, a full, consciously apprehended visual field with all its subject matter—yet at the same time the person cannot form a belief that makes use of the consciousness, much less represent the phenomenal aspects of the consciousness as such; and the person cannot form a propositional memory from it or of it.¹

This result is in one way unsurprising. Phenomenal consciousness is a matter of phenomenal feeling or sensing. Access consciousness involves the occurrence of rational, cognitive attitudes—belief, propositional memory, reasoning. Feeling and sensing, on one hand, and rational cognition, on the other, are distinct psychological capacities. There are almost certainly animals that are phenomenally conscious but lack any rational, cognitive powers—propositional attitudes. Where there are distinct capacities that are phylogenetically separable, there is very likely the possibility of dissociation within an individual that has both. Block not only outlined such a distinction. He marshaled evidence that dissociation occurs. He has thereby enriched our sense of the borders between sensibility and rational cognition.

I have benefited from several conversations with Ned Block.

¹ Block first draws the distinction in 'On a Confusion about a Function of Consciousness', *The Behavioral and Brain Sciences*, 18 (1995), 227–247. The 'what it is like' formulation derives, of course, from Thomas Nagel, 'What is it Like to Be a Bat?', *The Philosophical Review*, 83 (1974), 435–450. For a more recent discussion of empirical evidence for the two types of consciousness, see Ned Block, 'Two Neural Correlates of Consciousness', *Trends in Cognitive Sciences*, 9 (2005), 46–52. Block discusses further evidence in 'The Methodological Puzzle of the Neural Basis of Phenomenal Consciousness' (forthcoming). The present paper develops some reflections in my 'Two Kinds of Consciousness', in *The Nature of Consciousness*, N. Block, O. Flanagan, and G. Güzeldere (eds.) (Cambridge, Mass.: MIT Press, 1997) (Ch. 17 above).

While this separation of types of consciousness seems to me to be of great importance, there remain questions about how to characterize both types of consciousness. I stand by the view that phenomenal consciousness is the basic sort, and that one cannot have any other sort without having that one. A zombie that lacks phenomenal consciousness lacks consciousness in any sense. The exact nature of the dependence between access consciousness and phenomenal consciousness remains, I think, elusive and puzzling.

I

I raised a problem for understanding the notion of access consciousness in 'Two Kinds of Consciousness' (Ch. 17 above). The problem is that access consciousness, or what I called 'rational-access consciousness', like any sort of consciousness, is an occurrent condition. Block's original characterization of access consciousness was dispositional. A state was supposed to be access conscious if it is 'poised' for use in rational activity. But no matter how poised for use, realization, or occurrence a state may be, it can still be unconscious in a natural and straightforward sense. What turns disposition into occurrence?

There are, of course, beliefs that are not occurrently activated but that are easily accessible to consciousness. We may count such beliefs 'conscious beliefs' proleptically. There is definitely a sense in which they are not conscious, and perhaps a derivative sense in which they are conscious. They are accessible to consciousness, but they are not part of consciousness. Since the consciousness attributed to such beliefs is understood in terms of accessibility to occurrent consciousness, we need to understand what this occurrent rational or cognitive consciousness is. We have an intuitive understanding. I would like a better reflective understanding.

For Block's immediate purposes of showing that phenomenal consciousness can occur without access consciousness, intuitive understanding is enough. We have sufficient intuitive grip on a notion of conscious belief to enable us to judge most cases of absence and presence. Beliefs lodged in the Freudian unconscious, no matter how occurrently active, are not access conscious. Beliefs that are intentionally asserted by a wide-awake person are. Block wants to show that phenomenal consciousness—a robust sensory array with qualitative, phenomenal, 'what it is like' character—can occur without conscious belief, or even any accessibility to conscious belief. This point can be made without providing a general characterization of rational access consciousness.

In 'Two Kinds of Consciousness' I tried to better understand rational-access consciousness by considering cases in which this sort of consciousness bears various relations to phenomenal consciousness. For example, a thought that uses phenomenally conscious imagery in its representational content is a rational-access conscious thought. The thought is accessed by the individual through the phenomenal elements in it. The phenomenally conscious imagery itself is

rational-access conscious as well. It is occurrently phenomenally conscious and occurrently accessed by the individual's rational capacity.

Such a case provides a rather direct relation between rational-access consciousness and phenomenal consciousness. Among other sorts of relations that I cited, I would like to concentrate on one, as a second example. An individual who is phenomenally conscious and who thinks an imageless thought that is under direct rational control is thinking consciously. The individual is phenomenally conscious, but no particular elements in the phenomenal consciousness are made use of in the thought. Yet the individual initiates, guides, directs, directly controls the thought. Such thinking is a type of rational-access consciousness.

The relation between the rational, propositional aspect and the conscious access aspect of the thought is very different in the two cases. In the former case the conscious access aspect is provided by the phenomenal consciousness in, or used by, the thought itself. In the latter case, the thought content does not contain or make use of any particular phenomenally conscious element. How does its being in the same mind with phenomenal consciousness and being directed under the individual's direct control make it conscious?

What is the relation between occurrent, directed, direct control and rational-access consciousness? One can control some of one's states without their being conscious. One can learn actively to control goose bumps on one's skin, or one's heart rate, or perhaps one's unconscious anger or unconscious thoughts. In such cases, the control seems indirect. Occurrently exercised, direct control of thoughts, at least by an individual who is phenomenally conscious while doing so, seems to imply that the thoughts are conscious (though I think not necessarily that the individual is conscious of the control of them). I would like better reflective understanding of what the connection is here.

Occurrently exercised, direct control is certainly not a necessary condition on rational-access consciousness. Some rational-access conscious thoughts simply come upon one. These seem to be thoughts more closely connected to some sort of phenomenal consciousness. They operate on or make use of particular, qualitative, conscious elements. They make use of conscious perception, imagery, verbalization, or the like.

In some cases, however, occurrently exercised direct control seems sufficient for rational-access consciousness, given that the individual is phenomenally conscious. The thought itself can be rational-access conscious even though it does not operate on or make use of particular phenomenally conscious elements, *if* it is under the direct control of the individual. This is the example of the attentively guided imageless thinking, or only intermittently imaged or verbalized thinking, that is under direct control. I want to connect this point with some issues about what it is to be a conscious individual, and about psychological agency.

Both phenomenal consciousness and rational-access consciousness are necessarily occurrent states of the *whole individual*. In fact, both phenomenal consciousness and rational-access consciousness seem to be closely associated with conceptions of what is the individual's *own* in a proprietary sense of 'own'.

Modular mental processes and other unconscious mental processes are, in different senses, sub-individual. They occur within the individual's psychology, but they are primarily attributable to psychological subsystems. They are attributable to the individual psychological subject only derivatively. For an individual with rational powers, both phenomenal consciousness and rational-access consciousness seem in some way to be the constitutive core or base of the individual's psychology or mind. They are fundamental to what counts as non-derivatively the individual's own. They play a constitutive role in determining what it is to be an individual subject, even though the vast bulk of psychological processing in an individual mind is unconscious in both ways.

I call conscious individuals *individual subjects*. Being an individual subject requires phenomenal consciousness. Phenomenal consciousness is the base of conscious mental life. Being an individual subject that exercises autonomous rational cognitive powers requires rational-access consciousness as well. That part of such an individual's rational, cognitive psychology that is occurrently rational-access conscious or that can be brought to occurrent rational-access consciousness is attributable to the *individual* as distinguished from just the individual's subsystems. Both types of consciousness are constitutive of what is an individual's own.

The idea that those mental states or events that are occurrently conscious, or can be brought to occurrent consciousness, are the individual's *own* goes back at least to Kant.² The dispositional power to bring a state to occurrent consciousness is obviously constitutively explained in terms of occurrent consciousness itself.³ Kant was interested in the proprietary ownership that resides in a capacity for rational *self-consciousness*—the capacity to attach I think to one's representations. I think that Kant's higher-level notion of being a *self-conscious* psychological subject with powers of thought and intentional action is constitutively posterior to a more primitive notion. The more primitive notion centers on individuals that are capable of propositional attitudes—thought and intentional action—but are not necessarily capable of self-consciousness. I think that rational agency—occurrently exercised direct control of thought and action—is developmentally and phylogenetically, as well as conceptually, prior to self-conscious rational agency. In both cases, what it is to be an individual rational subject is constitutively determined by capacities constitutively explained in terms of rational-access consciousness.⁴

² Immanuel Kant, *Critique of Pure Reason*, trans. P. Guyer and A. W. Wood (Cambridge: Cambridge University Press, 1998), B131–135.

³ Constitutive explanation is not always one-way. Here I think, as Kant also thought, that the dispositional power to bring a state to consciousness is part of the explanation of what it is to be a self; but a self is constitutively involved in what it is to be such a dispositional power (it is constitutively a power of a self). As I shall indicate, a similar reciprocity connects the notion of self with the notion of rational access consciousness.

