The limits of sensory phenomenology: Jesse Prinz on conscious thought

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When we consciously think a thought or entertain a certain proposition we undergo a certain experience. We can say that the phenomenal character involved in such an episode is an instance of cognitive phenomenology, at least in the sense that there is *some* phenomenal character in the episode of conscious thought. Some agreement is reached concerning the *existence* of cognitive phenomenology, when this thesis is not filled in with more substantial claims (see Smithies, forthcoming). The mere existence of an experience of consciously thinking is not problematic *per se*, but controversies arise with respect to its *nature.* A question we need to answer is whether cognitive phenomenology is *specifically cognitive* or it is *reducible* to more familiar kinds of phenomenologies, such as the sensory or emotional one[1].

The answer to the nature of cognitive phenomenology implies, among other things, a view on the *reach* of phenomenal consciousness: proponents of a specific cognitive phenomenology defend that phenomenal consciousness includes cognition or thought, while proponents of non-cognitive phenomenologies think that cognition is not under the reach of consciousness (Bayne, 2009). As general views regarding the extension of phenomenally conscious mental episodes, we can thus distinguish between *expansionist* versus *restrictivist* views (Prinz, 2011).[2] The view according to which cognitive phenomenology is reducible to other non-cognitive phenomenologies would be among the restrictivist ones, whereas the defense of a specific phenomenal character would constitute an expansionist one. Notice that the expansionist/restrictivist dichotomy includes other positions regarding

[1] For an overview of the problem, see Bayne, T. & Montague, M. (2011).

[2] Terminology varies a lot here: Bayne (2009) labels both positions 'phenomenal conservatives' versus 'phenomenal liberals', Kriegel (2011) prefers 'phenomenological inflationists' versus 'phenomenological deflationists', and Siewert (2011), talks about 'inclusivism' versus 'exclusivism' (Siewert, 2011).

high-level perceptual properties, emotional episodes, etc., so it is a distinction that serves as an umbrella for many different theories regarding phenomenal consciousness. For the purposes of this paper, I will talk of reductionism and restrictivism as interchangeable labels. The reach of phenomenal consciousness can be cashed out in terms of which kind of mental episodes are thought to be phenomenally conscious and which are not. If one has an answer to these related questions, namely, the reach of phenomenal consciousness and the nature of cognitive phenomenology, one can evaluate whether certain theories of phenomenal consciousness can accommodate these results or not. In other words, if consciousness includes cognition and there are cognitive specific phenomenal properties, then *any* theory of phenomenal consciousness that denies specific cognitive phenomenology is undermined.

I think Jesse Prinz's work on consciousness is illuminating in this respect: he has extensively argued for a general theory of consciousness (Prinz, 2002, 2007, 2012) according to which consciousness arises at the intermediate level of perceptual systems, where feature integration takes place and attention mechanisms are involved[3], that is, with attended intermediate-level representations or AIRs (Prinz, 2005). It is an intermediate level between the low-level stage that responds to local stimulus features without integration and the high level perceptual stage that abstracts away details form the previous one. According to this theory, the neural correlates of perceptual consciousness are thus restricted to brain areas that implement those perceptual processing. The strategy of this account, like many others, is to think that an account of perceptual experiences will give a general account of consciousness, so that the following conclusion serves as an slogan for the view: *all consciousness is perceptual consciousness*[4]. Once we frame the question of consciousness in these terms, the issue of the nature of cognitive phenomenology demands a quite straightforward and direct answer: whatever phenomenal character we are to find in conscious thought, this will have to be perception-like, so we end up with some form of restrictivism or reductionism to the perceptual[5]. This makes us consider whether opposition to a specific cognitive phenomenology or to expansionism in this sense is somehow "theory-biased" in the first place, so that direct denials are provided only when certain theories of

[3] For Prinz, intermediate-level mechanism is necessary but not sufficient for consciousness: attention is needed for consciousness to arise.

