

THE MIND'S AWARENESS OF ITSELF

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The *hard* problem of consciousness--the nature of phenomenal experience--is especially hard for people who believe that:

- (1) Conscious perceptual experiences exist inside a person (probably somewhere in the brain)[1](#)
- (2) Nothing existing inside a person has (or needs to have[2](#)) the properties one is aware in having these experiences.

The experience I have when I see (dream of, hallucinate) a large orange pumpkin is certainly inside me. Why else would it cease to exist when I close my eyes, awaken, or sober up? Yet, nothing inside me--certainly nothing in my brain--has the properties I am aware of when I have this experience. There is nothing orange and pumpkin shaped in my head. How, then, can I be aware of what my perceptual experiences are like--presumably a matter of knowing what qualities they have--if none of the properties I am aware of when I have these experiences are properties of the experience?

Surely, though, we are, in some sense, aware of our own conscious experiences. We have, if not infallible, then privileged, access to their phenomenal character. I may not know what it is like to be a bat, but I certainly know what it is like to be me, and what it is like to be me is primarily--some would say it is exclusively--a matter of the phenomenal qualities of my perceptual (including proprioceptive) experience. I am aware--directly aware--of what it is like to see (dream of, hallucinate) orange pumpkins. If such awareness is incompatible with (1) and (2), so much the worse for (1) and (2).

This is a problem that some philosophers have given up trying to solve. Others spend time tinkering with (2). The problem is real enough, but (2) is not the culprit. The solution lies in distinguishing between the fundamentally different sorts of things we are aware of and, as a result, the different forms that awareness (or consciousness[3](#)) of things can take. Once these distinctions are in place, we can see why (1) and (2) are compatible with privileged awareness of one's own experience. We can have our cake and eat it too.

By way of previewing the argument for this conclusion, let **o** be an object (or event, condition, state--i.e., a spatio-temporal particular), **P** a property of **o**. We speak of being aware of **o**, of **P**, and of the fact that **o** is **P**. These differences in the ontological kinds we are aware of are reflected in differences in the corresponding mental acts of awareness. Awareness of **P** is a much different mental state from awareness of the **o** which is **P**, and both differ from an awareness of the fact that **o** is **P**.

In thinking about the mind's awareness of itself, these differences are important. For if **e** is some mental particular and **P** a property of **e**[4](#), we must not confuse awareness that **e** is **P** with awareness of either **e** or **P**. For one can be aware of the former--aware, that is, that one's experience is **P**--without being aware of either the experience (**e**) itself or the quality (**P**) that helps make it that kind of experience.

Therein lies an answer to the puzzle generated by (1) and (2), the puzzle of how one can be aware of internal affairs--aware of what one's experiences are like--without being aware of these experiences themselves or the properties that give them their phenomenal character. The mind's awareness of itself is an awareness of **facts**

about itself, an awareness that internal experience, e , is P . It is not an awareness of the internal object e or the property P out of which such facts are composed. The facts we are aware of in knowing what it is like to experience orange pumpkins are, to be sure, facts about internal affairs--thus the truth of (1)--but the properties we are aware of in achieving this awareness (being universals⁵) exist nowhere. **They** aren't in the head. Thus the truth of (2).

1. Objects, Properties, and Facts

When an object is moving, I can be aware of: (A) the moving object; (B) the fact that it is moving; (C) the movement; (D) all of the above; (E) none of the above. Consider:

Case A: I study the minute hand of a clock. The hand is moving so the object I see, the object I am aware of, is a moving object. I do not, however, sense, I am not aware of, its movement. Nor (thinking the clock is broken) am I aware of the fact that it is moving. I am aware (I see) the moving hand, **o**, but I am aware of neither its movement, **M**, nor the fact that it is moving: that **o** is **M**.

Case B: I observe the minute hand on the clock for several minutes. I see that the hand is in a different position now than it was a moment ago. I thus become aware that it is moving. Nonetheless, I still do not perceive the movement. The minute hand moves too slowly for that. I know it is moving. but I cannot see it move. I am aware of **o** and that **o** is **M** but not **M**.

Case C: I observe the movement of a nearby vehicle and mistakenly take it to be my own movement. I stomp on the brakes. Nothing happens. In this case I was aware of both the neighboring vehicle and its movement without at the time being aware that it (the adjacent vehicle) was moving. I thought **I** was moving. Awareness of **o** and **M**, but not of the fact that **o** is **M**.

Case D: I observe the second-hand of another clock. Unlike the minute hand of the first clock, the movement of this object is plainly visible. I am aware of the moving hand, its movement, and also the fact that it is moving. When one becomes aware of the fact that **o** is **M** by awareness of both **o** and the **M** of **o** I call it **direct** fact-awareness. I am directly aware that the second hand is moving, but indirectly aware that the minute hand is moving.

Case E: I am aware of neither the object, its properties, nor the fact that it has those properties. There are unobservable objects (e.g., electrons) that have properties (e.g., spin) I am not conscious of. I am, to be sure, aware of the fact that electrons have this property (I read about it in a book), but there was a time I was not. There was a time, in other words, when I was unaware of **o**, the property **S**, and the fact that **o** was **S** (not to mention the fact that there were **o**'s).

