On the Limits of the Method of Phenomenal Contrast

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Penultimate version!

For the final version see:

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Abstract:

The method of phenomenal contrast aims to shed light on the phenomenal character of perceptual and cognitive experiences. Within the debate about *cognitive phenomenology*, phenomenal contrast arguments can be divided into two kinds. First, arguments based on actual cases that aim to provide the reader with a first-person experience of phenomenal contrast. Second, arguments that involve hypothetical cases and focus on the conceivability of contrast scenarios. Notably, in the light of these contrast cases, proponents and skeptics of cognitive phenomenology remain steadfast in their views. I provide an explanation for the method´s dialectical ineffectiveness by focusing on the first-person performances of the phenomenal contrast tasks. In particular, I argue that the introspective judgments about phenomenology are regimented by the view initially held. Understanding the underlying mechanisms responsible for the dialectical stand-off in the face of phenomenal contrast cases casts light on introspection-based arguments for phenomenology in general.

Keywords:
Cognitive Phenomenology; Sensory Phenomenology; Phenomenal Contrast; Introspection.

Introduction

When it comes to analyzing the nature of the content of conscious mental states[1], some philosophers think that phenomenal character[2] plays a crucial role. This view can be found in theories about the content of perceptual experiences, but also in discussions about the content of conscious occurrent thoughts. Surprisingly, we not only find disagreement about how exactly to characterize the *role* phenomenal character plays with regard to mental content, but we also encounter heavy disagreement about how to characterize the *phenomenal character* in play. The latter disagreement is puzzling since phenomenal character is often held to be revealed by

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[1] In accordance with defenders of the positions analyzed in this paper, I assume that the content of experiences and conscious thoughts is given by their accuracy conditions (see Siegel 2010, Siewert 1998).
[2] I use the notions "phenomenal character" and "phenomenology" interchangeably. I utilize these notions to refer to the "what it is likeness" (Nagel 1974) to be in a conscious mental state.

introspection.[3] The question of which kind of phenomenal character is involved in conscious mental states is a significant one. Clarifying its nature is central to answering further questions within these debates such as whether phenomenal character can be constitutive of mental content. Debates about the nature of the phenomenal character of conscious states face a notorious challenge. On the one hand, phenomenal character is often held to be directly revealed by introspection. Accordingly, introspective evidence is considered highly relevant within these debates.[4] On the other hand, philosophers disagree about the kinds of phenomenology they find in introspection. Since they fail to converge on a shared characterization of phenomenal character, the reliability of introspection is called into question.

Here are two examples. The discussion about the phenomenally conscious content of perceptual experiences can be roughly divided into two positions. Some philosophers (Siegel 2010, Siewert 1998) claim to find representations of high-level properties in their perceptual experiences. In contrast, others (Dretske 1995, Tye 1995, Price 2011, Prinz 2011) hold that the phenomenology of perceptual experiences is restricted to representations of low-level properties (such as color, shape, illumination, and depth). Notably, both sides often point towards introspective evidences when defending their positions.

We find an analogous situation within the debate about the phenomenology of conscious thoughts. The so-called "cognitive phenomenology-thesis" (hereinafter: CP-thesis) also comes in, at least, two flavors. Some philosophers claim to enjoy a proprietary, sui generis, cognitive phenomenology (Pitt 2004, Horgan and Graham 2012, Kriegel 2015, Chudnoff 2015b) whereas others (Carruthers and Veillet 2011, Robinson 2011, Pautz 2013) hold that all they can detect introspectively is the familiar kind of sensory phenomenology (like inner visual or auditory imageries).[5]

How can we make progress within these debates about the nature of phenomenal character? Since the target issue is the phenomenology of conscious states, arguments that ignore the introspective findings of the opponents of the target thesis run the risk of being unsuccessful simply because the opponents will judge the view as phenomenologically inadequate. Thus, an argument is needed that directly targets the introspective deliverances in question. *Arguments from*

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[3] It is commonly assumed that we have good introspective access to subjective phenomenal states. For a different view, see the literature on the limits of our introspective abilities (Schwitzgebel 2008, Spener 2013).