[4] Prinz argues for the particular claim that all *phenomenal* consciousness is perceptual phenomenal consciousness, and he believes other uses and forms of consciousness are parasitic on phenomenal consciousness, and thus this more general claim can be defended (see Prinz, 2007, p. 336). This view constrast, for example, with Peacocke's (), according to which conscious thought is a special case of another kind of conciousness, namely, action consciousness. Action awareness is the other case apart from thought than can provide objections to Prinz's view (Prinz, 2007, p. 341).

[5] His intermediate-level view on consciousness has had some objections regarding cases in which non-cognitive phenomenology can be said to outstrip this intermediate-level: high-level perceptual representations, perceptual constancies, the experience of presence in absence, motor actions and emotions. In Prinz (2011), he provides answers to them, but here I am going to focus on the case of thought.

phenomenal consciousness are already accepted. Prinz (2007), however, appeals to parsimony, arguing that "having a single unified theory is, all things being equal, better than having a family of different theories for each kind of phenomenal state that we experience" (Prinz, 2007, p. 337). One assumption of the parsimony argument is that the reduction works.

My aim in this paper is to focus on some paradigmatic cases for specific cognitive phenomenology, then present the main elements of Prinz's reductive account of them and argue that they do not provide a satisfying view. I will not discuss all the subtle ideas and arguments of Prinz's work, but just provide what I take to be three important and new objections to his project. First, a problem related to the phenomenology of inner speech; second, what I call the 'phenomenological adequacy' problem and third, what I take to be 'the limits of sensory variation'. I then sketch an account that does not have these problems, thus making the case for acknowledging the cognitively specific phenomenal character of conscious thought, and thereby undermining Prinz's general theory for consciousness.

Arguments regarding cases for specific cognitive phenomenology[6] normally have the form of phenomenal contrast argument: they present two scenarios where there is a phenomenal change from one to another and nevertheless the non-cognitive components (mainly sensory and perceptual aspects) remain the same. Since, it is argued, the only difference between both scenarios is cognitive, the phenomenal contrast is to be accounted for by appealing to a specific cognitive phenomenology. The paradigmatic case is that of *understanding* vs. *not understanding* some written or heard sentence, for example (Strawson, 1994/2010). Or cases of the experience of comparing the price of some item in a familiar currency versus comparing it in a foreign one.[7] There are also single cases: the example of *imageless thought*, when thoughts are conscious but nevertheless lack images[8] or the cases of *languageless thought,* where there is some consciousness of the thought without any sentence being experienced, like sudden thoughts that occur without time for language (Siewert, 1998).

Given Prinz's theory of perceptual consciousness, the question to be asked regarding cognitive phenomenology is whether consciousness outstrips perception or the senses (Prinz, 2011, p. 174). Prinz's (2011) argumentative strategy regarding specific cognitive phenomenology is mainly negative,

[6] Provided by Husserl, (1900/1901); Siewert (1998); Strawson (1994/2010); Peacocke (1998); Kriegel (2011).

[7] Thanks to Manuel García-Carpintero for this example.

[8] The discussion on imageless thought goes back to introspective psychology and the debate whether imageless thoughts are possible. The experiments where based in people reporting whether they had images or not when asked certain questions: what substances are more costly than gold, etc?. These experiments and introspectionist psychology was after that highly dismissed and regarded as a failure of method: subjects can simply be wrong about their own mental states (see Prinz, 2011, for an overview of the debate).

