

Conscious Occurrent Thought

Abstract. In this paper, I begin with the question ‘What does conscious occurrent thought consist in?’ I first argue that the notion of ‘access-consciousness’ cannot provide a satisfactory answer and that we need to appeal to phenomenological properties. If this right, a further question arises about what kind of phenomenological features are required. Can conscious occurrent thought be accounted for solely in terms of sensory phenomenology, including both verbal and non-verbal imagery? I will argue that the answer is ‘no’, and that we must appeal to what is now often called ‘cognitive phenomenology’ in order to say what conscious occurrent thought consists in.

1 Consciously perceiving & consciously thinking

It is generally accepted that the difference between consciously occurrently seeing a red rose and any subpersonal or non-conscious occurrent processing that may take place during this visual episode is accounted for partly in terms of phenomenology. Consciously seeing a red rose involves color phenomenology and color-shape phenomenology, whereas non-conscious visual processes do not.¹

What about conscious thought? Consider a subject who occurrently and consciously thinking that grass is green or occurrently or consciously entertaining the possibility of Sarah Palin being the next US president.² Conscious occurrent thoughts also need to be distinguished from various kinds of occurrent non-conscious mental processing. When a subject reads a sentence of a language she understands, for example, there may be a lot of subpersonal occurrent processing involving the rules of syntax. At this point, I only want to note that there is a difference between conscious occurrent thought and non-conscious but occurrent mental processing.

Suppose we allow, as I think we can, that non-conscious occurrent mental processing can count as thought. Then the question is, what is distinctive of conscious thought? Allowing that there is non-conscious occurrent thought, we get the question ‘What makes occurrent thought conscious thought?’ So—I’m going to focus on conscious occurrent thought and ask ‘What (exactly) does it consist in?’³

I will argue that neither stories about the neural machinery involved in conscious thinking, nor stories about the functional properties conscious thoughts typically have, can account for what a conscious occurrent thought consists in. Rather, we need to appeal to phenomenological features to say what a conscious occurrent thought consists in. If this right, a further question arises about what kind of phenomenological features are required. Can conscious occurrent thought be accounted for solely in terms of sensory phenomenology, including both verbal and non-verbal imagery? I will argue that the answer is ‘no’, and that we must appeal to what is now often called ‘cognitive phenomenology’ in order to say what conscious occurrent thought consists in.

I understand cognitive phenomenology to be a kind of phenomenology associated paradigmatically with conscious thought, but also with conscious perception and emotion, that is something essentially over and above sensory phenomenology. For example, there is

¹ Each sensory modality in turn has certain phenomenological features typically or indeed essentially associated with it. (For my purposes here, I’ll put aside issues concerning cross-modal phenomenological effects.)

² I am using ‘conscious occurrent thought’ to cover consciously and occurrently judging, wondering, doubting, desiring, supposing, entertaining a proposition and so on.

³ I don’t expect to be able to give a complete answer. Rather, I will focus on what I take to be certain features that are essentially involved.

something it is like to think that $2+2=4$, or that temperance is a virtue, something that is *irreducible* to any sensory phenomenology that may be associated with these thoughts. This is the standard use of the term ‘cognitive phenomenology’ and should be distinguished from certain ‘deflationary’ uses.

Levine (2011) offers one such deflationary use in allowing that there might be such a thing as what he calls ‘impure cognitive phenomenology.’⁴ He considers the phenomenon of sensory experience being ‘cognitively inflected’. The idea is that although all phenomenology is sensory phenomenology, cognitive states can influence the way the “sensory manifold” is experienced in such a way that two distinct thoughts can result in the same set of sensible features being experienced differently. (An x-ray scan looks different to a radiologist from the way it looks to a non-expert; if you know bananas are yellow an achromatic banana may look yellow.)⁵

One of the key issues here, which I will come back to later, is whether or not the content of thought is experienced directly or only indirectly. In Levine’s deflationary use of ‘impure cognitive phenomenology’, the content of thought is only indirectly experienced as something which can affect the way the sensory manifold is experienced.