[4] Introspection is not the only evidence for the existence of kinds of phenomenology. Other theoretical reasons such as reflections about content-determinacy and predictive considerations are advanced in the debate as well. However, what matters for the present purpose is that introspective evidence is considered as highly relevant when it comes to the phenomenal character of experiences. Accordingly, theoretical reasons that find no support via introspective evidence come at the cost to be less convincing than arguments that are supported by introspective evidence. The method of phenomenal contrast is considered a powerful tool within the debate since it aims at meeting the latter requirement.

[5] "Everything that is occurrent and phenomenologically present in such cases [of entertaining a thought] is either imagistic or a change in emotional state." (Robinson 2011: 203)

phenomenal contrast meet this requirement by being based on a method that is supposed to make phenomenal character more salient. In particular, the phenomenal contrast is utilized to change the introspective evidence of the opponent of the target thesis by inducing in her a first-person phenomenal experience that she did not introspectively recognize before.[6]

In this paper, I investigate the method of phenomenal contrast as it is employed by defenders of proprietary cognitive phenomenology (Strawson 1994, Horgan and Tienson 2002, Pitt 2004, Siewert 2011, Chudnoff 2015a, 2015b; Kriegel 2015). In particular, I offer an explanation of why this method does not lead to any progress in the debate. I proceed as follows: In section 1, I outline the general structure of arguments from phenomenal contrast and demonstrate that the standard reply to these arguments results in a dialectical stand-off. Next, I discern two kinds of phenomenal contrast cases that aim to establish proprietary cognitive phenomenology — *actual* and *hypothetical* cases of phenomenal contrast.[7] In section 2, I analyze the actual cases and explain why they cannot settle the issue which kind of phenomenal character is involved in conscious thoughts. In section 3, I examine a hypothetical case and I explain why it fails to establish the target thesis as well. Notably, the method based on hypothetical cases fails for different reasons than the one involving actual cases. The explanations given will generate a more sophisticated understanding of the underlying mechanisms responsible for the current dialectical stand-off in the face of arguments from phenomenal contrast. In section 4, I discuss the ramifications of the analysis. Understanding the reasons why the method of phenomenal contrast is ineffective will shed light on introspection-based arguments of phenomenology in general. Moreover, it provides us with a basis for exploring new methodological approaches to settle the question which kind of phenomenal character figures in mental content.

1. The Structure of the Method of Phenomenal Contrast

The method of phenomenal contrast is considered a powerful tool to illuminate the phenomenology involved in conscious states. In its orthodox form it is presented as an argument of the following structure. First, readers are invited to imagine two phenomenally contrasting mental states. Second, it is pointed out that the same acknowledged phenomenal elements are involved in these phenomenally contrasting states. Third, it is argued that, therefore, the phenomenal contrast can only be accounted for in terms of the target thesis. The target thesis

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[6] Following Koksvik (2015: 331), we can distinguish between ostensive and argumentative uses of phenomenal contrasts. I focus on the method that uses phenomenal contrasts in an ostensive way.

[7] This distinction is akin to Chudnoff´s (2015a, 2015b) distinction between "pure" and "hypothetical" phenomenal contrast arguments. Chudnoff defends a third version that adds a gloss by specifying the difference of the phenomenal contrast and arguing that the specific contrast is such that sensory phenomenology cannot account for it. Since Chudnoff´s "glossed phenomenal contrast argument" aims at establishing a cognitive phenomenology only for the case of *intuiting* and not for conscious thinking in general, I leave an analysis of his proposal to another paper.

then concerns an extra kind of phenomenology that the opponent denies to find introspectively. For example, within the debate about the content of perceptual experiences, the phenomenal contrast is used to establish a high-level sensory phenomenology. A famous example is due to Siegel:

> "Suppose you have never seen a pine tree before and are hired to cut down the pine trees in a grove containing trees of many different sorts […] [Y]our disposition to distinguish the pine trees from the others improves. Eventually, you can spot the pine trees immediately. […] Gaining this recognitional disposition is reflected in a *phenomenological difference between the visual experiences* you had before and after the recognitional disposition was fully developed."
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> <div align="right">(my emphasis) (2010: 100)</div>