as he tries to account for the cases in favor of cognitive phenomenology with the resources of his perceptual view of consciousness and then his positive stance consists in giving a diagnosis of the intuitions that guide expansionists in terms of introspective illusions. Before giving the main positions, he makes an important distinction between the vehicle, the content and the quality of mental episodes. The vehicle is a token particular that have representational content: in a sentence, the orthographic marks on the page, or the mental representations in the head. The content is what the vehicle represents: vehicles in the visual system represent shapes and colors, etc.[9] And the quality is how it feels when it is conscious, the phenomenal character. With this distinctions, the main positions in the debate are defined as follows: *restrictivism* is true if, and only if, for every vehicle with qualitative character there could be a qualitatively identical vehicle that has only sensory content; and *expansionism* is true if, and only if, some vehicles with qualitative character are distinguishable from every vehicle that has only sensory content. A content of a vehicle is sensory just in case that vehicle represents some aspect of appearance and a content is non-sensory if it transcends appearance – if there are two indistinguishable things by the senses, one of which has the property and the other not. The point is that the introduction of non-sensory content does not also introduce non-sensory phenomenal qualities, so that the content that goes beyond appearance does not have an impact on quality or experience. Restrictivists like Prinz, then, allow for *conscious* thoughts as long as there are no qualities over and above the sensory ones. He accepts that conscious thought "feels like" something (there is a phenomenology), but not that it feels differently than sensory activity (all phenomenology is reducible to sensory one).

He then tries to accommodate the phenomenal contrast of understanding and similar cases with differences in sensory elements, such as different associated mental images or inner speech or differences in the focus of attention. Briefly, Prinz's (2011, p. 189) conclusion is the following: for cases of imageless thought, verbal imagery is at place and explains the phenomenology and for cases of languageless thought, non-verbal imagery is at place and explains the phenomenology. Cases in which both are absent are difficult to find and think of.

I would like to put pressure on this view of cognitive phenomenology in three ways. The first problem is related to appeals to inner speech without paying enough attention to its phenomenology. I think inner speech or verbal imagery cannot play the role Prinz wants them to play. Notice that for his

[9] Prinz endorses an empiricist view, according to which the vehicles in thought are copies of the ones used in perception and besides shapes, colors, etc., visual vehicles can also represent objects, natural kinds, or more abstract properties like numbers.

account to work, it is the *sensory* component of inner speech the responsible for the changes in phenomenology. There is the distinction between the *sensory* and the *semantic* aspects of inner speech, the first containing the syntactic, phonologic elements, etc., and the second all the other non-sensory aspects like the interpretation of the sounds, etc. This can certainly be supported by the mechanics of inner speech: psychologists normally distinguish between a production system and the perceptual/comprehension system of inner speech, in a similar way as outer speech[10]. For example, McGuire, PK et al (1996) show that the brain areas which are activated in inner speech and imagining speech differ with respect to perception areas, while having the same brain area for speech production. There are also some studies that show that both elements are separable, so people born without the ability to make use of the speech apparatus and people born without the ability to hear may develop forms of inner speech (see Bishop (1985); Bishop (1988); Bishop and Robson (1989)). The semantic element thus is the responsible of the meaning of the string of words, whereas 'sensory' refers to all the other non-semantic elements present in inner speech: syntactic and phonologic elements, etc. The crucial question here is whether the *mechanics* and the separation in these two systems entail a *phenomenological* difference between sensory elements and semantic ones. Prinz seems committed to answering yes, but this does not seem what in fact occurs when we experience inner speech: we do not experience a string of sounds and afterwards an interpretation of them, but rather the *unity* of both components in the string of inner speech. There are at least two reasons to think this: (i) the interval of time for going from one system to the other is too small to be phenomenologically significant and (ii) restricting phenomenology to the sensory aspect of inner speech would amount to equating cases in which one repeats phrases or words without any sense, purely sensory streams of inner speech, with standard cases of inner speech in conscious thought. If the entailment from the mechanics of inner speech to its phenomenology is not warranted, as I have argued, any appeal to inner speech as a candidate for sensory reduction cannot succeed.

Second, I want to consider the problem from what I call '*phenomenological adequacy*'. It should be obvious that the phenomenal character of a certain mental episode “shows us” or “gives us” what it is like to undergo this episode, precisely because phenomenology is a matter of feeling a certain way and the most accepted definition we have so far of phenomenal character, though uninformative and controversial[11], is the what it is likeness for the subject (Nagel, 1974; Block, 1995). The point is then

[10] See Vicente, A. and Martinez Manrique, F. (2010) for the claim that inner speech shares fundamental properties with outer speech.