I will call these three forms of awareness **o**-awareness (for **object**-awareness⁶), **f**-awareness (for **fact**-awareness) and **p**-awareness (**property**-awareness). When the kind of awareness is clear from context--when, for example, I am talking about an awareness (and, thus, a **p**-awareness) of properties--I will generally drop the distracting prefixes. There are times, though, when it is important to specify exactly which form of awareness is at issue, and on these occasions the prefixes will appear. Though I use movement (a relational property) to illustrate these distinctions, I could as well have used any other property. I can, for instance, be **f**-aware that the wine is dry (someone told me it was or I read the label) without being aware of the wine or its dryness (I do not taste the wine for myself). One sees a fabric in normal light--thus experiencing (becoming **p**-aware of) its color (blue, say)--without realizing, without being **f**-aware, that it is blue. One thinks, mistakenly, that the illumination is abnormal. The fabric, one thinks, only looks blue. And one can be aware of the color of Tim's tie--that particular shade of blue--without being **o**-aware of his tie or the fact that it is

blue. One sees another object of exactly the same color. If it sounds odd to speak of being aware of an object's color without actually seeing the object, imagine someone pointing at another object (a color sample perhaps) and saying, "**That** is the color of his tie."⁷ What you are made **p**-aware of when you see the color sample **is** the color of his tie. One might also be **p**-aware of the color of his tie while being aware of no object at all. Imagine hallucinating a homogeneous expanse of color that exactly matches the blue of his tie.

This last claim may sound false--at least controversial. When a person hallucinates pink rats, isn't the person aware of colored images (shaped like rats)? Isn't awareness of properties (colors, shapes, sizes, orientations, etc.) always (and necessarily) awareness of objects having these properties? To insist on this point is a way of denying (2). It is a way of denying that there is nothing in one's head that has the properties one is aware of in having experience. Since I am here exploring the possibility of understanding conscious experience given the truth of both (1) and (2), I assume, to the contrary, that hallucinations are experiences in which one is aware of properties (shapes, colors, movements, etc.) without being **o**-conscious of objects having these properties. To suppose that awareness of property **P** must always be an awareness of an object (an appearance? a sense-datum?) having property **P** is what Roderick Chisholm (1957) called the Sense-Datum Fallacy. Following Chisholm, and in accordance with (2), I will take this to **be** a genuine fallacy. Hallucinating pumpkins is not to be understood as an awareness of orange pumpkin-shaped objects. It is rather to be understood as **p**-awareness of the kind of properties that **o**-awareness of pumpkins is usually accompanied by.

Awareness (i.e., **p**-awareness) of properties without awareness (**o**-awareness) of objects having these properties may still strike some readers as bizarre. Can we really be aware of (uninstantiated) universals? Yes we can and, yes, we sometimes are. It is well documented that the brain processes visual information in segregated cortical areas (see Hardcastle 1994 for references and discussion). One region computes the orientation of lines and edges, another responds to color, still another to movement.⁸ As a result of this specialization it is possible, by suitable manipulation, to experience one property without experiencing others with which it normally co-occurs. In the after-effect called the *waterfall phenomenon*, for instance, one becomes aware of movement without the movement being *of* any thing. There is no colored shape that moves. To obtain this effect one stares for several minutes at something (e.g., a waterfall) that moves steadily in one direction. In transferring one's gaze to a stationary scene one then experiences movement in the opposite direction. Remarkably, though, this movement does not "attach" itself to objects. None of the objects one sees appears to be moving. Yet, one experiences movement. As a psychologist (Frisby, 1980, p. 101) puts it, "although the after-effect gives a very clear illusion of movement, the apparently moving features nevertheless seem to stay still!" One becomes, he says, "aware of features remaining in their 'proper' locations even though they are seen as moving." This may seem paradoxical (Frisby describes it as contradictory), but it is nothing more than a **p**-awareness of one property (movement) without this movement being instantiated (as it normally is) in or by some object. One's movement detectors are active, but they are not *made* active by any object possessing the normal array of sensory properties (shape, color, texture, etc.).

Everyday perception is generally a mixture of object, property, and fact awareness. Usually we become aware of facts by becoming aware of the objects and properties that constitute these facts. I become aware that his tie is blue by seeing his tie and its color. I become aware that gas is escaping by smelling the escaping gas. Perceptual modalities being what they are, though, we are often made aware of facts by being made aware of properties altogether different from those involved in these facts. We become **f**-aware that the metal is hot by **seeing** it change color, not by **feeling** its temperature. Instruments, gauges, and natural signs (tree rings, tracks in the snow, cloud formations, etc.) have familiarized us with the various ways awareness of facts is mediated by awareness of objects and properties quite different from those involved in the fact. I see that the water is 92° by an awareness not of the water, but of a thermometer and the height of its mercury column. Use of language in communication is another source of **f**-awareness in which there is little or no connection between the objects (sounds and marks) and properties (spatial and temporal arrangement of symbols) we perceive and the facts (reported on) that communication makes one **f**-aware of. When **f**-awareness is achieved by awareness of properties and/or objects other than those involved in the fact, the **f**-awareness is **indirect**.

Thus, awareness that your daughter has a fever is indirect when you use a thermometer, direct when you feel her forehead.

There is, then, a virtual⁹ independence (conceptual, not causal) between **f**-awareness, **o**-awareness, and **p**-awareness when the awareness is perceptual. We can, and we often do, have one without the others. If this is also true--and why shouldn't it be?--of our awareness of mental affairs, this tells us something important about awareness of our own conscious states. I begin by describing what it tells us about a special class of conscious experiences--**perceptual** experiences.