Within the debate about cognitive phenomenology, the phenomenal contrast is considered as evidence for the existence of a *proprietary sui generis cognitive phenomenology*. Examples include the two ways of understanding ambiguous sentences (Strawson 1994, Horgan and Tienson 2002), garden-path sentences (Pitt 2004), or the phenomenal contrast due to suddenly understanding the meaning of a complex sentence. For example, Siewert asks us to consider "what it's like for you to read a passage without understanding it [is] different from what it's like to then re-read the same passage and understand it in a certain way." (2011: 251) In these cases, the defenders of a proprietary cognitive phenomenology hold that the acknowledged sensory-phenomenal elements are held constant and the contrast is due to a change in proprietary cognitive phenomenology.

In the literature, the discussion mostly turns on the question whether the contrastive scenarios in fact involve the same sensory-phenomenal elements. Thus, one common reply to these arguments is to claim that there is no need to postulate a sui generis cognitive phenomenology[8] since we can explain the phenomenal contrast in terms of changes in the cluster of sensory-phenomenal properties that we already countenance (Carruthers and Veillet 2011, Tye and Wright 2011, Prinz 2011, Robinson 2011.) The dialectic then goes as follows: For example, Horgan and Tienson point out that we can understand the sentence "Time flies!" in two different ways. We can hear it "as a cliché about the passage of time [or] as a command at the insect races" (Horgan & Tienson 2002: 523) and the difference is due to a change in proprietary cognitive phenomenology. Tye and Wright reply by re-describing the case: "Isn´t the difference easily accounted for by differences in associated linguistic images […] (and perhaps visual images too – of flies lined up to compete in the latter case but not in the former?)" (Tye & Wright 2011: 337)[9].

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[8] The claim that cognitive phenomenology is proprietary comes in different strengths. On a weak reading, cognitive phenomenology is seen as *irreducible* to sensory phenomenology, whereas on the strong reading, it is seen as *modally independent* of sensory phenomenology. Here we can set this distinction aside (though it will be relevant in section 3).

[9] Another reply is to hold that the phenomenal contrast is due to a general feeling of understanding which is fleshed out as a sensory-emotional feature such as relief of puzzlement, ease of processing, etc.

Koksvik (2015) offers an explanation of this dialectical stand-off. He argues that for arguments from phenomenal contrast to succeed we would need to find "truly minimal pairs"— viz. a pair of scenarios where it is agreed upon that they share all acknowledged sensory phenomenal features. Only if we found a true minimal pair, and if we agree that there is a phenomenal contrast in the overall phenomenal character of the two experiences, this would press the skeptic to acknowledge an extra phenomenal feature. I agree with Koksvik that within the debate about cognitive phenomenology truly minimal pairs are hard to find and that this poses a serious challenge to proponents of these arguments. In particular, if we understand arguments from phenomenal contrast as proper *arguments* and want them to entail their conclusion, then finding a minimal pair is crucial.

However, proponents of phenomenal contrast cases often understand them in a weaker way, not as arguments that entail the existence of the target phenomenology, but rather as a *method* that highlights the target phenomenology, thereby making the opponent change her mind. That means, even if no minimal pairs are provided—because a change in the acknowledged sensory phenomenal elements is granted by the proponents of the method—, the method could still be promising in its ostensive use. For it will already reach its aim if it boosts a shift in the overall phenomenal character that can be better explained by the target phenomenology than in terms of the change in sensory phenomenology. I agree with proponents of the method that finding minimal pairs might be too strong of a requirement for phenomenal contrast cases to succeed. Accordingly, the debate it not settled yet by Koksvik´s diagnosis and the method of phenomenal contrast is worth to be further explored.