[11] See Kriegel (forthcoming) for an overview of the problems of this characterization.

that the *explanation* of cognitive phenomenology in sensory terms does not correctly *describe* what it is like to think, what is to have an experience of a cognitive episode. This is a general phenomenological point that receives support from the following idea. Which is the phenomenal element that marks the experience as one of thinking and not seeing or hearing? When we consciously consider a thought, for example, or understand something, or ask ourselves whether we know something, we seem to be able, at least, to distinguish that very episode from our current visual perception *solely* on the basis of experience. Just by way of undergoing the cognitive episode, we can at least pick up the episode as one of thinking and not just hearing or seeing something. Contrary to this, reductionist or restrictivist proposals are not in a position to distinguish thinking experiences from sensory or emotional ones on the basis of experience, because the sensory phenomenology associated with a cognitive episode and with a visual perception can be the same: if we see an ice-cream and if we consider whether this ice-cream is too expensive, and in both cases we have the same image of an ice-cream, the mere experiential character cannot differentiate between both mental episodes, according to the restrictivist.[12] One could resist the objection and argue that there still might be differences in both images that can account for the phenomenal difference between both episodes, but then notice that the most we have are some *sensory differences* between a visual perception and the mere entertainment of a proposition so that we are left with nothing else that makes us aware of undergoing a visual experience (and not thinking about it) or considering whether the ice-cream is expensive (we can imagine this situation in the absence of the visual perception of the ice-cream). Prinz could answer that in the case of considering a thought but not in the visual experience we might have some verbal imagery that explains the difference. The point is, again, that this verbal imagery is not in a position to tell us that we are considering and not just seeing, or desiring or remembering – where we could have the same verbal imagery. The dilemma his restrictivism is pushed towards is the following: either he accepts that we cannot differentiate between kinds of mental episodes on the basis of experience or that sensory phenomenology is typified in a way that can do the job, so that the sensory elements of cognitive phenomenology would be somehow "special" or sensory* (meaning: sensory of the kind involved in thought). Both horns of the dilemma do not seem to find support. In contrast, expansionism or views

[12] Notice that this argument resembles Pitt's (2004) epistemological argument for cognitive phenomenology, based on the premise that we know the content of our thoughts and we can distinguish one thought from another and from non-cognitive mental states. Besides showing a specific cognitive phenomenology, Pitt argues that this argument shows that there is a *distinctive* phenomenology (between the thought that *p* and the thought that *q*) and an *individuative* one (what determines the content of the thought that *p)* for thought. My point against restrictivism only assumes the capacity for distinguishing cognitive from non-cognitive episodes on the basis of experience, without the other more demanding requirements.

defending a specifically phenomenal character can accommodate this phenomenological fact by appealing to a cognitive phenomenal character specific for cognition or thoughts.

The third problem I see in Prinz's restrictivism can be called *'the limits of sensory variation'.* It has two sub-points: one the one hand, I will argue that sensory differences cannot account for the phenomenal *similarities* we find between thoughts of the same kind and, on the other hand, sensory differences cannot account for *all* the phenomenal differences we find in conscious thought. There is a motivation for this way of specifying cognitive phenomenology: talk of similarities and differences in phenomenal character has been important for progress in perceptual consciousness up to the point that for some authors, picking out similarities and differences in phenomenology is an essential condition for talking of experiential kinds and recognising a certain kind of phenomenal character (Martin (ms); Georgalis (2005)).