Another suggestion is that we use the term ‘cognitive phenomenology’ to denote any phenomenology whatever that is experienced as tied up with a particular conscious occurrent thought, even if we think that in the end all phenomenology is sensory. But this use of the term ‘cognitive phenomenology’ obscures the central question of the cognitive phenomenology debate, which is whether there is a kind of phenomenology entirely distinct from sensory phenomenology.

2 Access Consciousness & Cognitive accessibility

I am concerned with conscious occurrent thought understood generally to cover conscious judging, desiring, wondering and so on. How does this relate to Block’s notion of access consciousness as opposed to phenomenal consciousness?⁶

In the original 1995 definition, Block defined “‘A-consciousness’ as (roughly) ‘poised for control of speech, reasoning and action’”, but in 2002 added the following to the definition:

A representation is A-conscious if it is broadcast for free use in reasoning and for direct “rational” control of action (including reporting)...[A]-conscious representations are ones that are broadcast in a global workspace. What makes a typical A-conscious representation A-conscious is what getting to the Executive module sets it up to do, namely affect reasoning and action.”⁷ (Block 1995/2002, pp. 206-209)

⁴ See also Carruthers (2000).

⁵ I think these phenomena are better labelled ‘cognitive penetration’. For more on this notion see e.g. Siegel (forthcoming) and Macpherson (forthcoming).

⁶ Block 2002, p. 209.

⁷ Block 1995, ‘On a Confusion about a Function of Consciousness’, *Behavioral and Brain Sciences* 18: 227-47. Block 2002, ‘Concepts of Consciousness’ in D. Chalmers (ed) *Philosophy of Mind: classical and contemporary readings*, pp. 206-218. (OUP)

Block added the notion of being ‘broadcast in the global workspace’ to capture the idea that A-consciousness is an occurrent phenomenon.⁸ So, there seem to be the following central elements to a state’s being A-conscious:

[i] that it be poised to play a certain causal role in the overall cognitive system;

and

[ii] that it be broadcast.

[ii], I take it, implies

[iii] that it is occurrent.

In subsequent writings, Block has (temporarily?) given up the phrase ‘access consciousness’ in favour of the phrase ‘cognitive accessibility’. Block 2007 says, “Access-consciousness was my term for approximately what I am calling “cognitive accessibility” here.” (p. 486).⁹ In his 2007 BBS paper Block argues that phenomenal consciousness overflows cognitive accessibility, understood as that which underlies reporting.

The notion of ‘action’ in Block’s phrase ‘direct “rational” control of action’ denotes ‘intentional action’, and should include bodily action, mental action involving relations between mental states, and responses to requests to perform certain mental actions.

The reference to ‘rational’ is meant to rule out the kind of automatic behaviour that occurs in blindsight. In the ordinary blindsight case, mental states that guide behaviour are not under the control of the subject. They are responses to either verbal prompts asking the blindsighter to guess what’s in her “blind” visual field, or physical objects the blindsighter can successfully navigate around.¹⁰ In the case of verbal prompts, the fact that the blindsighter guesses means that, from her own perspective, she does not have a reason for answering as she does. In the case of physical prompts, the blindsighter does not from her own perspective have a reason to move as she does. The blindsighter is completely amazed that she is able to successfully navigate around physical objects.

We have, then, the notion of access consciousness or cognitive accessibility. What makes a cognitively accessible state accessible? It’s plausible that

[a] if a thought T is conscious and occurrent at time t1, then T is cognitively accessible at time t1, (barring various forms of impairment).

In a case where a conscious thought is not appropriately connected up to action, for example, we have a conscious thought that is accessed but not poised for global control. It is also important to point out that one is normally able to report one’s conscious thoughts, but this is not always so.

But it’s the other direction that really concerns us.

⁸ Block 2002 says, “My guide in making precise the notion of A-consciousness is to formulate an information processing correlate of P-consciousness that is not ad hoc and mirrors P-consciousness as well as a non-ad hoc information processing notion can.” (p. 208). Given that P-consciousness is undoubtedly occurrent, A-consciousness better be occurrent as well.

⁹ It is also interesting to note that in this same paper he decides to give up the term ‘phenomenal consciousness’ in favor of ‘phenomenology’, p.484.