In what follows, I show that the strategy to provide phenomenal contrast cases does not only fail as an argument because of the difficulty of finding minimal pairs, as Koksvik argues. It already fails in its more modest usage as a method, viz. in its objective to yield introspective evidence for the target phenomenology. Notably, for the method to succeed in this ostensive usage, it does not suffice to point at a contrast while remaining silent about the nature of the aspect pointed at.[10] Rather, the method aims at eliciting specific introspective beliefs about the kind of phenomenology involved. Since philosophers heavily disagree in their judgments about the kind of phenomenology responsible for the contrast, the method fails. In the next section, I offer explanations for the method´s ineffectiveness: the difficulty to agree on the introspective deliverances can be explained in terms of the special psychological processes that underlie the performances of the phenomenal contrast task.

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[10] Thanks to an anonymous referee for drawing my attention to this classification of the usage of phenomenal contrasts which lies at the interface of the argumentative and the pure ostensive usage.

2. The Method of *Actual Phenomenal Contrast* (MAPC)

Let me elaborate on the thesis that the method of phenomenal contrast based on *actual cases* (hereinafter: MAPC) fails because proponents and skeptics of the target phenomenology perform the phenomenal contrast task in significantly different ways.

The MAPC aims at inducing a first-person experience of phenomenal contrast, thereby forcing the addressee to acknowledge the existence of the target phenomenology. Horgan makes this aim explicit:

> "The strategy of describing certain kinds of mental-difference scenarios is a useful way of guiding the perplexed [...] to the recognition and acknowledgement of full-fledged cognitive phenomenology. The hoped-for result will be a reflective-introspective recognition [...] of the reality of cognitive phenomenology." (2011: 59, 62)

When confronted with ambiguous sentences such as "Visiting relatives can be boring" (Horgan & Tienson 2002: 524), one can perform in a first-person way the task of introspectively comparing the two different experiences that result from entertaining one content or the other.[11] Most philosophers agree that they detect a phenomenal contrast. However, their description of the contrast differs. Notably, their description tends to involve the very kind of phenomenology that has already been granted before considering the phenomenally contrasting states.[12] So no progress is made due to the MAPC. Why do most philosophers remain so steadfast in their introspective findings regarding phenomenology, even when confronted with elaborated contrast cases? For a start, let us briefly consider three potential explanations.

As a first pass, one might hold that the reason for the disagreement is that people simply differ in the kinds of phenomenologies they enjoy.[13] It would be implausible to assume that there are no intersubjective variations in the intensity, vivacity or even prevalence of phenomenologies involved in conscious states. However, it is unlikely that some philosophers systemically lack an entire *kind* of phenomenology, without this deficiency being noticeable or making any difference in everyday life. Moreover, if cognitive phenomenology is constitutive of mental content, it had better not be the case that some philosophers are completely deprived of this kind of phenomenology.

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[11] Other examples include the difference between initial puzzlement and then understanding-experiences which is illustrated by considering garden-path sentences such as "The boat sailed down the river sank" (Pitt 2004: 31).

[12] Defenders of sensory phenomenology account for the phenomenal contrast in terms of inner imageries, motor-sensoric responses and emotions. In contrast, defenders of cognitive phenomenology appeal to this proprietary kind of phenomenology in their explanation of the contrast.

[13] See Bayne & Spener (2010) and Chudnoff (2015b) for a helpful discussion of this and further explanations of the disagreement.

Next, one might think that we disagree about the characterization of the relevant phenomenology because we are not very good at exactly categorizing specific phenomenologies. This might be true when it comes to subtle distinctions within one modality. For example, it is reasonable to suppose that individuals easily disagree about whether they are currently having cardinal- or crimson-red experiences. However, I think we have good reasons to believe that we are able to introspectively discern at least different *kinds* of phenomenology. Proprietary cognitive phenomenology is supposed to be such an additional, sui generis, kind of phenomenology.

Another explanation would be that introspection is a good way to find out what kind of conscious state we are currently undergoing, but it might not be the best route to the underlying nature of this state. In particular, when it comes to modal questions such as a phenomenology´s modal independence of sensory-phenomenal features, introspection might not settle the issue (for an insightful discussion along this line see Chudnoff 2015b, 21ff). I agree with Chudnoff that some features of phenomenology might not be open to introspection, and that to establish them needs further support by theoretical considerations. However, the disagreement in the light of the MAPC is special. The problem is not that we have theoretical reasons to believe in proprietary cognitive phenomenology but its exact nature is not revealed to us in introspection. Rather the conflict arises because one side sincerely claims to have introspective awareness of the cognitive phenomenology´s proprietary character. So even if Chudnoff is right in his diagnosis about the limits of introspection, we would still need an explanation why proponents of cognitive phenomenology *believe* they have introspective access to its proprietary character. In what follows, I provide such an explanation.