Consider the following example. You and me are standing in front of a field and we both see a flower and think the proposition that the flower is beautiful. What are the experiential *commonalities* and *differences* between me and you in the cognitive episode? One main intuition that the restrictivist cannot explain away is the idea that phenomenal variation in cognitive experiences is not always different but there seems to be some commonalities between my entertaining the thought that the flower is beautiful and your entertaining the same kind of thought. Restrictivist positions seem forced to say that sensory phenomenology cannot provide anything more than phenomenal differences, given the kind of variation that characterizes sensory imagery. But I think there is a sense in which we experientially have the *same* kind of thought, and this can be explained by the fact that our thoughts are *about* the same thing, namely, the flower that stands in front of us. A familiar picture of why this is so is the fodorian view of concepts as concrete mental particulars in the head that are constitutively linked to the world, and thus externally individuated. If these world-tied aspects of concepts have any contribution to phenomenology, I think they provide us with *commonalities* in cognitive phenomenal character, or at least it is not *in virtue of* the world-tied aspect of concepts that we have different cognitive experiential mental states. The differences in phenomenal character are provided by differences in *inner speech* (yours being a certain kind of tone and speed and mine another), *images* associated with this thought and possible feelings associated with it – and let's assume that they are reducible to perceptual phenomenology, as in Prinz's (2004) view. If we suppose, for the sake of the argument, that all these elements are the same in you and me, as are the concepts FLOWER and BEAUTIFUL externally individuated, can we still say that you and me have different experiential or

phenomenal character while entertaining the thought that the flower is beautiful?

Against restrictivism, I think the answer is yes. The sensory, perceptual and emotional elements in the episode of conscious thought do not suffice to explain the differences between you and me in the phenomenal character of the conscious thought, precisely because of the *network* in which our thoughts are embedded in our mental economies. My proposal is that the connections and the "situation" of the concept in our cognitive mental lives form a kind of network, that is needed to account for further cognitive experiential differences, over and above the elements mentioned. This network is constituted by the *background knowledge* one possesses about a certain concept and that we both may differently carry. The idea is that the more knowledge one has over a certain subject, the bigger the network is, and more differences in cognitive phenomenology we can find or the richer it is. The connections of this network are clearly not differences in sensory phenomenology, so if my proposal is sound, Prinz's restrictivist position is in trouble.[13]

One might object that we are talking about *occurrent* conscious thought, and the network is a set of dispositional concepts that cannot be experientially present when we entertain the thought, so they are elements that cannot account for the cognitive phenomenal difference between you and me. This proposal has to be presented in more detail, but the idea and response to this objection would be that the network is somehow felt with the occurrent concept you are thinking about, just in the sense in which one can say that there is phenomenal consciousness in the peripheral areas of the visual field that are not the focus of our attention.

The sketched proposal I have offered is a view on cognitive phenomenology that takes into account sensory variation (like restrictivism) but also explains the intuitions of commonality and further differences that are not just sensory, thus providing a specification of the nature of cognitive phenomenology that is not available to the restrictivist. If there is motivation to look for similarities and differences in phenomenal character in cognitive phenomenology and my account is sound, it shows the limitations of Prinz's restrictivism in both directions: in a nutshell, there are more phenomenal variations in cognitive phenomenology than restrictivism recognizes – in particular, cognitive experiential differences – and there are also commonalities that restrictivism *per se* cannot account for.

The limits of sensory variation, together with the problem with the phenomenology of inner

[13] Strawson (2011) thinks we should postulate an identical cognitive phenomenal character over an above the one determined by the world-bound aspect and the internal economy, so that we can account for the idea that, by hypothesis, me and my Twins (my Twin in Perfect Twin Earth where 'water' refers to XYZ, my Instant Twin which has just popped into existence and my Brain in a Vat Twin which has no external connection to the world) have the same qualitative character.

speech and the phenomenological adequacy problem discussed above constitute, to my mind, an important obstacle to Prinz's account of cognitive phenomenology. If his reductionist account of cognitive phenomenology cannot solve these problems, then his general theory of phenomenal consciousness is undermined, given the "all consciousness is perceptual" claim. One moral of this paper is that before giving arguments from unity and parsimony for a theory of consciousness, we could try to specify the nature of cognitive phenomenology and work from there on. I have suggested a way of doing so through phenomenological similarities and differences and have argued that it gives evidence for the defender of a specific cognitive phenomenology view.

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References

Bishop, D.V.M. (1985). "Spelling ability in congenital dysarthria: Evidence against articulatory coding in translating between graphemes and phonemes". *Cognitive Neuropsychology*, 2:229§251.