⁴ There may be a yet more primitive notion of ownership along this general line. Phenomenally conscious sensory states are certainly an animal's *own*, phylogenetically prior to propositional attitudes. Perhaps the relevant animals are able to bring to phenomenal consciousness states of sensory

Four paragraphs back, I conjectured that occurrently exercised direct control of occurrent rational processes plays some constitutive role in rational-access consciousness. What is the connection between individual subjecthood and ownership, just discussed, and occurrently exercised direct control?

Rational agency—occurrently exercised direct control of rational processes—is necessarily a power of the whole individual. With respect to active aspects of rational, propositional occurrences, I think that the notion of occurrently exercised *direct* control by the *individual* entails occurrent conscious access to what is under direct control. When propositional representational contents are directly *used* by the individual (not just useable or passively received), they are conscious. *Being used, or being under occurrently exercised direct control, by the individual* entails being rational-access conscious.⁵ I think that this point may illumine individual mental agency and rational-access consciousness, as well as what it is to be a rational individual subject.

I conjecture that where rational-access conscious thoughts *are not* under exercised direct control, they are fully the individual's *only* inasmuch as they operate on or make use of particular elements of phenomenal consciousness. They count as rational-access conscious only insofar as these rational cognitive powers operate on or make use of the passive, sensory aspects of the individual's proprietary psychological core—phenomenal consciousness.

In such cases, I think that the thoughts are both phenomenally conscious and rational-access conscious. They are phenomenally conscious because they operate on or make use of qualitative elements that are phenomenally conscious. They are rational-access conscious because the phenomenally conscious elements that they make use of yield access to the thoughts that use them. Explicit verbalizations of thoughts or incorporations of phenomenal elements into the representational contents of thoughts make the thoughts accessible by clothing them in sensory garb. The access is occurrent proprietary ownership of the propositional thought through the thought's being informed by elements from the individual's sensory core. So the thought and the phenomenal sensory elements are both rational-access conscious.

Where thoughts *are* under exercised direct control, they are rational-access conscious by virtue of being the individual's rational acts. The access is occurrent proprietary ownership of the thought through its being the direct expression of the individual's core rational agency. Access can be overdetermined. If the thought is under the exercised direct control of the individual and makes use of phenomenal elements, it is accessible in both ways. It is also both rational-access conscious and phenomenally conscious. If the thought is imageless, is not

memory or sensory imagination. Any non-occurrent states over which an animal had such power would also count as the animal's own. On the other hand, if the relevant animals lack such power, then ownership would be restricted to occurrent phenomenally conscious states.

⁵ I am always assuming a background of phenomenal consciousness, although the thought need not make use of particular aspects of the phenomenal consciousness.

spelled out through some sort of verbalization, and is not associated with any other phenomenal element particular to the thought, then it is not phenomenally conscious. But it can remain rational-access conscious if it is a direct exercise of the individual's agency.

It was part of Block's original characterization of access consciousness that it be 'poised for direct control of thought and action'. I criticized this view for treating consciousness as dispositional ('poised'), whereas consciousness is occurrent. I think that what it is for a propositional attitude to be the individual's own is a partly dispositional notion. Psychological ownership of propositional attitudes is to be explicated in terms of occurrent consciousness or a capacity to bring such attitudes to consciousness. Reciprocally, this dispositional power is explicated in terms of rational-access consciousness. And rational-access consciousness is constitutively intertwined with occurrently exercised direct control.

Intertwined with, not reducible to. As I noted, some occurrent thoughts that are rational-access conscious are not the products of occurrently exercised direct control. They simply occur to one. These thoughts are rational-access conscious, I have conjectured, because elements in them make use of particular elements of phenomenal consciousness. Even these thoughts tend to come under control, once they occur. They can be used in further thought and action that is directly controlled. That is, they can be co-opted for direct control, at least in normal non-pathological circumstances. One can begin to reason in an active way from a daydream. Of course, control of propositional attitudes should not be understood in terms of some meta-monitoring process operating upon them. The idea is simply that the attitudes are directly attributable to the individual as exercises of psychological agency.

The circle of constitutive dependence here is narrow. Rational-access consciousness and individual, occurrently exercised, direct control of propositional thoughts are different notions. There are mutual entailment relations between them, however. Direct control of propositional attitudes by the individual entails that the attitudes (and any phenomenal states that they operate on or make use of) are rational-access conscious for the individual. Being a rational-access conscious thought entails either being directly and occurrently controlled or being associated with making use of particular phenomenally conscious elements. In both cases, the rational-access conscious state is *accessed* by the individual through engagement of his or her rational powers. And of course, phenomenally conscious sensory states that are made use of by thoughts are also rational-access conscious.

The primitive core of being an individual subject is having a base of phenomenal consciousness. Where the individual subject has powers for thought and intentional action, the individual subject has rational-access consciousness as well. Much thought and action is generated by psychological processes that are unconscious. Our basic notion of an individual subject with powers for thought and action, however, takes these unconscious processes as functioning to serve the whole individual. In all individual subjects, whether capable

of thought and intentional action or not, the basic kind of consciousness, phenomenal consciousness, plays some constitutive role in an individual's having a mind or a psychology. For individual subjects with powers of thought and intentional action, occurrent access to the individual of propositional events (and phenomenally conscious states that the propositional events make use of) is constitutive of being a *rational* individual subject. Being such a subject entails complex but constitutive relations not only to consciousness but also to rational agency.⁶

II

I turn now from rational-access consciousness to the basic sort of consciousness—phenomenal consciousness. Examples of phenomenally conscious states are felt pains, felt tickles, felt hunger pangs; qualitative elements in conscious vision, hearing, smell, or taste; feelings of tiredness or strain from effort; the feels associated with touch; phenomenal blur, phenomenal static; and so on. Most of these examples derive from aspects of sensory capacities. Some might be parts of feedback loops in primitive action systems.

Understanding phenomenal consciousness depends on distinguishing it from other things. One is better placed to understand what it is if one is clear about what it is not.

⁶ Thus, for example, having propositional attitudes requires being able to use their propositional structure in inference, which is a psychological act. So, even though not all rational-access thoughts are active, some must be. I think that there can be active elements in elementary phenomenal consciousness as well. A frog probably lacks propositional attitudes, but it may be phenomenally conscious. I suppose that it may be capable of feeling pain. Perhaps it has a rudimentary phenomenally conscious visual field. There is empirical reason to think that selective attention, or orientation to certain primed areas, occurs with respect to one or another aspect of a sensory array even in frogs. Cf. D. J. Ingle, 'Selective Visual Attention in Frogs', *Science*, 188 (1975), 1033–1035. Thus selective attention is not necessarily associated with systems of propositional attitudes. As the notion of attention is here employed in psychology, attention is not necessarily associated with any kind of consciousness either. There is some evidence that sub-propositional, selective orientation within a stimulus array occurs with human blind-sight patients. Cf. A. David Milner and Melvyn A. Goodale, *The Visual Brain in Action* (Oxford: Oxford University Press, 1995), 180–183. I conjecture that where selective attention, or selective orientation, occurs in sub-propositional, non-rational aspects of a psychology, it is a psychological *act* by an individual only if it operates within phenomenal consciousness.

The examples from frogs and blindsight concern consciousness and agency in sub-propositional perceptual systems. But conscious agency may be even more primitive. Some animals that lack sense-perceptual systems, let alone propositional attitudes, might well be phenomenally conscious. A mark of a sense-perceptual system is a capacity for representational objectification and perceptual constancies. Aspects of our own sensory capacities, which can be phenomenally conscious, are not sense-perceptual. Cf. my 'Perception', *International Journal of Psychoanalysis*, 84 (2003), 157–167; 'Perceptual Entitlement', *Philosophy and Phenomenological Research*, 67 (2003), 503–548. Such pre-perceptual animals would be capable of feeling pain, simple tingles, and so on. Whether they might also be capable of directing attention to one or another aspect of phenomenal consciousness is, as far as I know, an open question. Answering such questions lies at the heart of understanding the most primitive cases of psychological agency.

Phenomenal consciousness is not attention. The states that I have listed can be phenomenally conscious whether or not they are attended to, and whether or not things sensed through them are attended to. When they are not the objects of attention, and when attention does not operate through them, however, the consciousness is commonly less intense or robust.

Phenomenal consciousness is not thought or conception.⁷ Phenomenally conscious qualities are aspects of our sensory systems, or other relatively primitive systems, which are distinct from systems of propositional attitudes. Certain animals—perhaps lower mammals, almost surely many birds and many fish—cannot think, but are phenomenally conscious. (Cf. note 27.) There are also the experiments cited by Block (note 1) that indicate that in humans phenomenally conscious states can be inaccessible to capacities for thought. The idea that consciousness is thought, whether first-order or second-order, is in my view empirically unacceptable. When thought is phenomenally conscious, its being phenomenally conscious derives from its making use of phenomenal qualities that derive from more primitive psychological systems.