2. Perceptual Experience

Perceptual experiences are phenomenally rich in a way that beliefs are not. It is like something to have them. Unlike a belief or judgment (an **f**-awareness) that a pumpkin is moving toward you (something you can have without awareness of either the pumpkin or its movement), seeing a pumpkin move involves an experience that is phenomenally quite different from experiencing a green bean move toward you, a red tomato moving to the left, a ripe banana rotating in place, etc. The experience of a moving pumpkin, though it is caused by a pumpkin (and, according to causal theorists, must be so caused in order to be rightly classified as an experience **of** a pumpkin) is detachable from external causes in the sense that the very same kind of experience--an experience having the same phenomenal character--could occur (and in pumpkin hallucinations does occur) without a pumpkin.

This much, I hope, is philosophical (not to mention psychological) common sense. Disagreement arises when we turn to questions about our awareness not of pumpkins, their properties¹⁰, and facts about them, but of our experience (*e*) of a pumpkin, **its** properties, and facts about **it**. Letting *P* stand for a property of a pumpkin experience, a property that helps makes this experience the kind of experience it is, how does one become aware that *e* is *P* ? Is this achieved by an awareness of *e* and *P* or is it, instead, indirect--mediated by an awareness of some other object and (or) property ?

There is a long tradition stemming from Descartes that conceives of the mind's awareness of itself as direct. We become **f**-aware that a visual experience is *P* by means of **o**-awareness of the experience, *e* , and **p**-awareness of *P* . According to some philosophers, all fact-awareness begins here.¹¹ Thus, awareness of facts about a pumpkin, that the pumpkin is **P**, are reached via inference from **o**-awareness of *e* and **p**-awareness of one or more of **its** properties. We become fact-aware of what is going on outside the mind in something like the way we become **f**-aware of what is happening outside a room in which we watch TV. The only objects we are aware of are in the room (e.g., the television set); the only properties we are aware of are properties of those objects (patterns on the screen). **Only** **f**-awareness--awareness of what is happening on the playing field, concert hall, or the broadcast studio--is capable of taking us outside the room.

I will not discuss such theories (basically sense-data theories). I set them aside, without argument, because they all deny thesis (2), and my purpose here is to understand the mind's awareness of itself in a way compatible with (1) and (2). Contrary to (2) sense-data theories affirm that there is something in a person's head that has the properties the person is aware of when he sees or hallucinates an orange pumpkin. Sense-data are inside, and sense-data actually have the properties one is aware of when one sees or hallucinates a pumpkin. The sense-datum is orange. It is bulgy and shaped like a pumpkin. It moves--at least it does so relative to other sense-data. In having a visual experience of a pumpkin it is the bulgy orange sense-datum, an internal object, one is **o**-aware of, and it is the properties of this internal object one is **p**-aware of. Awareness of pumpkins is, at best, indirect. It is the same type of awareness (i.e., **fact**-awareness) that one has of Boris Yeltsin when one "sees" him on TV.

Armed, as we now are with the distinction between object, property, and fact awareness, though, we are in a position to understand what goes wrong in traditional arguments for indirect realism. We are in a position to understand--and, thus, resist--arguments against (2). The mistake in traditional arguments lies in failing to distinguish between **f**-awareness of experience, that it has phenomenal character **P**, on the one hand, and, on the other, **p**-awareness of the qualities (e.g., **P**) that give it this character. Failing to distinguish these forms of awareness, one concludes, mistakenly, that awareness of what it is like to see (experience) pumpkins must be awareness of the properties (i.e., **P**) of these experiences. **That** is the first mistake--the mistake of inferring **p**-awareness of the properties of experience from **f**-awareness of the fact that experience has those properties. The second mistake (this is optional; the major damage has already been done) is inferring **o**-awareness from **p**-awareness--that is, inferring that one must be **o**-aware of **e** in order to be **p**-aware of **e**'s properties. The conclusion? To be aware of what it is like to experience pumpkins, one must be aware of one's own pumpkin experiences in something like the way one is aware of pumpkins.

The fact that we don't have to be **p**-aware of an object's properties to be **f**-aware that it has those properties does not mean that we are **not** aware of our own experiences and their properties. It only shows that an awareness--even a privileged awareness--of what it is like to have a given experience is not, by itself, a good reason to think we are aware of either the experience or its properties. Once the distinctions between kinds of awareness are in place, our privileged awareness of what it is like to have these experiences **may** simply be a form of fact-awareness, an indirect awareness of a fact about an experience that is psychologically immediate and epistemically privileged.

But how is this possible? How is it possible to be aware in both a privileged and (or so it seems) direct way of facts about one's experiences without being aware of either the experiences or their properties? If one's **f**-awareness of one's own experience is supposed to be indirect like becoming aware, by looking at X-ray photographs, that one's arm is broken, what objects and properties is it an awareness **of** that is supposed to give one this awareness? I can become (indirectly) aware that my arm is broken by having the doctor tell me it is or by looking at the photographs for myself, but what could possibly bring about an indirect fact-awareness of the quality of one's own experience that would preserve the immediacy and privileged character of this awareness? No one tells us--indeed, no one can tell us--what our own experiences are like in the way a doctor can tell us about our broken bones. X-rays are not of much help in telling what it is like to be a bat or what it is like to see orange pumpkins. What, then, is supposed to tell us what qualities our experiences have if we are not, in having them, **p**-aware of them? There must be something (other than the experience) that tells us this since, in accordance with (1) and (2), we are now assuming that the properties we are aware of in having the experience are not properties of the experience. If we are to be made **f**-aware of what our experiences are like--that they are **P** for some value of "**P**"--then, we must be made **f**-aware of this fact by an awareness of properties and objects other than those of the experience itself. What are these other objects and properties?