¹⁰ <http://www.youtube.com/watch?v=xekRNLNzrr8&feature=related>

[b] If T is cognitively accessible at time t1, then T is consciously occurrently thought at time t1

[b] seems false. T can be

[i] poised for global control

without being conscious

and

[ii] broadcast for free use in reasoning

without being conscious.

Take [i] first. As stated, [i] is a very weak claim. Suppose that at t1 I have the dispositional thought or belief that Obama has two lungs, although I have never explicitly entertained this thought. (It is therefore what used to be called an ‘implicit’ belief as opposed to an ‘explicit’ belief, i.e. a belief that has at some point been consciously entertained.) This thought is poised for control of speech and action in the clear sense that if someone asks me if I have this belief, I can *immediately* report that I do. (The same qualifications concerning reportability discussed above apply here.)

Presumably, Block had something other than these kinds of dispositional thoughts in mind. Perhaps we should strengthen [i] to

[i]* optimally poised for global control

However, consider Strawson’s 1986 notion of ‘explicit+’.

If you are reviewing two courses of action, X and Y, which you believe to be the best (or only) ones open to you, and if, having assessed the pros and cons of X in conscious, occurrent thought, you then pass to the assessment of Y in the same way, your belief that you can perform an action of kind X may ... be explicit+ in the present sense ... [it may be]—here the ineliminable vagueness—‘near at hand’ in the mind, present to the mind in some way in which a belief or thought can be present to mind without actually being consciously occurrent.¹¹

Clearly there is a difference between my dispositional belief that Obama has two lungs and the belief that I can do action X in Strawson’s case. I’ll consider two ways of interpreting Strawson’s case. On the first interpretation, Strawson’s case suggests that a state may be optimally poised for global control without being occurrent. And since a state’s being occurrent is necessary for its being conscious, being optimally poised for global control, at least, is not sufficient for capturing what an occurrent thought’s being conscious consists in.

As pointed out earlier, broadcasting implies some sort of occurrent dissemination. So Block’s definition, which requires that the state be (optimally) poised for global control and

¹¹ pp. 117-118.

broadcast (presumably it is poised for global control *because* it is being broadcast) does after all secure the requirement of occurrency.

However, a second way of interpreting Strawson's example is that when a thought is explicit+, 'near at hand in the mind' in Strawson's sense, it is in fact *occurrent*, although it is not conscious. For example—it may perhaps be occurrent in some state of activation of working memory. The point is that broadcasting on its own does not seem to distinguish non-conscious or subpersonal occurrent dissemination from conscious occurrent dissemination. In the case under discussion, the belief about action X can be seen as being broadcast and thus occurrent, yet still below the threshold of consciousness.

In fact, Block's superblindsight case seems to provide an example of a content's being access-conscious, broadcast and occurrent, and yet subpersonal or non-conscious. (His superblindsighter is introduced as an example of A-consciousness without P-consciousness.) Although a blindsight patient can only guess what's in his visual field upon prompting, a superblindsighter can be trained to prompt himself to guess what's in his blindfield without being told to guess. He spontaneously offers that he knows that there is an 'X' in his visual field although he can't see it. Visual information about his blindfield just pops into his thoughts. The perceptual content that there is an 'X' in his visual field is A-conscious but not P-conscious. Block goes on to characterize the case as follows:

Of course, the superblindsighter has a thought that there is an 'X' in his blind field that is both A-conscious and P-conscious. But I am not talking about the thought. Rather, I am talking about the state of his perceptual system that gives rise to the thought. It is this state that is A-conscious without being P-conscious.¹²

In order for this A-conscious state of his perceptual system to give rise to a thought it seems it must be occurrent, and it's broadcast by definition of 'A-consciousness', but it's also subpersonal or non-conscious by definition of blindsight.

One immediate puzzle is then why Block is calling a subpersonal state conscious. It's confusing. But if we switch back to the term 'cognitively accessible', we can simply and clearly say that the state of the superblindsighter that gives rise to the thought that there is an X in his visual field is cognitively accessible and occurrent but not conscious.

If this is right it seems that we can make sense of a state—e.g. a thought being broadcast and poised for global control independently of the idea that it is conscious. What is missing?

3 What does a conscious occurrent thought consist in?

It seems plain that it is a necessary condition on a thought's being conscious that it is occurrent. And it also seems plain that there is a difference between conscious occurrent thought and occurrent thought that is not conscious. So, what makes this difference?