Phenomenal consciousness is not perception or perceptual representation. Perception, as I understand it, is a sensory capacity for objectification. It is commonly marked by perceptual constancies—capacities that enable an individual to treat objective, environmental properties systematically as the same under a wide variety of proximal stimulations and perspectives.

Underlying the perceptual constancies are sensory subsystems that systematically filter proximal stimulation that is not relevant to distal stimulation. Phenomenal or qualitative aspects of perceptual systems are used as vehicles of perceptual representation. Many perceptions are thereby phenomenally conscious. But the qualitative aspects of sensation are not correctly explained in terms of any such notion of objectification.⁸

Is phenomenal consciousness representation? The term 'representation' is troublesome in discussions of consciousness. Many standard issues in the area turn on what is meant by the term. Most discussions, even many that claim that consciousness is to be understood in terms of representation, never bother to explicate the term. The term has many uses in philosophy. I will not be able to provide an extensive explication or defense of my use, but I will say a few things.

Some authors take a type of state or condition *A* to 'represent' a state or condition *B* if the former is a regular or nomological or causal consequence of

⁷ I take thought to be propositional. I take concepts to be certain components in propositional, representational thought contents. Concepts mark aspects of propositional abilities.

⁸ Since phenomenal aspects of perceptual systems are used as vehicles in many perceptual systems, they become part of perceptual modes of presentation, part of perceptual representational content. I think that these representational roles are never reductively constitutive. Most philosophical views that try to reduce phenomenality to representation help themselves to very broad—I would say debased—notions of representation, or representational content, that have no independent explanatory value. For reasons given below, I think that even debased notions of representation fail to capture some types of phenomenal consciousness.

the latter. On this type of view, smoke could be taken to represent fire. I do not use the term that way. Some philosophers add to the preceding type of condition a further one: that the regular or nomological or causal relation has a biological function for an organism. On this type of view a plant's growing in a certain direction or an amoeba's state of being caused to move in a certain direction could represent light or some chemical compound. I do not use the term 'representation' in this way either. I call this latter sort of usage 'information registration'.⁹ I distinguish between representation and information registration.

One reason why I draw this distinction is that information registration can easily be dispensed with in favor of causal (or correlational, or nomological) notions and notions of biological function. I take 'representation' to be a term with some *prima facie* independent explanatory bite. Genuine *perceptual* representation cannot be dispensed with in some psychological explanation. At least, no one knows how to dispense with it. We do not need a further notion, beyond causal (correlational, nomological) and functional notions, to explain a plant's or an amoeba's sensitivities. I reserve 'perception' and 'representation' for cases where psychological explanation needs them.

Since 'representation' is, *prima facie*, a primitive theoretical term, I do not have a definition for it. One sign of the presence of genuine representation, however, is an explanatory paradigm in psychology in which the explanation is geared to explaining individuals' going into veridical or non-veridical states—getting things right or wrong. Such explanation is not a rewarding enterprise in the case of plants and amoebae. It is not a rewarding enterprise even in scientific work on many sensory systems in many more complex animal organisms. Insofar as one can count these various organisms as getting something right or wrong, the explanation reduces to the organism's being in a sensory state that serves, or fails to serve, its survival or reproduction. These explanations do not need to appeal to conditions of veridicality. Nor is it particularly intuitive to do so. In the case of visual perception, by contrast, a complex, challenging type of explanation has centered on this very problem.¹⁰ Representational states are fundamentally states of the sort that can be veridical or non-veridical. A genuinely distinctive notion of representation can, I think, be developed by taking such explanations as cue. The most primitive type of representation in this sense is, I conjecture, perceptual representation, in the sense of 'perception' explained earlier. Further types of representation include belief, thought, intention, assertion, certain types of memory, and so on. The theoretical term 'representation' must find its place through use, combining example and theory.

⁹ There is, of course, a thinner, purely statistical notion of information carrying that does not imply anything about function. I think the richer notion that I am employing is more useful in understanding the physiology of sensory systems.

¹⁰ I explain the form of this sort of explanation in some detail in 'Disjunctivism and Perceptual Psychology', forthcoming in *Philosophical Topics*.

Given this understanding of 'representation', I believe that phenomenal consciousness is not in itself, and in general, representation. It is certainly not in itself, and in general, perceptual representation, which I believe to be the most primitive sort of representation. Pain is a paradigm of phenomenal consciousness. Pain is not perceived, and it is not perception of bodily damage. It lacks the marks of true sensory perceptual representation, or, I think, any other genuine representation. There are no objectifying elements in the sensing of pain. There is no distinction in the sensation of pain between mere proximal stimulation and stimulation that comes from a distal source. Similarly, there is no capacity, in the mechanisms for pain's registering information about bodily damage, to distinguish between proximal and distal information. There are no perceptual constancies in this information-registration system. There is no *evident* rewarding type of explanation that centers on either getting the pain right or getting the bodily damage right. Most pain registers information about, and so is functionally related to, damage in certain locations in the body. Pain registers information about bodily damage and bodily location without *perceptually representing* either. (Cf. note 15 below.)

Pain's registering information without perceptually representing anything can be usefully compared to other non-perceptual sensory systems, like that of a bacterium's sensing the location of oxygen or light, or a worm's geotactic sensing of up or down. Pain is phenomenally conscious. Presumably the bacterium's sensory events and probably the worm's geotactic sense (like many of our own sensory capacities for balance) are not phenomenally conscious. The difference between all of these non-perceptual information-registering systems and genuine perceptual systems is huge, and of great importance for understanding mind. The notion of registering information requires no systematic powers of objectification. There are no internal mechanisms to distill the distal from the proximal. There is no evident need for perceptual representational kinds in explaining the sensory function of the painfulness of pain.¹¹

Phenomenal consciousness is not in itself, in general, registering of information. Phenomenally conscious states usually do register information about other things. That is, usually there is a systematic law-like relation between phenomenally conscious states and further properties that functions to relate the individual to those properties in order to further survival for reproduction. I think, however, that it is not part of the nature of *some* phenomenal qualities to represent or

¹¹ I shall elaborate the distinction between sensory registration of information and perceptual representation in further work. Cf. my 'Perception'. The objectification that is the mark of perceptual representation is pre-intellectual. It can reside in capacities of an automatically operating perceptual system that systematically filters out noise and irrelevant aspects of the proximal stimulus array to form representations of relevant distal conditions. Such capacities are absent in mere sensory systems that respond simply to proximal stimulation. The proximal stimulation may be reliably connected to some distal situation that is relevant to biological function. But nothing in the sensory system is geared to making the distinction systematically. In such cases, the sensory system may *register information about* or *register* the distal situation; but it does not perceptually represent it.

register any particular information, in this sense, about anything further.¹² Some qualitative aspects of phenomenally conscious states depend purely on underlying transactions in the brain, not on causal or functional relations to anything further about which they register information. These qualitative aspects do not *constitutively* function to register any specific information—although many do in fact register information. I believe that this point applies to the most primitive sorts of phenomenal qualities.

Take the hurtful or painful quality of pain, for example. This quality in fact registers information about bodily damage. A pain can be produced by stimulating the central nervous system, even as normal neural pathways to the areas of bodily damage that the pain normally registers information about are blocked or severed. Further, it has been conjectured by neuro-scientists as empirically plausible, given what we know about the neural structure of the brain, that the pain centers of the brain would continue to cause the hurtful quality of pain even if they had been wired to connect to peripheral sensors for touch.¹³ Then the lightest touch of the skin would have produced painful feelings. If the wiring had been naturally in place from the beginning of a creature's or species' life, then pain would never have had the biological function of conveying information about bodily damage; but it would have retained its hurtful or painful feeling. It follows from this conjecture that the hurtful quality of pain is not constitutively associated with registering information about bodily damage. It could have registered entirely different information, about touch.¹⁴ I think that this conjecture is both extremely plausible and empirically testable. If it is correct, as it seems to be, then we have empirical ground for rejecting the identification—or even the constitutive connection—of the relevant phenomenal quality (hurtfulness) with any particular information-registering properties. I believe that similar points apply for other primitive qualities—the feel of cold, heat, hunger, stress. All of these might have signaled different bodily conditions than they in fact do.¹⁵

¹² Cf. Ned Block, 'Mental Paint', in M. Hahn and B. Ramberg (eds.), *Reflections and Replies: Essays on the Philosophy of Tyler Burge* (Cambridge, Mass.: MIT Press, 2003); and my 'Qualia and Intentional Content: Reply to Block', *ibid.*

¹³ V. S. Ramachandran, 'Behavioral and Magnetoencephalographic Correlates of Plasticity in the Adult Human Brain', *Proceedings of the National Academy of Sciences USA*, 90 (1993), 10,413–10,420, esp. p. 10418.