They are--what else?-- the objects and properties our experiences make us aware of. One is made aware of what a pumpkin experience is like (that it is **P**) not by an awareness of the experience, but by an awareness of the pumpkin and an awareness of its (the pumpkin's) properties. When the perception is veridical, the qualities one becomes **p**-aware of in having a perceptual experience are qualities of external objects (the pumpkins) that one experiences, not qualities of the pumpkin-experience. One becomes **f**-aware of experience--that it is **P**--by **p**-awareness of **P**--the pumpkin's properties. The reason **p**-awareness of **P** can make one **f**-aware that one's experience is **P** is that **P** is the property of being an experience, in fact a **p**-awareness, of **P**. **P** tells one what specific kind of experience **e** is: it is an **e** of the **P** kind--i.e., an awareness of **P** kind. Even when there are no pumpkins, even when hallucinating, it is nonetheless true that **what** (properties) one is **p**-aware **of** in having the pumpkin experience are color, shape, texture, distance, and movement--properties that pumpkins normally have.

The key to this account is the relation between **P**, the property we are **p**-aware of in having experience **e**, and

the property of the experience (*P*) that we thereby become **f**-aware that *e* has. If **P** is the pumpkin's movement, a property that one becomes aware of in observing a moving pumpkin, then *P* is the property of being *an experience (a p-awareness)-of-movement*. *P* is not the property: *is moving*. *P* is the property that a possibly stationary experience has that makes this experience a **p**-awareness of movement.¹² *P* , therefore, helps fix the kind of experience *e* is--an experience of movement. Though *P* is not a property one is **p**-aware of, it is nonetheless a property that (helps) make that experience the kind of experience it is--an experience, specifically, of a **moving** pumpkin.

What this means is that **if** we follow philosophical convention and take qualia to be properties of one's experiences (and not the properties one experiences), then it is *P* , not **P**, that is the quale. Nonetheless, it is **P** (i.e., movement) not *P* (an awareness of movement) that one is **p**-aware of. One is (or can be--see §4 below) aware of the quale *P* , to be sure, but this is **fact**, not **property**-awareness. One's experiences of movement do not (or need not) have the properties one is **p**-aware of in having these experiences. The experiences don't move. Nonetheless, when experiencing movement, the property the experience has is *P* , the property of being a **p**-awareness of movement.

This account of the mind's awareness of itself gives a neat and, I think, satisfying account of both the psychological immediacy (i.e., the seeming directness) of introspective knowledge and the epistemically privileged character of self awareness. **F**-awareness of the fact that one's experience (of **P**) is *P* is psychologically immediate because, although it is indirect (one is not **p**-aware of *P*), one cannot have an experience of this sort without thereby being aware of **P**, a property (usually) of external objects that reveals (to the person having the experience) exactly what property it is that his or her experience has--namely, *P* (= an awareness of **P**). Technically speaking (given my earlier definitions) this is indirect fact-awareness, yes, but the fact one is indirectly aware of is so directly given by the properties (of external objects) one is aware of that the process (from **p**-awareness of **P** to **f**-awareness that one's experience is *P*), when it occurs, **seems** direct and immediate. It can be made to seem even more direct, of course, if one confuses the properties one is aware of in having the experience with the properties of the experience. **F**-awareness that *e* is *P* is also privileged because **only** the person having the experience is necessarily (in virtue of having it) aware of a property, **P**, that reveals what kind of experience (viz., *P*) he is having. Other people might also be experiencing **P**, of course, but unless they know you are, they can only guess about the quale (viz., *P*) of your experience.

Before leaving this discussion of perceptual experience, it may be useful to see how a familiar (to philosophers) scenario plays out on this account. What Jackson's (1986) Mary does not have before she emerges from her colorless room is an awareness of red (or of any other color). Assuming that colors are objective properties (if they aren't, we don't need Jackson's argument to refute materialism; (1) and (2) will do the job), Mary knows all about tomatoes--that they are red (**P**)--and she knows all about what goes on in other people's heads when they see red objects (there is something in their brain that has the property *P*), but she does not herself have internal states of this sort. If she did, she would, contrary to hypothesis, be **p**-aware of (she would actually experience) the color red. Once she walks outside the room, objects (*e* s) in her head acquire *P* --she becomes **p**-aware of red. She is now aware of things (i.e., **p**-aware of colors) she was not previously aware of. Using our present distinctions to express Jackson's point, the question posed is not whether Mary is now aware of something she was not previously aware of (of course she is; she is now **p**-aware of colors), but whether Mary is now **f**-aware of things that she was not previously **f**-aware of. The answer, on the present account of things, is No.¹³ Mary always knew that ripe tomatoes were red (**P**) and that ripe tomato experiences were *P* --viz., awarenesses of red. There are no other relevant **facts** for her to become aware of.¹⁴ Emerging from the color-free room gives her an awareness of properties (**P**) that figure in the facts (that **o** is **P**) she was already aware of, but it doesn't give her an awareness of any new facts.