The conclusion of the last section was that

[i]* optimally poised for global control

and

[ii] broadcast in the global workspace

¹² 1995/2002, p. 211.

although perhaps necessary conditions for a thought's being consciously occurrent are neither individually sufficient nor jointly sufficient. Since being broadcast and optimally poised for global control seems to be as good a functional property as any we're likely to find, when trying to give a characterization of conscious thought, we can I suggest conclude that no additional functional property is going to push a subpersonal occurrent thought over the threshold into the conscious field. It may be that being broadcast in the global workspace includes something that I have not mentioned, but if so, what is it? My proposal is that what needs to be added to an occurrent thought to push it into the conscious field are phenomenological properties. The question now becomes, which phenomenological properties, sensory or cognitive?¹³

Most philosophers accept that there are sensory-phenomenological properties, e.g. what it's like to see colors, taste tastes, hear sounds and so on, but most also reject that there are cognitive-phenomenological properties. So, according to these philosophers, if phenomenological properties explain what a conscious occurrent thought consists in, they must be sensory-phenomenological properties.

So let's begin by considering this proposal — that conscious occurrent thought consists in the thought's having certain sensory phenomenological properties. Consider a subject, call him 'John', who has the conscious occurrent thought that grass is green at a number of different times.

[i] t1: John thinks that grass is green and has an image of a patch of green while thinking this thought. (For simplifying purposes, suppose that his images are restricted to the green patch. This kind of restriction will be assumed for all of the cases considered below.) So, the claim would be that the conscious occurrence of John's thought essentially involves, or is partly constituted by, whatever else it also necessarily involves, his having an image a patch of green.

[ii] t2: John thinks that grass is green, but this time he imagines a patch of green grass. In this case, therefore, the claim is that John's thought is consciously occurrent because it essentially involves or is at least partly constituted by his imagining a patch of green grass, whatever else it also involves or necessarily involves.

That John could have these different images while thinking that grass is green is undeniable, and if sensory images are what conscious occurrent thought partly consists in, then there is presumably some possible variation in what these images can be.

[iii] t3: Suppose that John mows a lot of lawns. He spends his whole summer mowing lawns. So, now suppose John thinks grass is green at t3. This time, however, instead of having images of green patches or patches of green grass he has an image of his lawnmower, and that's all he imagines. In this case, therefore, that John's thought is conscious and occurrent essentially involves his imagining a lawn mower.

¹³ In this paper I am going to put aside the proposal that a conscious occurrent thought consists in a higher-order thought directed at it. The reason is that I am unsure of how higher order theories account for the phenomenology of conscious states. The confusion is best seen when considering what is now called the 'mismatch problem'.

[iv] t4: Now suppose that John has an image of a red dragon while thinking that grass is green, and that's all he imagines. So, the claim is that John's conscious occurrent thought that grass is green essentially involves his imagining a red dragon.

On the face of it, it seems we can imagine the same sort of cases for verbal imagery.

[v] t5: John has the conscious occurrent thought that grass is green while having the verbal image of the word 'green'. So, John's conscious occurrent thought that grass is green essentially involves his having verbal image of 'green'.

[vi] t6: Let's suppose that John understands German as well as English. At T6 when he has the conscious occurrent thought that grass is green he has a verbal image of the word 'grun', thus the conscious occurrence of his thought essentially involves his having the verbal image 'grun'.

[vii] t7: Let's again suppose that John has mowed a lot of lawns. At T7 when he has the conscious occurrent thought that grass is green he has the verbal image of the word 'lawnmower', and so the conscious occurrence of his thought essentially involves his having the verbal image 'lawnmower'.

Once the occurrence of the verbal image of the word 'lawnmower' is seen as plausible explanation of what the conscious occurrence of his thought consists in, any number of tokened word-images seem equally possible.

What do these cases show?

[1] If conscious occurrent thought simply consisted in having only verbal or non-verbal sensory imagery, there would be no restriction on what that imagery could be. John, in the above example, could be imagining green patches, patches of green grass, lawnmowers, the word 'lawnmower', the word 'dragon' and so on.