¹⁴ It is no argument to claim that such a species could not have evolved. In the first place, this is not obviously true. In some environments the slightest touch might be sufficiently dangerous to register strong alarm signals. In the second place, the issue is not over what is evolutionarily plausible, but over what is constitutive of painfulness. With respect to this issue, mere physical or metaphysical possibility suffices to separate properties. The physical connections could be established non-evolutionarily.

¹⁵ I believe that these points apply better to the hurtful quality of the pain than to its locational feel. I take it that the pain's being-in-the-foot feeling may well have a *constitutive* informational element. This topographic aspect of phenomenal feel seems to me plausibly associated with the well-known way in which phenomenal topography, like neural topography in the central nervous system, functionally mimics the topography of peripheral areas of the body which normally cause their activation. Of course, it does not follow from this point that even the being-in-the-foot aspect of

The hurtful quality of pain does not represent anything perceptually. It is not perception of, or as of, anything. It does register information. But it does not constitutively register the information that it in fact registers. I think that the hurtful quality of pain does not *constitutively* register any information at all. Thus I think pain could have been the result of only relatively random stimulations, or of psychological noise. I will not argue this particular point. There are other phenomenal qualities—phenomenal aspects of phenomenally conscious states—that not only represent nothing. They have no function, and do not register sensory information at all.

Psychological theories must always allow for psychological noise. Psychological noise does not have a function and thus does not register information. It is not systematically correlated with anything that the animal or its sensory system makes use of. In some cases, the animal could not even learn to make use of it. It is an interference with or degradation of function. Some psychological noise is phenomenal. Visual blur is an instance of phenomenal psychological noise. Visual blur has no function and does not naturally register information for the individual. Phenomenal psychological noise cannot be assimilated to the (functional) registration of information.

What can we say in a more positive vein about phenomenal consciousness? A phenomenally conscious state is always a state of an individual psychological subject. The state is conscious for the individual. This 'for' needs scrutiny. The conscious phenomenal aspects of a conscious state are present for, presented to, the individual. In this respect, phenomenal consciousness involves access.¹⁶

a pain's feeling is *purely* informational. This aspect of the phenomenal quality may be constitutively informational without its being identical with, or fully explained by, its informational aspect. At a minimum, the way in which the pain feels to be in the foot involves the hurtful way of feeling the pain. This aspect of the feeling does not seem to convey constitutively any particular information at all, as I have suggested in the text. For stimulating facts relevant to these points, see Ramachandran, "Behavioral and Magnetoencephalographic Correlates".

Although the locational aspects of pain may be constitutively information registering, I think that they are not perceptual. We can certainly regard a feeling of pain in the foot as mistaken if there is no foot or if the pain is 'referred pain'. But the error does not rest on the failure of an objectifying capacity. There is no such capacity. The error seems more one of a failure of function. In such cases, the pain does not fulfill its function of guiding the individual to a location. There is no explanatory need to type-identify the pain in terms of an *objectifying* sensory capacity for distilling the distal from the proximal and with representational content that sets veridicality conditions. The contrast with genuine perceptual psychology—centered in representational theories of vision, hearing, and active touch—is stark. The notion of representation is tied to veridicality conditions. Perhaps it could be separated from the objectification of perception.

Whether there is an empirically autonomous type of representation—with a genuinely explanatory appeal to veridicality conditions—that is weaker than perceptual representation, but stronger than information registration—and that fits the locational feel of pain—seems to me worthy of further reflection. I am provisionally doubtful. I see no *evident* need for a systematic explanation that takes representational success and failure as one of the central explananda, and representational states as an explanatory kind, in accounting for the mechanism of pain formation for signaling bodily location.

¹⁶ Partly for this reason, I prefer 'rational-access consciousness' to Block's 'access consciousness'. Since phenomenal consciousness also involves access for the individual, one needs to specify

We need to remember, firmly, what this access is not. It is not attention, conception, thought, perception, or information registration. An individual need not be conscious of the qualitative or sensory elements in a conscious state as sensory elements. They need not be conceptualized. They need not be categorized perceptually. The access is phenomenal, sensory—in the way that conscious sensations are, trivially, sensed.

There is a relation in this sensory access. We have intransitive uses of 'is conscious', analogous to 'is awake'. But if an individual is conscious in this intransitive sense, then necessarily there are instantiated qualitative aspects of the consciousness which are *conscious for* the individual.¹⁷ Some phenomenal aspects are presented to, present to, present for, or conscious for, the individual in consciousness. I think that understanding this relation is fundamental to understanding phenomenal consciousness and what it is to be an individual subject.

A certain philosophical tradition inveighs against construing phenomenal consciousness as involving an 'act-object' relation.¹⁸ There is something to this tradition. Sensing and phenomenal consciousness are not themselves acts. The aspects of phenomenal states that are phenomenally conscious for an individual are not objects, in most commonsense uses of the term. They are not objects of perception. They are not objects of reference, at least not by virtue of being phenomenally conscious. And they are not individuals. They are aspects, aspect instances, of psychological states. Psychological states are states of individuals. On the other hand, they are real; they have causal powers; and they can enter into relations. Pains, the phenomenal quality of blur, hunger pangs, and so on are events or properties that are conscious for individuals. They are presented to, present for, individuals. Their being conscious for an individual is a relation.

what sort of access is at issue. For rational-access consciousness, the relevant kind of access involves the employment of propositional attitudes, which I take to imply a capacity for rational inference.

¹⁷ I would also say that the individual is 'conscious of' these aspects. But this phrase, together with 'aware of', easily misleads. The 'of' suggests attention, representation, reference. For example, consider phenomenally conscious vision. It may help to think of such vision in a rat rather than a human, since the human case brings in more intuitive distractions. If we say that the rat is conscious of the cheese, we are less inclined to say that the rat is conscious of the visual sensations in its visual field. Saying that will suggest, at least to many, that the rat *attends to* its visual sensations, or *perceives* them, or perceives them *as* visual sensations, or perhaps even *thinks* about them. (The point about attention shows in the fact that we are more willing to say that the individual is conscious of the pain or of a tickle. The individual's attention is likely to be directed to the pain or tickle rather than to its cause.) None of these suggestions is acceptable. Many will withhold 'conscious of' from its applications to such cases because of the suggestions. For this reason, 'conscious for' and 'presented to' seem to me better, less committal-seeming locutions for relations of phenomenal consciousness between individuals and sensations or the qualitative aspects of psychological states. I will, however, use all these locutions, since I think that the implicatures that accompany the 'conscious of' locution can be cancelled.

¹⁸ Sydney Shoemaker, "Self-Knowledge and 'Inner Sense'", *Philosophy and Phenomenological Research*, 54 (1994), 249–314; repr. in *The First-Person Perspective and Other Essays* (Cambridge: Cambridge University Press, 1996).

Some philosophers have maintained that the putative relation should be collapsed into a one-place property. For example, the sensation sensed is sometimes treated in an adverbial manner, as a feature or way of being conscious: individual _____ is conscious painfully, individual _____ is conscious in the visual-blur way. Of course, conscious sensations are aspects of psychological states, which are, in turn, states of individuals. So, ontologically, there is something to these locutions. Adverbs do connote properties of properties. But sensed sensations, occurrent qualitative aspects of consciousness, are also timeable states or events. They are instantiated aspects of consciousness. They have causal powers. Since they themselves can have a number of properties and relations, I think it impossibly stultifying to avoid referring to them—to avoid quantifying over them and making singular reference to them. Psychological explanation makes reference to these entities. I take the relational locutions to be unexceptionable. The visual blur is conscious for the individual. The individual is conscious of the pain. The individual feels the hunger pang. The tickle is present to, and presented to, the individual's consciousness.

For a qualitative aspect of a psychological state to be conscious for an individual is for that aspect (aspect instance) to be an element or aspect of the consciousness.¹⁹ The relation between individual and qualitative aspects of psychological states that are conscious for the individual is not epistemically robust. The relation is not representational. It expresses no sort of perception or knowledge. Still, I think that it is worth taking very seriously.

The relation is not that of just any property to its bearer. The aspects of consciousness in phenomenally conscious states are present for the individual, whether or not they are attended to or represented. They are accessible to—indeed, accessed by—the individual. Although they are not necessarily accessible to whatever rational powers the individual has, phenomenal consciousness in itself involves phenomenal qualities' being conscious for, present for, the individual. They are presented to the individual's consciousness. This presentational relation is fundamental to phenomenal consciousness. I think that this relation can be recognized apriori, by reflection on what it is to be phenomenally conscious. Phenomenal consciousness is consciousness for an individual. Conscious phenomenal qualities are present for, and presented to, an individual.