Since I think that none of these explanations tell the whole story about why the MAPC is dialectically ineffective, I suggest that there is a further factor that has significant impact on the introspective findings about phenomenology that has not been discussed in the literature yet. Here is my proposal: the main source of the problem is that the MAPC relies on a first-person performance of the task to compare two phenomenally contrasting mental states and to figure out what the phenomenal contrast consist in. This description leaves some aspects open of *how* this task can be performed. My explanation of why the MAPC is ineffective is that proponents and skeptics are performing the task in a way that influences their judgments about the introspective deliverances significantly. Let me be more specific about the two different ways of running an actual phenomenal contrast case. The crucial factor that differentiates both ways of performing the task is the *initial focus*. Presumably, performing a phenomenal contrast task in a first-person way hardly occurs against a neutral background. Accordingly, the initial focus differs, depending on which view one endorses on the issue.

Philosophers who think that phenomenology is restricted to sensory phenomenology (the phenomenology akin to that of sense-impressions, emotions, proprioception; hereinafter: SP) start the scenario with a focus on SP, which is granted at the outset of the argument. Accordingly, when running the scenario, they focus on the SP and consider this aspect carefully. They raise questions such as: is the SP really shared by the two contrasting scenarios? Is there an inner imagery or an emotion that is different?

In contrast, proponents of a sui generis, proprietary, cognitive phenomenology (hereinafter: CP) deploy the MAPC with the aim of inducing in their opponents the target experience. Accordingly, they initially focus upon the alleged CP. Only then they consider the two contrasting cases that are supposed to share (most of) the sensory-phenomenal features. However, in doing this, they always keep in mind that the aim is to highlight the phenomenal difference due to the alleged CP.

Let us pause for a moment to consider where we stand. We are searching for an explanation of the dialectical ineffectiveness of the MAPC. I suggest that the reason for this ineffectiveness is found in the concrete first-person performances of the phenomenal contrast task, and these vary due to different initial foci. The next question is: what psychological mechanisms could explain the fact that – due to these different initial foci – the philosophers performing the task believe they introspectively find the very phenomenology they assumed at the outset? In particular, what mechanism could lead to either the skeptic´s mistake of missing CP or to the defender´s mistake of believing that CP exists? To illuminate the issue, some further specifications might be helpful.

2.1. Self-confirming mechanisms

In the process of performing an actual phenomenal contrast task and arriving at a belief about the kind of phenomenology involved, we can distinguish up to three aspects:

1. The phenomenal character of the experience E focused upon.
2. What introspection tells the subject about the phenomenal character of E.
3. The subject´s belief about the phenomenal character of E.[14]

According to this threefold distinction, the introspective deliverance is a sort of "quasi-perceptual awareness" or "second-order seeming" and can diverge from the introspected target experience. This means that not only the belief, but also the introspective deliverance itself is a potential source of error, since it can be inaccurate with respect to the target experience.[15] Some philosophers (Nichols and Stich 2003, Hill 2009) deny such dual experiential layers and rather

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[14] Thanks to an anonymous referee for drawing my attention to this threefold distinction.
[15] Self-presentational accounts of experiences (e.g. Horgan 2012) question this possibility.

hold that introspection yields beliefs.[16] On the latter view, the failure of the MAPC has to be explained according to a twofold distinction between the experience and the belief about the experience, and the mistake has to be located at the level of belief.

In this paper, I remain neutral on the issue of whether a twofold or a threefold distinction better captures the process of a performing the MAPC. In the following, I will discuss different psychological mechanisms. Some of these mechanisms would influence the belief about the experience and are available to both views about the products of introspection. Moreover, I will present two mechanisms that would rather affect the introspective deliverance understood as a second-order seeming and, hence, are only available to those who subscribe to the threefold distinction introduced above. Counterfactual considerations will help to clarify how the initial focus could trigger these mechanisms, which then result in the respective mistakes.