We have now taken the first step in this account of the mind's awareness of itself. In a way that is consistent with both (1) and (2) and in a way that preserves the essential features of the mind's awareness of itself (the

psychological immediacy and epistemically privileged character of this awareness) we have an account--at least the broad outlines of one--of how we are aware of our own experiences of the world. What remains to be done is to see whether this account can be generalized to **all** mental states. My efforts at generalization (§3) will be feeble. I can, at this point, do little more than gesture in what I take to be the appropriate directions. I close (in §4) with a mildly interesting implication of this account of self-awareness.

3. Pains, Feelings, Emotions, and Moods.

Up to this point I have focused exclusively on conscious perceptual experiences, mental episodes that are **of** things--whatever objects and properties we are, in having the experience, made aware of. Perceptual experiences are being identified with internal states having properties (e.g., **P**) that make them **p**-awarenesses, experiences, of the properties (e.g., **P**) that external objects have. Something, **e**, in my head having the property **P** (a property that is not movement) constitutes my awareness of movement (**P**). I can become **f**-aware that something in me has **P** by an awareness of **P**. If **e**'s having **P** is caused by a pumpkin having **P** (i.e., by the movement of a pumpkin), then I am aware of a pumpkin's movement. I see it move. If there is no such object, I am aware of movement without being aware of any moving object and, thus, without being aware of any object's movement. I hallucinate or imagine something moving.

This account works nicely enough for phenomenal experiences that are, in some ordinary sense, **of** or **about** things (mental states the having of which makes us perceptually aware of things). For this reason it is tempting to try extending the account to mental states that are, in some related (but, perhaps, different) sense, also **of** or **about** things: beliefs, desires, intentions, hopes, and, in general, the propositional attitudes. Just as my experience of movement has a property that makes it a **p**-awareness of movement, perhaps my belief (i.e., my **f**-awareness) that some object, **o**, is moving is, likewise, an internal state having a property, **B** (not itself movement), a property the having of which makes an internal state into a conceptual representation or depiction (i.e., an **f**-awareness) of movement. Just as the English word "movement" need not itself be moving in order to figure in a representation of something as moving (e.g., a sentence), so too, perhaps, there are symbols (concepts?) in the head that do not (or need not) have the properties they represent objects as having. If this were so, then thoughts, just as experiences, would be mental states that would not (or need not) have the properties we become **f**-aware of in having these thoughts.

If this were so, then we could tell the same story about awareness of these states that we told about our **f**-awareness of perceptual experiences. We become **f**-aware that we are having thoughts about movement (internal states with **B**) by actually thinking about movement. It is the movement we think **about**--the content of our thought--that (when we introspect) "tells us" **what** we are thinking about and, hence, if we understand what thinking amounts to, **that** we are thinking about movement (not color or shape). Just as I reach the **f**-awareness that I am experiencing movement from a **p**-awareness of movement, so too I reach an **f**-awareness that I am thinking that **o** moves from an **f**-awareness that **o** is moving.[15](#)

I will not pursue this line of thought any further here since it seems like a more or less obvious extension of the present theory, and there are much more difficult problems to face. This treatment of belief, judgment, and thought is, I think, merely a version of the view that Tyler Burge has promoted about the introspective accessibility of externally grounded belief content. Burge's idea is that my second order belief (the content of which is that I believe **o** moves) inherits the conceptual content **MOVES** from the content (that **o** moves) of my first order belief. Hence, if I really do believe (1st level) that **o** moves, I must be right in thinking (2nd level) that **that** (viz., that **o moves**) is what I think. The present theory is a version of this idea since a (2nd level) **f**-awareness that I am aware (at the first level) that **o** moves is privileged because the property (viz., movement) I am (1st level) **f**-aware of (= believe something has) "tells me" more or less infallibly what content-property my 1st level belief has--viz., **M**, a conceptual awareness that something is moving.

Unlike the propositional attitudes, though, there are a great many mental states (emotions, moods, and so forth) that, unlike experiences and thoughts (both of which seem representational at some level), do not, at least not on the surface, make us aware of anything (either of objects, properties, or facts). And it is these states that pose the real problem for the present account. When I am hungry, have a splitting headache, or am depressed, for instance, I seem to be aware of mental objects (the hunger, the ache, the depression) and their properties (the headache is **splitting**, the hunger **gnawing**, the depression **constant**). Surely in such cases I am aware not only of the fact that I have certain feelings or am in a certain mood, but also aware of the feelings and moods themselves--the pain, the hunger, the depression.

This, I concede, is a natural way to talk about feelings, emotions, and moods. What I think worth questioning, though, is whether this way of talking doesn't embody a confusion between **awareness** of something (an act) and the **something** of which we are aware (the object of that act)--a confusion that is fostered by a failure to distinguish between the different things we can be aware of. Why suppose, for instance, that feelings of hunger are internal mental objects (i.e., conditions, states) we are **o**-aware of and not awarenesses (i.e., experiences) of certain internal (non-mental) objects--a chemical state of the blood, say? Just as we conceived of visual experiences as internal states having the property of being awarenesses of **P** (for some **P** of an external **o**), why can't hunger be similarly conceived of as an internal experience (a **p**-awareness) of the properties of an **internal o**? Why can't an itch in one's arm be thought of **not** as something in the arm (brain?) one is **o**-aware of, but an **o**-awareness (in the head) of a physical state of the arm? Why can't we, following Damasio (1994), conceive of emotions, feelings, and moods as perception of chemical, hormonal, visceral, and musculoskeletal states of the body?