The individual may or may not have rational powers. The individual may or may not be a self. The individual may or may not have perception in the full-blown objectifying sense in which I understand 'perception'. But consciousness is necessarily and constitutively presentational. The presentation is to an individual subject.

¹⁹ Prima facie, any psychological state that has conscious qualitative aspects may also have other properties that are not conscious for the individual. This may be disputed. It is a serious issue in some forms of the mind-body problem.

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The key to avoiding mistakes here is, I think, to allow the relational and presentational elements some scope in one's thinking, without misinterpreting phenomenal consciousness to be a form of perception or representation. This misinterpretation is, I believe, one of the root mistakes of the sense-data tradition and of Russell's 'knowledge by acquaintance'. Phenomenally conscious aspects of psychological states are not objects of perception, or data (evidence) to which one normally adverts in representing something else. They may be vehicular elements in perception or in information registration. They can have those roles. For example, phenomenally conscious sensations can figure in visual perception—say, conscious perception as of a moving object. Many phenomenally conscious sensations commonly register non-perceptual information.

Although phenomenally conscious states can figure in perception and in information registration and thus serve perceptual-representational and informational functions, the relational and presentational features constitutive of phenomenal consciousness itself are not in general constitutively functional. As I have indicated, some phenomenally conscious elements of conscious states do not have a function at all. At least, many of those that do have a function could have lacked the one they have. When phenomenally conscious sensations do figure in perception or information registration, there remains the presentational relation of these sensations to the individual. They are conscious for the individual, presented to the individual, no matter how unattended to, unperceived, unreferred to, unrepresented, and uninformative they may be.

The presentational, 'consciousness-for', aspect of the relation between phenomenally conscious states and the individual does have some things in common with representation. Phenomenally conscious qualities are present for the individual. They are presented to the individual in consciousness. Of course, an individual with capacities for propositional attitudes can have beliefs about phenomenal qualities. These are, I think, fallible. One can believe that one is in pain when one is not; and one can believe that one is not in pain when one is. But phenomenal consciousness itself is phylogenetically prior to propositional attitudes. It is fundamentally a sensory capacity.

There is a natural temptation to take an individual's feeling pain as a special case of the sort of sensory perception involved in, for example, the individual's seeing a red glow on the horizon. There is a natural temptation to take visual blur's being a phenomenally conscious element of a visual state for the individual as a special case of the sort of perception involved in the individual's seeing a highlight on an illuminated surface. The temptation is to count the cases special in that they cannot fail. If the pain or visual blur is presented to one in phenomenal consciousness, there can be no failure of 'perception' of these phenomenal elements. Phenomenal consciousness has been regarded as an infallible intentionality or representation.

These temptations should be firmly resisted. Phenomenal consciousness is indeed a presentation to the individual that cannot fail. It cannot fail, not because it is an infallible representation, but because it is not a representation with

veridicality conditions at all. It can neither fail nor succeed.²⁰ Either phenomenal aspects of psychological states are present for, presented to, the individual in consciousness, or they are not. There is no question of right or wrong. It is a matter of presence or absence.

The presence is not spatial. The presence is to or for the individual's consciousness. Conscious phenomenal aspects of conscious states are presented to the individual, to the individual's consciousness.

This point encourages the question, How are conscious sensations presented? How are they present for the individual? How are phenomenal qualities like pain, visual blur, or the cold visceral sensation associated with objectless depression, phenomenally conscious for the individual?

These questions bring out part of why it has been perennially tempting to assimilate consciousness, phenomenal consciousness, to a kind of reference or representation. For entities are also presented to the individual through perception, thought, and other types of representation. The questions asked in the preceding paragraph have analogs for representational states: How is the individual conscious of the table? How is the table presented to the individual in perception? How is the individual thinking of this point in the triangle? What is the mode of presentation by which the point is present to the individual's thought?

The answers to these latter questions cite a representational content: perhaps a perceptual attributive or an applied concept. These are components of

²⁰ A recently popular view of pain is to regard it as perception of bodily damage, or of some property associated with bodily damage. For reasons mentioned earlier, I think that this view conflates information registration with perception. Some versions of the view also conflate the feeling of pain with the information that the feeling of pain registers about something further (bodily damage or even bodily location). The view has invoked some strange collateral positions. It has been maintained that in phantom limb cases, individuals hallucinate pain: they have no pain. This claim seems to me to be absurdly off the rails. No supplementary patter about how theoretical considerations can force revision of intuition should distract one from the weakness of such a view. A more subtle position, which I think has also gone wrong because of thinking of pain sensation too much on an analogy with perception, is that of Sydney Shoemaker, 'Introspection and Phenomenal Character', in David J. Chalmers (ed.), *Philosophy of Mind* (Oxford: Oxford University Press, 2002), 464. Shoemaker maintains that the somatic experience of pain perceptually represents a phenomenal property. The phenomenal property is supposed to be a relational property: roughly, the disposition of the bodily damage to cause the somatic experience. The somatic experience is not to be identified with either the bodily damage or the dispositional phenomenal appearance property of the damage. Shoemaker claims that somatic experiences are what we are averse to, and that they are better candidates for being pains than the phenomenal properties. But he does not regard them as good candidates, as will emerge. Since the phenomenal properties are dispositional properties of the damage, we *can*, according to the view, presumably hallucinate them. To his credit Shoemaker avoids claiming that we hallucinate pain, where the somatic experience is not caused by damage. But of the somatic experiences, he claims that they are not felt, 'just as visual experiences are not seen'. So if pains were the somatic experiences, they would not be felt. According to the theory, what we do feel is not something we are averse to; and nothing that we feel is pain. Without calling attention to these results, Shoemaker blames the awkwardness of mapping his theory onto intuition on 'our ordinary talk of pains'. He concludes that nothing is an ideal candidate for being pain as we ordinarily talk about it. It seems to me that these results reveal a theory gone awry.

the representational content of perception or thought. In the case of phenomenal consciousness of pain, visual blur, or hunger pang, one can seem to need analogous answers. It can seem that the consciousness of the pain, or the presentation of the pain to the individual's consciousness, is just a special type of sensory reference or representation.

As I have been maintaining, such a view would be mistaken. The situation is, rather, the reverse. Phenomenally conscious perception and phenomenally conscious thought are special cases of presentation to the individual.²¹ Thus phenomenally conscious representation is a special case of presentation to the individual. So is non-representational information registration that involves phenomenal consciousness. Presentation of aspects of phenomenal states to the individual's phenomenal consciousness is not in itself a case of representation, or (at least not in general) information registration.

Asked with caution, the question 'How are phenomenally conscious aspects of psychological states present for the individual, or presented to the individual?' is not a bad one. There are certainly wrong answers to it! The phenomenally conscious aspects of psychological states are not presented through some representational content. We are not phenomenally conscious of our pain—we do not feel the pain—through some further mode of presentation. As is often noted, the pain is not separate from a mode of presentation as the rigid body is separate from the perceptual representation (or the perceptual content, or perception) that represents it. The pain is, however, present to and presented to the mind. How? It is presented to the individual through itself. The pain is its own mode of presentation. In this weak sense, there is a reflexive element in phenomenal consciousness.

Again, this reflexiveness should not be conceived as self-reference. It is not reference. It is not representation. The difference between self-reference in thought or language and the reflexive element in phenomenal consciousness of pain or visual blur is far more impressive than any similarity. Still, phenomenal consciousness involves a kind of access. Not rational access. It is access for the individual to the sensation, or to qualitative aspects of psychological states. The access is by way of phenomenal consciousness—by way of the person's feeling or sensing those aspects, having them in phenomenal consciousness. The sensation is sensed by the individual, or is conscious for the individual, *through* the sensation and through nothing further. The sensation's being presented to the individual in phenomenal consciousness does not entail that it is used to represent or refer to anything, even itself.

As I just indicated, there is reflexiveness in self-referential thoughts. Some of these are rational-access conscious. So the difference between phenomenal consciousness and rational-access consciousness is not that in the case of

²¹ Rational-access consciousness may be a special case of a yet broader generic notion of presentation to the individual. I will confine my discussion here to phenomenal consciousness.

thought, the mode of presentation is always distinct from what it represents. Self-referential reflexiveness in thought has a logical form, which falls under norms for logical transformation. No such norms govern phenomenal consciousness *per se*. Reflexiveness in phenomenal consciousness is not representation. It is presentational consciousness in the absence of representation.

Rational-access consciousness is reflexive only in special cases. Reflexiveness is not a constitutive aspect of rational-access consciousness. Only few conscious thoughts are self-referential. Moreover, unconscious thoughts can surely be self-referential.