Bishop, D.V.M. (1988). "Language development in children with abnormal structure or function of the speech apparatusÍ, in D. Bishop and K. Mogford (eds). *Language Development in Exceptional Circumstances*. Edinburgh: Churchill-Livingstone.

Bishop, D. V. M and Robson, J. (1989). "Unimpaired short-term memory and rhyme judgment in c ongenitally speechless individuals: Implications for the notion of articulatory coding." *Quarterly Journal of Experimental Psychology*., 41A:123§141.

Block, N. (1995). "On a confusion about a function of consciousness", *Behavioral and Brain Sciences,* 18: 227-87.

Bayne, T. (2009). "Perception and the reach of phenomenal content", *Philosophical Quarterly,* 59: 385-404.

Bayne, T. and Montague, M. (eds.)(2011). "Cognitive Phenomenology: and Introduction", in Bayne, T. and Montague, M. (2011). *Cognitive Phenomenology.* New York*:* OUP.

Georgalis, N. (2005). T*he primacy of the Subjective: Foundations for a Unified Theory of Mind and Language.* Chapter 3. MIT Press.

Husserl, E. (1900-1901/1970). *Logical Investigations*. London and New York: Routledge.

Kriegel, U. (forthcoming). *The Varieties of Consciousness. Studies in non-sensory phenomenology.*

McGuire, PK et al (1996), "Functional neuroanatomy of verbal self-monitoring". *Brain*, 119:907§917.

Martin, M. (manuscript). *Uncovering Appearances.*

Nagel, T. (1974). "What is it like to be a bat?", in *Philosophical Review,* LXXXIII: 435-50.

Peacocke, Ch. (1998). "Conscious attitudes, attention, and self-knowledge", in Wright, C., Smith, B. and MacDonald (eds.). *Knowing our own minds.* OUP.

Pitt, D. (2004). "The phenomenology of cognition, or, what is it like to think that p? *Philosophy and Phenomenological Research*, LXIX, No. 1, 2004

Prinz, J. (2002). *Furnishing the Mind: Concepts and their Perceptual Basis.* Cambridge, MA: MIT

Press.
Prinz, J. (2004). *Gut reactions: A Perceptual Theory of Emotion.* New York: OUP.
Prinz, J. (2005). "A neurofunctional theory of consciousness", in A. Brook and K. Akins (eds), *Cognition and the Brain: Philosophy and Neuroscience Movement.* Cambridge: Cambridge University Press, pp. 381-96.
Prinz, J. (2007). "All consciousness is perceptual", in B. McLaughin and J. Cohen (eds), *Contemporary Debates in Philosophy of Mind.* Oxford: Blackwell, p. 335-57.
Prinz, J. (2011). "The Sensory Basis of Cognitive Phenomenology", in Bayne, T. and Montague, M. (eds)(2011). *Cognitive Phenomenology.* New York*:* OUP.
Prinz, J, (2012). *The Conscious Brain.* OUP.
Siewert, Ch. (1998). *The Significance of Consciousness*. Princeton University Press.
Siewert, Ch. (2011). "Phenomenal Thought", in Bayne, T. and Montague, M. (eds)(2011). *Cognitive Phenomenology.* New York*:* OUP.
Smithies, D. (forthcoming). *"*The nature of cognitive phenomenology", in *Philosophy Compass.*
Strawson, G. (1994/2010). *Mental Reality.* 2nd ed. Cambridge, MA: MIT Press.
Strawson, G. (2011). "Cognitive phenomenology: Real life", in Bayne, T., and Montague, M (eds). *Cognitive Phenomenology*. New York: OUP.
Tye, M., and Wright, B. (2011). "Is there a phenomenology of thought?", Bayne, T., and Montague, M (eds). *Cognitive Phenomenology*. New York: OUP.
Vicente, A. and Martinez Manrique, F. (2010). What the...? The role of inner speech in conscious thought. *Journal of Consciousness Studies,* 17, issue 9-10, pp. 141-167.