This way of thinking about pains, itches, tickles, and other bodily sensations puts them in exactly the same category as the experiences we have when we are made perceptually aware of our environment. The only difference is that bodily sensations are the experiences we have of objects in the body (the stomach, the head, the joints, etc.), not objects outside the body. What gives these sensations their phenomenal character, the qualities we use, subjectively, to individuate them, are the properties these experiences are experiences of, the properties (of various parts of the body) that these experiences make us **p**-aware of (irritation, inflammation, time of onset, injury, strain, distension, intensity, chemical imbalance, and so on). What gives a (veridical) visual experience of an orange pumpkin **its** particular quality (**P**) are the qualities of the pumpkin (viz., **P**) that this experience (in virtue of being **P**) is an experience of. Likewise, what gives headaches their particular quality (what distinguishes them from pains in the back, itches, thirst, anger or fear) are the properties (and these include **locational** properties) that these experiences are **p**-awarenesses of. Just as one becomes aware of external objects in having visual and olfactory experiences, so one becomes aware of various parts of the body (and the properties of these parts) in having bodily sensations--e.g., pain. Having a headache is not an awareness--certainly not an **o**-awareness--of a mental entity: a pain in the head. The only awareness one has of pain is an **f**-awareness that one has it. In saying that one feels pain what one is really saying is not that one is **o**-aware of something mental (viz., a pain)--but that one feels (is aware of) a part of the body the feeling (awareness) of which **is** painful (is pain). Once again, the phenomenal qualities (= qualia) of these mental states are not the properties of those parts of the body one becomes **p**-aware of in occupying these states. They are, instead, **awarenesses** (= **S**) of these properties (**P**). We do not have to be aware of the state (**e**) itself (or **its** properties **S**) to be aware--authoritatively aware--that we occupy a state of that phenomenal kind. **P** gives our conscious awareness its phenomenal character and tells us what kind of experience we are having.

But can such an account possibly work for **all** experiences--for love and hatred, joy and depression, ennui and anxiety? Even if such feelings are not all properly classified as "experiences," they all seem to have an associated phenomenology that calls out for explanation. Can what-it-is-like to have these feelings or experiences always be interpreted (using the model of perceptual experiences) not as internal objects we are **o**-aware of, but as awarenesses of the properties of internal objects? Can the entire phenomenology of the conscious mind be boiled down to the properties (of bodily parts and external objects) that we are **p**-aware of

in having these experiences?

Whether it can or not, this is clearly the direction suggested by our analysis of perceptual experience. It may turn out, of course, that even if our account of perceptual experience is on target, perceptual experiences are unique. Other feelings, moods, and emotions--itches, pains, hunger, anger, jealousy, pleasure, and anxiety--may have a phenomenal character that they get from other sources. If the story I have told about perceptual experience is plausible, though, it is tempting to try extending it to other qualia-laden mental states along similar lines. I leave the argument that it can be so extended to another time.

4. Prerequisites of Self-Awareness

Fact-awareness, unlike **p**-awareness and **o**-awareness, requires an understanding of what one is aware of.¹⁶ One cannot be **f**-aware that **o** is an apple without understanding, at some conceptual level, what an apple is. If a child (or an animal) doesn't know what an apple is, this does not prevent it from being **o**-aware of apples or **p**-aware of their properties (this presumably happens when the child is a few months old), but it prevents it from being **f**-aware that the apples (she is **o**-aware of) are apples.

Since the account developed in §2 and §3 identifies our awareness of our own (not to mention everyone else's) experiences with **f**-awareness, it requires of anyone aware of the P quality of her own experience an understanding, a conceptual grasp, of the property P (and, thus, of **P** which e 's having P is an awareness of). If S doesn't know what it is to be P, then even if S has a P -experience (i.e., an experience of **P**), S cannot be aware of this. S will be "blind" to it. Since the mind's awareness of itself is always (according to this account) **f**-awareness, there is no way one can be aware of one's mental states without a mastery of the relevant concepts. The senses make you aware (i.e., **o**-aware and **p**-aware) of the world (and, if we can generalize, your own body) before you have developed the concepts needed for understanding what you are aware of, but, lacking a "mental sense" (a sense that allows us to become **o**-aware of the mind and **p**-aware of its properties) we must first develop the required concepts before we can be made conscious of what transpires in our own minds.

This result may seem mildly paradoxical so let me take a moment to soften the mystery. Imagine a naive (about numbers and shapes) child shown brightly colored geometrical shapes. The child, possessing normal eyesight, sees the difference between these figures in the sense that the pentagons look (phenomenally) different from the triangles and squares. How else explain why we could teach her to say "pentagon" when (and only when) she saw a pentagon? In the terminology we have already introduced for describing these facts, the child (before learning) is **o**-aware of circles, squares, and pentagons, and **p**-aware of their shapes. The child hasn't yet been taught what a circle, a square, or a pentagon is, so it isn't (yet) **f**-aware of what these figures are, but that doesn't prevent it from being aware of the figures themselves and **p**-aware of their (different) shapes.