Reflexiveness is important to understanding *thought* primarily at the level of self-consciousness. Self-consciousness is rational-access consciousness that involves attribution of psychological states to oneself as such. A certain *type* of self-consciousness always involves a self-referential element. This reflexiveness is not the kind involved in phenomenal consciousness.

So phenomenal consciousness is not self-consciousness. But phenomenal consciousness is, I think, *always* reflexive. I conjecture that reflexiveness is a constitutive feature of phenomenal consciousness.

I have been emphasizing the negative. Reflexiveness is a feature of the presentational relation in phenomenal consciousness through the absence of a further mode of presentation. Given that reflexiveness gets its putative purchase only through absence, one can reasonably ask whether it is an idle wheel. What is the point of the extra place in the relation of consciousness between an individual and a sensational aspect of a psychological state, if the place does not add anything? Could we not do equally well with the relation

(sensation) _____ is presented in phenomenal consciousness to
(individual) _____

or

(pain) _____ is phenomenally conscious for (individual) _____

or

individual _____ is phenomenally conscious of (visual blur) _____ ?

I think that the answer to this question hinges on whether a third argument place, which putatively engenders reflexiveness, really *is* idle.

The locutions just highlighted can certainly be understood as indicating simple two-place relations. Perhaps they all indicate the same relation. If we were to confine our consideration to phenomenal consciousness *per se*, with no consideration of the way in which phenomenal consciousness figures in other psychological states, then the third argument place would be idle. I think, however, that there is much to be said for considering phenomenally conscious presentation as pivotal in a wider range of mental phenomena.

²¹ On the third locution, see note 17.

410 *Reflections on Two Kinds of Consciousness*

Consider these relation instances:

- (i) (sensation) _____ is presented in phenomenal consciousness to (individual) _____ through (sensation) _____
 (pain) _____ is phenomenally conscious for (individual) _____ through (pain) _____
 individual _____ is phenomenally conscious of (visual blur) _____ through (visual blur) _____
- (ii) (rigid body) _____ is presented in phenomenal consciousness to (individual) _____ through (perception) _____
 (rigid body) _____ is phenomenally conscious for (individual) _____ through (perception) _____
 (individual) _____ is phenomenally conscious of (rigid body) _____ through (perception) _____
- (iii) (wound) _____ is presented in phenomenal consciousness to (individual) _____ through (pain) _____
 (wound) _____ is phenomenally conscious for (individual) _____ through (pain) _____
 (individual) _____ is phenomenally conscious of (wound) _____ through (pain) _____
- (iv) (table) _____ is presented in phenomenal consciousness to (individual) _____ through (concept) _____
 (table) _____ is phenomenally conscious for (individual) _____ through (concept) _____
 (individual) _____ is phenomenally conscious of (table) _____ through (concept) _____²²

If it is reasonable to regard the relation or relations in each group as being the same relations as in the other groups, then the third argument place is not idle. If presentation or consciousness-for is the same relation in phenomenally conscious sensing sensation, phenomenally conscious perception, phenomenally conscious information registration, and phenomenally conscious thought, then the reflexivity exhibited in the first group is not idle. I think that it is reasonable to regard phenomenal consciousness as present in phenomenally conscious perception, information registration, and thought. Presentation to an individual, phenomenal consciousness for an individual, can occur in all these cases.

Consider groups (ii) and (iii). The rigid body is presented to the individual through a perceptual representation. The individual is conscious of the wound

²² I am assuming that at least the first relation in groups (i), (ii), (iii), and (iv) is the same relation. Similarly, for the second relation in the four groups, and the third and fourth. So the role of the locutions in the parentheses is not to indicate part of the relation. It is to indicate relevant *relata* that can enter into the relevant relation. Group (i) concerns feeling sensations, or being phenomenally conscious in the most primitive way. Group (ii) concerns phenomenal consciousness in perception. Group (iii) concerns phenomenal consciousness in information registration. Group (iv) concerns phenomenal consciousness in thought.

through the pain. In these cases what is presented to, or conscious for, the individual, and what the individual is conscious of, is something other than a qualitative aspect of a phenomenal state. The mode of presentation is different from what is presented. So in groups (ii) and (iii), there is no reflexiveness.

In group (ii) the mode of presentation is a perceptual state or perceptual content. What is presented is different (for example, a rigid body or a shape or color). So there is no reflexiveness. I doubt that reflexiveness is even possible for genuine perception. In group (iii) the mode of presentation is an information-registering state or sensation. If the information-registering state is non-perceptual but phenomenally conscious, the mode of presentation must be a qualitative state, a conscious sensation (type or token). What is informationally presented is different from the mode of presentation. What the conscious sensation registers information about (for example, bodily damage, or heat) is different from itself. So again, there is no reflexiveness.²³

The same point applies with respect to group (iv). The phenomenally conscious thought that represents the table is certainly not reflexive. The subject matter of most thoughts is not presented, or represented, reflexively. Even phenomenally conscious thoughts as of qualitative states are not reflexive. In cases of *thought* about a sensation or quality, the phenomenally conscious thought (which I think is also rational-access conscious) may employ or make use of sensory, phenomenal elements in the conceptual mode by which the sensation or quality is presented. That is, the phenomenal quality may be presented in thought through the application of a phenomenal concept. The concept may incorporate the very phenomenal quality, as an iconic archetype, into its mode of presentation. The quality that is employed by the conceptual ability can be a sensation or sensation-memory. Or it can be an element in a representational image or perception. In any case, the concept is not identical with the quality. The concept is essentially representational, constitutively has a logical form, and has essential relations to truth. The quality is not essentially representational, constitutively lacks in itself a logical form, and lacks essential relations to truth. So, even though the quality is a part of the concept's mode of presentation, it is not the same as the conceptual mode of presentation.²⁴ So, again the presentation to the individual in thought is not reflexive. Clearly, reflexiveness is not a constitutive feature of thought in general. There is, as I indicated, self-referential thought. Its reflexiveness is representational, indeed conceptual. A mode of representation represents itself. The reflexiveness of phenomenal consciousness is the

²³ It is probably a constitutive, necessary truth about perception that a perceived object is never identical with its perceptual mode of presentation. I am inclined to think that an analogous point applies to information registration. I can think of no cases in which a conscious qualitative sensation registers information only about itself, in the sense of 'information registration' discussed earlier. Even if there are such cases, they are not constitutive of information registration. So reflexiveness is not constitutive of information registration *per se*, as it is of phenomenal consciousness *per se*.

²⁴ The demonstrative-like application of the concept is also not identical to any occurrence of the quality, which in itself is not a representational application of anything.

reflexiveness of absence of representation. So it is certainly to be distinguished from the reflexiveness of self-reference in thought.

If what is phenomenally presented to, or phenomenally conscious for, the individual is the qualitative aspect of a phenomenal state—of a sensation—(group (i)), and if the phenomenal consciousness is considered in itself and not as an element in a more complex psychological phenomenon, then the mode of presentation—what goes in the third place of the relation—is the same as what is presented. The sensation is presented to the individual through itself.²⁵ This is reflexiveness in the phenomenal consciousness relation or relations.

Whenever presentations to the individual through perception, information registration, or thought are phenomenally conscious, there is a phenomenally conscious qualitative state that is the vehicle of, or an aspect of, the perceptual state, or that is an aspect of the information-registering state, or that is an expression of, element in, or aspect of a propositional attitude. In other words, whenever a relation in group (ii), or group (iii), or group (iv) holds, a relation in group (i) holds, as a sub-element of the phenomenal consciousness in perception, information registration, or thought. In such group (i) cases, the qualitative state or aspect of a state is presented to the individual in phenomenal consciousness as well. It is its own mode of presentation. It is not perceived in group (ii) cases, and it need not be attended to. It is not the functionally relevant information in group (iii) cases. It may be thought about in group (iv) cases, but in such cases the conceptual mode of presentation is not identical with the qualitative element that is presented. Still, in these cases, there remains the basic relation that is constitutive of phenomenal consciousness. In this relation the qualitative element is presented to the individual and conscious for the individual through itself. (Cf. note 16.) Phenomenal consciousness, in and of itself, is reflexive. The reflexiveness of the phenomenal-consciousness relation distinguishes it from other sorts of presentations to the individual's mind, which may also be phenomenally conscious.

²⁵ Since phenomenal qualities are constitutive aspects of the core individual subject, there is an approximation to ego-presentation in phenomenal consciousness. But nothing presents the ego as a whole, or as such. There is no phenomenal quality that is the 'presentational to me' quality. Beyond the hurt, there is no further 'to me-ish' quality in sensing pain. There is a *de se* aspect of primitive *perceptual* states; this aspect is *representational*. We human sophisticates can represent, in thought, anything, including pain, as presented to *us*. Such ego representations overlay phenomenal consciousness. They are not present in phenomenal consciousness *per se*, or in non-perceptual, non-representational systems of phenomenal consciousness. The ego-connection in such systems is not representational. It resides in the presentation to an individual that is constitutive of phenomenal consciousness itself. And it resides in the functional connection between having sensations and individuals' being disposed to react so as to benefit themselves. A claim that there is a 'me-ish' *phenomenal quality* at any stage of phylogenetic complexity would be mistaken. Hume and Kant rightly denied such a claim. Cf. David Hume, *Treatise of Human Nature*, ed. L. A. Selby Bigge (Oxford: Oxford University Press, 1965; first pub. 1899), 252; Kant, *Critique of Pure Reason*, B132, B157, B275–277. One is not phenomenally presented with a self, or proto-self. One is presented with phenomenal qualities.