However,

[2] If no restriction applies on the kind of sensory phenomenology the subject can have when thinking that grass is green, then it seems completely fluky and arbitrary which kind of sensory phenomenology makes which thoughts consciously occurrent.

One is bound to wonder how having an image of a red dragon explains what the conscious occurrence of the thought that grass is green consists in. There seems to be no connection. If this is right, it seems that we can conclude that

[3] the simple assertion that sensory phenomenology explains (at least in part) what is essential for a thought's being consciously occurrent cannot be right.

What is needed is some sort of connection between the phenomenology that explains what makes a conscious occurrent thought conscious and the thought itself. So,

[4] Whatever phenomenology that makes a particular occurrent thought a conscious thought cannot be completely arbitrary. It may be a very personal matter but something needs to provide the linkage.

One obvious problem with the simple sensory approach so far considered is that the *content* of John's thought is completely divorced from the kinds of *sensory phenomenology* whose occurrence is being supposed to be what makes it true that the thought is consciously occurrent. In John's red dragon case, it presumably will be a personal symbolic connection — but how will it work? One plausible way of linking the kind of phenomenology that could be involved in explaining conscious occurrent thoughts is by reference to the content of the relevant thought.

[5] The phenomenology that makes a particular occurrent thought a conscious thought must be linked to the content of that thought.

One proposal for the sensory phenomenology approach is to tie the content of thought to verbal imagery. For example, Prinz (forthcoming) suggests that

sentences do not merely stand in for thoughts, but [they] actually constitute thoughts. When we produce sentences in silent speech, they issue forth from unconscious representations that correspond to what those sentences mean (these are perceptual representations if empiricism is true). Arguably, the sentences inherit their truth conditions from the unconscious ideas that generate them. So produced, these sentences aren't arbitrary marks, but rather meaningful symbols. If we define a thought as a mental state that represents a proposition, then mental sentences qualify as thoughts. (p. 13)

There are two problems with this proposal. First, it may be the case that often when having conscious thoughts we have verbal imagery of the words we use to express those thoughts, but is this necessarily true? It doesn't seem true that every time a subject has a conscious occurrent thought, the subject must have verbal imagery of the sentence we typically use to express that thought. If no verbal imagery is necessary, then we once again we have to rely on non-verbal imagery, so long as we think that conscious occurrent thoughts must have sensory phenomenology, and so we seem to be faced with the same problem as above. The content of a given particular thought does not seem to necessitate any particular non-verbal imagery.

One might say that the unconscious content does not need to necessitate any particular sensory phenomenology, but only provide a link between the content and the sensory phenomenology attached to the experience in question. This proposal highlights the second problem. [6] seems true and thus makes any account that appeals to unconscious content as that which restricts the phenomenology in question problematic.

[6] If an occurrent thought is a *conscious* thought the content of the thought must in some sense be consciously occurrent.

If one claims that the content is unconscious, then it looks like what one is saying is that the thought is really unconscious and there's some associated sensory phenomenology that is conscious. So, thoughts themselves would never be conscious, which is an implausible result.

My positive proposal then involves the idea that any phenomenology that is proposed as part of what the conscious occurrence of a particular thought consists in must be connected to

the content of that thought. And I now propose that the only plausible way to explain the conscious occurrence of the content is to simply claim that there is cognitive phenomenology associated with thinking thoughts with particular contents. On this view then

[7] associated with each content are cognitive phenomenological properties that account for what it is like to think a thought with that content.

Moreover,

[8] If and in so far as we always have direct access to the contents of our conscious thoughts, we do so via their cognitive phenomenological properties.¹⁴

In conclusion, I began with the question ‘what does conscious occurrent thought consist in?’. I first argued that the notion of ‘access consciousness’ cannot satisfactorily answer this question. We need to appeal to phenomenological properties, and I argued that those phenomenological properties must be cognitive-phenomenological properties.

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¹⁴ One may propose that there is some sense/feeling phenomenology one always has that is part of having every conscious thought. One could then say it was necessary in the sense that you couldn’t have conscious thoughts at all without having this sense/feeling phenomenology, but it still wouldn’t be in any way constitutive of the thought’s having the content it has, or of the content’s being conscious.