Is the child also aware--in **any** sense--of what its experience of these shapes is like, of what it is like to see a pentagon? No.¹⁷ Lacking the concept of a pentagon (not to mention the concept of awareness) the **only** awareness a child has when it sees a pentagon is an awareness of the pentagon and its shape. It cannot be made aware of its experience of the pentagon until it develops the resources for understanding what pentagons are and what it means to be aware of (experience) them. Only then can it become aware of its awareness of pentagons. In having an experience of a pentagon, the child is, to be sure, aware (i.e., **o**-aware) of a pentagon and **p**-aware of its distinctive shape. What the child lacks is not a visual awareness (experience) of pentagons, but an awareness of pentagon experiences. Awareness of experience awaits development of the understanding, an understanding of what property one is **p**-aware of in having the experience. If you lack this understanding, you can still be aware of pentagons, but you cannot be aware of your pentagon experiences. It

is like awareness of neutrinos. Being what they are (i.e., unobservable: we do not have a sense organ that make us o-aware of them), neutrinos are objects one cannot be aware of until one learns physics. Unlike pentagons, you have to know what they are to be aware of them.

The mind becomes aware of itself, of its own conscious experiences, by a developmental process in which concepts needed for such awareness are acquired. You don't need the concepts of PENTAGON or EXPERIENCE to experience (e.g., see or feel) pentagons, but you do need these concepts to become aware of pentagon experiences. As psychologists are learning (in the case of such concepts as EXPERIENCE), this doesn't happen with children until around the ages of 4-5 years. In most animals it never happens. The mind is the first--indeed, the **only**--thing we are aware with, but it is among the last things we are aware of.

REFERENCES

Chisholm, R. 1957. **Perceiving**. Ithaca, NY; Cornell University Press

Damasio, A. R. 1994. **Descartes' Error: Emotion, Reason, and the Human Brain**. New York: Avon Books.

Dretske, F. 1995. **Naturalizing the Mind**. Cambridge, MA; MIT Press/A Bradford Book.

Frisby, J. P. 1980. **Seeing: Illusion, Brain and Mind**. Oxford: Oxford University press.

Hardcastle, V. G. 1994. Psychology's Binding Problem and Possible Neurobiological Solutions. **Journal of Consciousness Studies**, 1:1, pp. 66-90.

Jackson, F. 1986. What Mary Didn't Know. **The Journal of Philosophy** LXXXIII, 291-95.

ENDNOTES

1. Locating the mind (thoughts, experiences, etc.) inside the head is not a denial of externalism about the mind. Externalism is the view that what makes a mental state the mental state it is are factors existing outside the person. Externalism is consistent with (indeed, I think it implies) the claim that mental states are inside the person. What is external (according to externalism) are not the thoughts and experiences themselves, but (some of) the factors that make them thoughts and experiences. Money is no less in my pocket by having the factors that make it money existing outside my pocket.
2. The parenthetical qualification is necessary because, of course, there are exceptions. Sometimes there is something existing in the head of a person having an experience that has the properties that person is aware

of in having that experience. Think, for example, of seeing your own teeth (in a mirror) or a human brain. In seeing someone else's brain, something in your head (viz., your brain) has the properties (i.e., gray, brain-shaped, etc.) that you are aware of. This, of course, is the exception. Typically, we do not see things that look like things in our head. I will here be concerned with visual experiences (e.g., that of seeing or--in hallucination--seeming to see, a pumpkin) the phenomenal qualities of which (color, shape, movement, texture, distance) are not properties of anything in the brain of the experiencer. For this reason I will generally omit the qualification "or needs to have" and simply assume that nothing in the head has the properties that one is aware of in having the experience.

I later (§3) return to other exceptions to (2), proprioception--e.g., headaches, itches, cramps, and thirst, bodily sensations which (according to some) are internal and have the properties of which one is aware in having these sensations. For the present I mean to be focusing exclusively on perceptual modalities--hearing, seeing, smelling, tasting, and feeling--which are of (or purport to be of) external objects and conditions.

3. I use these terms interchangeably when they are followed by a word or phrase specifying what we are aware (conscious) of.

4. Throughout this essay I will use "o" to designate an external physical object (e.g., a pumpkin), "e" a mental particular (e.g., a visual experience of o), "**P**," "**M**," "**C**," properties of o, and "P," "M," and "C" (Old English font) properties of e.

5. I assume that universals (and, *a fortiori*, the universals one is **p**-aware of) are neither inside nor outside the head. Awareness of colors, shapes, and movements, when there is no external object that has the property one is aware of is not, therefore, a violation of (2). A measuring instrument (a speedometer, for example) can (when malfunctioning) be "aware of" (i.e., represent) a speed of 45 mph without any object (inside or outside the instrument) having this magnitude.

6. I count token events (e.g., particular battles, deaths), states of affairs (my lamp being on, your key being lost), conditions (the mess in his room), situations (= conditions), and processes (my tooth decaying, the maple tree shedding its leaves) as objects. They are, to be sure, peculiar objects about which a great deal more could (and probably should) be said (especially about our awareness of them), but I do not have the time to discuss these complications. For my purposes it is enough to note that token events, states, and conditions are spatio-temporal particulars which are (like apples and stars) distinct from both the facts and properties from which I distinguish objects. Events and conditions have a (temporal) beginning and an end. Properties do not. Neither do facts. As Dostoyevsky put it, a person's suffering (an event or condition) ends, but the fact that the person suffers endures forever.