In fact, reflexive phenomenal consciousness is what makes perceptual representation, non-perceptual information-registering phenomenal states, and thought phenomenally conscious. Relations in group (i) underlie relations in groups (ii), (iii), and (iv). The former relations make the latter relations phenomenally conscious. The former relations lie at the base of phenomenal consciousness. The connection to this base in the latter three groups makes non-reflexive cases and reflexive ones instances of phenomenal consciousness. The connection also unifies phenomenal consciousness.

Thus, given that phenomenal presentation to the individual, or phenomenal consciousness for the individual, is present in all these cases, the question of mode of presentation is not idle. Non-representational reflexiveness in presentation to an individual is a constitutively necessary condition on phenomenal consciousness. Such reflexiveness is present in, and constitutively necessary of, any phenomenal consciousness in perception, information registration, and thought. Presentations that are distinctive of perception, information registration, and most thought are not reflexive. Where a thought is reflexive by way of its representational content, this reflexiveness differs from the reflexiveness of phenomenal consciousness *per se* precisely in being representational. Of course, by employing phenomenal elements in its representational content, a self-referential thought can be phenomenally conscious. Phenomenal elements can figure in the self-reference. But what makes the thought phenomenally conscious is a non-representational reflexive presentation to the individual. What makes it self-referential is a representational reflexive presentation.

Reflexiveness is a constitutively necessary condition on phenomenal consciousness. It can be present in perception and information registration, when they are phenomenally conscious; but reflexiveness is not constitutive of perception or information registration. What they present to the individual in consciousness is not presented reflexively. Reflexive presentation is what makes these types of psychological processes conscious, but it is not what makes them cases of information registration or perception. Indeed, being phenomenally conscious is probably neither necessary nor sufficient for a state to be either an information-registering state or a perceptual state.

There are simple animals like bees that are known to have visual perception, with an array of objectifying representations and perceptual constancies, but about which we do not know whether they are conscious.²⁶ There is certainly no *a priori* connection between perceiving and being conscious. We appear to have an adequate empirical grip on the nature of bees' visual perception without

²⁶ Even though bees exhibit many visual constancies, the neural circuitry underlying their visual systems is relatively simple. It is much simpler than the corresponding circuitry underlying the visual systems of birds and fish. This is why I think it more plausible to conjecture that birds and fish are visually phenomenally conscious than that bees are. Of course, visual phenomenal consciousness is a relatively complex type. The phenomenal consciousness of pain, or of other sensations that do not serve perceptual systems, probably has a simpler neural basis and a phylogenetically earlier origin than phenomenal consciousness in vision.

assuming that they are conscious. Further, many sensory states deriving from the human dorsal visual stream are unconscious. Yet they exhibit the objectification, the sort of filtering mechanisms, and the perceptual constancies that mark perception. That is, they discriminate distal conditions under a wide variety of stimulus conditions and do so by standard perceptual means.²⁷ So there is empirical reason to believe that phenomenal consciousness is not constitutively necessary for perception.

Phenomenal consciousness is not constitutively sufficient for perception. Pain and visual blur are phenomenally conscious, but are not perceptions.

Visual blur shows that phenomenal consciousness is not sufficient for information registration. The numerous non-conscious information-registering states—sensitivity to light in amoeba, for example—show that phenomenal consciousness is not necessary for information registration. Amoebae are surely not conscious.

Other things besides qualitative sensations can be *sensorily* presented in phenomenal consciousness, insofar as the sensations do participate in perceptual or other sensory information-registering enterprises. When other things besides qualitative sensations are presented in purely sensory phenomenal consciousness, the presentation is through modes of presentation that differ from the things presented. (Cf. note 24.) So these presentations are not reflexive. But the concomitant presence of a non-representational reflexive presentation is what makes these presentations phenomenally conscious.

III

There may be a further point about the form of consciousness in (group (i)) phenomenal consciousness *per se*. To explain this point, I must return to an idea

²⁷ Cf. Milner and Goodale, *The Visual Brain in Action*; Yves Rossetti and Laude Pastille, 'Several "Vision for Action" Systems: A Guide to Dissociating and Integrating Dorsal and Ventral Functions (Tutorial)', in Wolfgang Prinz and Bernhard Hamill (eds.), *Common Mechanisms in Perception and Action* (Oxford: Oxford University Press, 2002). Some of this literature follows Milner and Goodale in using the term 'perception' in what I regard as a misleading and non-standard way. Often the term is applied only to transactions in the ventral system. But there is no scientific basis, especially in the larger context of perceptual psychology, for this usage. The basic mechanisms postulated to account for representational success and failure are common to dorsal and ventral systems, and to conscious and unconscious visual representation. Both conscious and unconscious representational contents can be veridical or non-veridical. Both exhibit perceptual constancies and other fundamental perceptual representational capacities. Both involve complex filtering mechanisms. Both share some of the same basic routes for yielding representational successes (e.g. depth perception). In fact, there is evidence that many unattended-to states in the ventral system that are counted perceptual (in the narrow sense of Milner and Goodale) are unconscious. So this narrow usage of the term 'perception' does not clearly correspond to a conscious-unconscious distinction. In my view, the term 'perception' should be applied to objectifying aspects of sensory systems, regardless of whether these are conscious. This is the more nearly standard usage in visual psychology. I think that perception is fundamentally to be understood in terms of a way of realizing representational function, not in phenomenological terms.

in 'Two Kinds of Consciousness'. This is the idea that one might distinguish between phenomenal consciousness and instantiated phenomenal qualities, or between *phenomenally conscious* sensation and phenomenal qualitative states, or sensations, that may or may not be phenomenally conscious.

According to such a distinction, an individual could have a pain while not consciously feeling it at all times. I want to explain the distinction before discussing whether it is of any empirical use, whether it actually applies to any real cases. In entertaining such a distinction, I am not merely supposing that the individual does not attend to the pain. I mean that the individual does not feel it. It is not phenomenally conscious for the individual. Yet the individual still has it. The pain is individuated partly in terms of how it consciously feels. It is, constitutively, an instance of a way of feeling. An enduring, occurrent, phenomenal, psychological condition that feels that way could go in and out of consciousness—could be felt or not—if distraction or some other interference intervened.

Roughly speaking, the continuity of the sensation, the pain, would depend on at least three facts. It would depend on the fact that it would be felt in roughly the same way if it were to come back into consciousness. It would depend on the fact that its basic cause and its causal powers are the same. And it would depend on the fact that phenomenal consciousness of it—its presentation to the individual—is masked by some interference. As I noted in 'Two Kinds of Consciousness', regaining consciousness of a sensation seems phenomenally different from being conscious of the initial onset of a sensation.

The conceptual distinction is this. On the view that I am exploring, an occurrent phenomenal quality is *constitutively* individuated in terms of how it *would* be felt if it were to become conscious. Its nature is constitutively, not just causally or dispositionally, related to occurrently conscious ways of feeling. This constitutive point is what makes the quality *phenomenal* even when it is not actually conscious. On this view, the unfelt pain is still a pain—not just a neural state or a dispositional state that happens to be capable of producing pain under the right conditions—even though it is not occurrently felt and is not conscious for the individual.

The alternative view does not recognize or make use of the distinction. On the alternative view, a phenomenal quality could not be phenomenal unless it is occurrently conscious at all times at which it occurs. On this view, phenomenal qualities are constitutively *occurrently* conscious. On this view, whenever some people say that one has phenomenal qualities that are unfelt, one should say instead that one is in a state, perhaps a neural state, that sometimes causes occurrently felt phenomenal qualities but bears no constitutive relation to them. On the view I am exploring, phenomenal qualities are *constitutively capable* of being occurrently conscious. The view might add that such qualities are occurrently conscious unless certain masking or interfering conditions occur. This constitutive capability—this association in the *nature* of the state with

occurrent phenomenal consciousness—is what makes the unconscious state a phenomenal state.²⁸

I have just defended the conceptual coherence of the distinction between phenomenal qualities of a psychological state and phenomenal consciousness of them. It is a further question whether the distinction has a definite empirical application. If it does not have such application, then I assume that there are no unconscious phenomenal qualities—no unfelt pains. Then (further), as far as I can see, all occurrently instantiated phenomenal qualities could be required constitutively to be always conscious.

I am not strongly committed one way or the other on this empirical issue. I simply want to keep it open. I am interested in exploring the empirical possibility of the more liberal form of individuation, which makes use of a distinction between being a phenomenal quality and being an occurrently conscious phenomenal quality.

There are obvious anecdotal cases where there is some temptation to apply the distinction. It is common to say that the soldier lost consciousness of the (persisting) pain from his or her wound until the battle was over. Of course, it is easy to redescribe such cases so as not to assume that a pain persists when it is not felt. There also appears to be some place for the distinction in some uses of the way many of us ordinarily think about sensations. The locution of being conscious of one's pain suggests cases where distraction might make one not conscious of one's pain—not (phenomenally) conscious of a pain that one has. Again, it is easy to see how to explain these locutions away so as to deprive them of literal empirical application.

Whether there are solid empirical applications of the distinction may depend on whether there is a place in more rigorous psychological explanation for constitutively phenomenal psychological states with causal powers even during times when they are not consciously felt. Take a case in which one is tempted to regard a pain as persisting even though it is unconscious. Is there a place in a systematic psychological theory for attributing occurrent causal relations where the cause or effect is distinctively phenomenal—constitutively individuated in phenomenal terms? If so, then there is empirical application for the distinction between felt and unfelt pains. If, on the contrary, in all such cases causal explanation of occurrent causal relations can dispense with psychological explanations that appeal to phenomenal states, then perhaps there will be no empirical application for the conceptual distinction.

I think that science should try to maximize the scope of its explanatory notions. I think that the notion of a psychological state individuated in terms of

²⁸ Such a distinction would in no way interfere with finding underlying neural mechanisms. One would expect to find one level or array of neural activity that corresponds to unconscious phenomenal states, and another level or array that corresponds to conscious phenomenal states. The key issue about whether this conceptual distinction has actual application to a difference in the real world centers on the character of psychological explanation, as I shall argue below—not on the relation between the psychological explanation and underlying neural explanations.

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what it is like to feel or be conscious is explanatory. Such states have causal powers and vulnerabilities. So I think that one should be alive to the possibility that causal explanation in phenomenal terms does not lapse at every moment when an individual is not occurrently conscious in the relevant way. I conjecture, for the sake of exploration, that there is a causal-explanatory role for such phenomenal continuants at times when they go out of consciousness.

As I have indicated, this view of the relation between phenomenal qualities and their being phenomenally conscious is not fundamental to my thinking about phenomenal consciousness. If it is correct, however, it would further highlight the *presentational* nature of phenomenal consciousness. The point can be brought out in two ways.

First, if feeling a phenomenal quality like pain is to be distinguished from merely occurrently having the phenomenal quality (the pain), reflexiveness is *not* a feature of the phenomenal state itself. The pain is not reflexive on its own, as a self-referential thought content might be. For if a pain is unfelt by, or not conscious for, the individual that has it, there is no way that the pain is, at that time, presented to the individual. Unconscious pain would become conscious in being presented to the individual through itself. Reflexiveness is, unmomentously but constitutively, how a phenomenal quality or sensation is presented to, or conscious for, the individual. It is presented to, conscious for, the individual through itself. Reflexiveness is a feature of the relation of phenomenal consciousness between the individual and the phenomenal state. In a weak sense, it is part of the form of the consciousness when the qualitative aspects of a psychological state are conscious for the individual. Reflexiveness is relevant entirely to the presentational aspect of phenomenally conscious states. It is relevant entirely to presentation to the individual. Phenomenal consciousness consists in such presentation.

Second, consider the following reasoning. A pain is correctly individuated partly in terms of a way of feeling. But a way of feeling is an abstraction that can be instantiated in different individuals and at different times in the same individual. The same can be said for *what it is like* to feel pain. That is an abstraction too. A phenomenally conscious pain is, of course, not an abstraction. It is an occurrent, instantiated condition. Suppose that an individual can have a pain without feeling it—without its being conscious for the individual, without its being presented to the individual. Then the pain's being instantiated is not sufficient for its being phenomenally conscious. On this supposition, a state's being individuated by a characteristic way of feeling (or way of being presented, or what it is like to feel it) *and* being instantiated do not suffice for the state's being phenomenally conscious. Being occurrently phenomenally conscious (at all times) is not a necessary feature of the pain itself. For the pain to be phenomenally conscious, it must be in the right relation to the individual. It must be conscious for, or presented to, the individual.

These two points are really at most supplementary. The idea that there is a place for a distinction between having a pain and being phenomenally conscious

of the pain is just exploratory. If it is correct, it throws the basic point into sharper relief. But the basic point that I have made about phenomenal consciousness is independent. The basic point is that phenomenal consciousness is constitutively a non-representational, reflexive presentation relation between an occurrent qualitative state and an individual.

The presentation relation between an occurrent qualitative state and an individual is evident in our common understanding of the notions *way of feeling* and *what it is like*: *way of feeling for the individual*, *what it is like for the individual*. The relation can be recognized through apriori reflection. No qualitative conscious state can fail to be conscious for an individual. The state is accessible to, present for, conscious for, presented to, the individual. All of the key notions for phenomenal consciousness mandate presentation to or for an individual. One can, of course, specify qualitative states that are essentially conscious—*conscious* pain, for example. Any such states must, however, at least implicitly entail this presentational relation to the individual.

This point about the role of a non-representational relation in phenomenal consciousness could be regarded as adding a new dimension, over and above the qualitative aspects of consciousness, to what is hard or difficult about understanding consciousness.²⁹ I do not see things quite that way. I think that this relation is an apriori and necessary aspect of what it is to be a phenomenally conscious quality or qualitative condition. What it is like has always been what it is like for an individual. Such phenomenal qualities are by nature either occurrently, or capable of being, presented to, present to, conscious for an individual.³⁰

Constitutive reciprocity reigns here, as it does with respect to rational-access consciousness. There is a constitutive role for an individual subject in what it is to be a phenomenal quality. Being conscious for an individual is part of what it is to be a qualitative phenomenal state. Reciprocally, what it is to be

²⁹ Although I cannot go into the matter here, I do not accept the usual framework in which the 'hard problem' of understanding consciousness is raised or answered. This framework invites a reduction of phenomenal consciousness, or substitute for it, as a condition of understanding. Then the discussion either maintains that some reduction is correct, or that because it is incorrect, we do not understand consciousness. Then philosophers who hold the latter position divide as to whether we will ever understand consciousness. 'Is it an ultimate mystery?', they ask. All this makes good magazine copy. But it is not the way scientific understanding tends to go. I see no scientific or commonsensical reason why understanding consciousness must take any such reductive form. It would be enough to integrate consciousness into a systematic empirical theory, connecting it in some systematic way to other psychological capacities and to underlying neural conditions. We are coming to understand representation in that way—not by reducing it to functional, neural, or other matters. Such reductions do not succeed for representation any more than they do for consciousness. But the integration of representation into empirical theory is dissolving the sense that representation needs reduction or 'naturalization'. Naturalization is best taken to be empirical systematization and integration. It is not best taken as reduction to some privileged set of terms (in the physical sciences or elsewhere). It is also not best taken as purification of subjective elements for a universal 'objective' point of view. Our main difficulty with consciousness is that we do not yet know how to integrate it into empirical theory. I see no reason to doubt that that day will come.

³⁰ Even if occurrent phenomenal qualities can fail to be phenomenally conscious, their phenomenality is still to be explained in terms of a would-be way of being occurrently presented.

a certain sort of individual, a conscious individual, is constitutively associated with an occurrent, presentational relation to such qualitative states. Phenomenal consciousness is relevant to demarcating certain sorts of individuals, individual subjects—individuals with a conscious mental life. Such individuals include selves or persons. But they are not confined to selves or persons. There are surely conscious individuals that are neither. For all individual subjects, the constitutive core—though not necessarily the bulk—of their psychological lives is phenomenal consciousness, a presentational relation to certain sensory aspects of their psychological lives. This core constitutes a primitive type of subjectivity—non-representational phenomenal subjectivity.

Any substantive value in these reflections lies in their uncovering a unified form for phenomenally conscious mental life—presentation to the individual in phenomenal consciousness. Central aspects of phenomenally conscious mental life vary in the formal structure of the presentation. In particular, the variations center on what is presented and how. But non-representational reflexiveness in presentation underlies, and is constitutive of, the phenomenal consciousness in all these variations.

These reflections on the role of non-representational reflexiveness in phenomenal consciousness are at best pointers to differences between phenomenally conscious sensing and conscious *representation*, whether in perception or in thought. The pointing may be too 'formal' to constitute rich insight into the content of the difference. We should not, however, belittle whatever insight we can gain into these difficult matters. One day we will gain more.