7. Depending on the property in question, it will sometimes sound odd to say that one is aware of o's **P**-ness without being aware of o. For example, can one become aware of the second-hand's movement without being aware of (seeing, feeling, or somehow sensing) the second hand itself? Can one be aware of **my** movement (executing a dance step, say) by observing another person execute the same movement?

We are sometimes, of course, interested not in universal properties but in particular instantancings of these universal properties--what philosophers call **tropes**. Though two objects, **a** and **b**, are the same color, or execute the same movement (i.e., instantiate the same universal property **P**) **a**'s color (trope) is not the same as **b**'s color (trope) nor is the movement (trope) of **a** the same as the movement (trope) of **b**. As a fact about ordinary usage, I think we generally mean to be referring to something like a trope when we speak of **a**'s movement or the movement of **a**--a universal property, movement, *as realized in a particular individual*. We perhaps come closer to the universal property in speaking of the movement that an individual executes.

My claim that property-awareness is independent of object-awareness, then, is a claim about our awareness

of universal properties, the properties objects can share with other objects, and not an object's particular "value" (trope) of this shareable property.

8 This gives rise to what psychologists call *the binding problem*: how does the nervous system "pull together", so to speak, all the information about different properties into an unified experience of a single object--an object that has all those properties? How does the brain put this shape together with this color and that movement?

9 "Virtual" because there are other relations between these forms of awareness that I must (given my limited purposes here) ignore. For instance, it might be argued (plausibly I think) that **o**-awareness requires **p**-awareness of some properties--if not the properties the object actually has, then the properties it appears to have. You can't perceive (thus be aware of) an object unless it appears some way to you, and if appearing ϕ to S is a way of S being **p**-aware of the property ϕ , then **o**-awareness requires **p**-awareness of ϕ for some property ϕ . This, I think, is one possible (and for my money, the only plausible) way of construing the doctrine that all seeing is seeing as.

I am willing to concede some degree of dependence. It will not be important for the use to which I will put these distinctions. I will exploit only the *degree* of independence my examples have already established

10. I will typically use movement and shape as my examples of properties which we can (and do) become aware in visual perception. I could as well use (I sometimes do use) color, but for obvious reasons (relating to the thesis I am proposing) I prefer to avoid the "secondary" properties and concentrate on the "primary" since some people will surely insist that it is not the pumpkin that is (phenomenally) orange, but our experience (or some proper part of our experience) of the pumpkin. The only relevant property that the pumpkin has is a disposition to produce orange e's (pumpkin experiences) in properly situated perceivers.

I do not myself share this view of color (and the other so-called secondary properties). I do not see how any materialist can (see (1) and (2) above and the discussion below). I take color, the surface property of things that we experience in experiencing objects, to be an objective property of the objects we experience. For this reason I sometimes use color, smell, sounds, etc. in my examples. For those who find this realism objectionable (or question-begging), please substitute an appropriate primary property-e.g., movement shape, orientation, extension--whenever I use an objectionable "secondary" property. I don't think anything important hangs on my choice of examples.

11. For skeptics it often *ends* here. If **f**-awareness is a form of knowledge, the only fact-awareness is of mental affairs--i.e., facts of the form: that e is P .

12. If one is a reductive materialist (like me) one will take P to be some physical property of the brain, a property the having of which makes an internal state into an experience, a p-awareness, a representation, of movement. I try to give an account of this property in Dretske 1995. For present purposes, though, reductive accounts of P are beside the point. All that is needed to achieve compatibility with (1) and (2)) is that P is not equal to **P**--i.e., the property (i.e., P) of an experience that makes it an experience (a **p**-awareness) of **P** (i.e. movement) is not (or need not) itself be P (the property we are aware of in having the experience).

13. There is the fact that she now occupies states having P , but this doesn't count since this fact wasn't a fact until she recovered her color vision. What Mary doesn't know is supposed to be a fact about the world as it existed *before* she recovered her color vision.

14. When Mary, after first seeing red, says "So *this* is what it is like to experience (see, be aware of) red," the "this" cannot refer to what she is aware of. For what she is aware of is the color red and this is not to be identified with her awareness of red. Red is not at all what it is like to experience red.

15. Of course, if o isn't in fact moving, then I can't be f-aware that it is moving. It merely seems (in some doxastic sense of "seems" that is distinct from the phenomenal) that o is moving.
16. I take f-awareness (of the fact) that o is P to imply knowledge (of the fact) that o is P, and the latter to imply belief that o is P. Belief, in turn, requires possession of concepts corresponding to the (obliquely) occurring expressions (i.e., "P") in the factive clause that specifies what is believed. Hence, one cannot be f-aware that o is P without possessing the (or a) concept corresponding to P.
17. If the child understands that this figure (a circle) is different from that figure (a square) it can (assuming it has the concept EXPERIENCE) be aware that its experience of this is different from its experience of that without being aware at any more determinate level of what either experience is like. If you can distinguish (by taste) wines, you don't have to know what feature(s) of the wine you are tasting (i.e., you do not need to be able to identify wines having that feature) to know that wines differing in that feature taste different.