Scenario A: CP does not exist.

If CP does not exist, defenders of CP will misjudge the phenomenal character of the target experience when they engage in the MAPC. Presumably, running the contrast cases would be defective at the level of the belief-forming process.[17] Here is an explanation of how the initial focus could bring about the false belief that one introspectively finds CP. Proponents of CP would start the MAPC with a focus on the alleged CP. However, since, ex hypothesi, CP does not exist, the initial focus would be in fact on semantic items such as concepts or contents. It seems natural to construe the employment of these items as involving mental representations. However, the focus will be on the *semantic character* of these mental representations, rather than on the phenomenology tied to *employing* these representations. The focus on the semantic character shapes the expectations of the person performing the MAPC and influences her beliefs about the introspective deliverances. Recall Shoemaker´s (1996) example of the blindfolded fraternity inductee who—due to his expectations—mistakenly believes he experiences pain when an ice cube is pressed against his throat. Just as this man misattributes a pain-phenomenology to his occurrent state, the proponent of CP misattributes a proprietary phenomenology to her conscious thoughts. Just as cold-experiences can be mistaken for pain-experiences, the sensory phenomenology of conscious thoughts can be misjudged as a proprietary cognitive phenomenology. The underlying mechanism is the following: the subject´s expectation of finding a CP results in the misattribution of features to the occurrent phenomenology that in fact are not

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[16] For a discussion about whether the products of introspection are second-order seemings or beliefs, see Schwitzgebel 2016.

[17] The other option on the threefold distinction—that the initial focus directly influences the introspective seeming—would lead to the implausible result that due to the expectation to experience a CP, one hallucinates and brings about this kind of phenomenology.

there.[18] Starting with a focus on the semantic character of concepts and contents, defenders of CP end up misattributing the alleged CP to the overall phenomenology of conscious thought, whereas in fact there are only sensory phenomenology and concept employment.[19]

Scenario B: CP exists.

If CP exists, the skeptic about CP will make the mistake of missing it when performing the MAPC. In this case, depending on whether one takes the product of introspection to be a belief or a second-order seeming, the mistake could be located only at the level of belief, or at the levels of both introspective seeming and belief. Let me start with possible explanations of how the introspective deliverance understood as a second-order seeming could misrepresent the target experience. Presumably, if CP exists it is embedded or surrounded by many SP features. The initial focus on SP shifts the primary attention in running the MAPC to SP. This could trigger psychological mechanisms which make the inner imageries or emotions more salient and thereby eclipse the CP-aspect of the overall experience.

One mechanism that would lead to this result is the *change-blindness effect*. Tests for change-blindness are classified as "intentional change detection tasks." So, just as in case of the MAPC, the persons performing the task are aware that they are trying to detect a particular change and fail to do so.[20] Something similar could happen in the case of MAPCs. Due to the focus on SP, it might be very hard to introspectively detect CP over and above detecting solely a change in the SP focused upon.

Another mechanism that would explain an inaccurate introspective deliverance is the *selection effect of features for experience.* This effect is discussed in the literature on perception, when those stimuli that are congruent with prior expectations are selected to form a particular experience. For example, Siegel considers this effect as explanation of the weapon bias (Payne 2006), where the participants see a black person holding a plier, but "attend only to those features that pliers share with guns, such as being metallic and shiny" which results in "[…] an experience with more impoverished contents, and they end up jumping to the conclusion that it is a gun" (Siegel 2013: 240). Presumably, the same effect could take place when introspecting phenomenology. The initial focus on SP might trigger the selection effect of SP-features of the overall phenomenology and, as a result, introspection tells the subject that only SP-features exist. On these explanations,

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[18] Carruthers (1996) argues along a similar line that the subject´s belief of finding a CP is the result of a swift self-interpretation about their experience rather than the result of an observation of the experience.

[19] One can even include a phenomenology of understanding—so long as it is interpreted as a general feeling of understanding that is fleshed out in sensory-phenomenal terms such as ease of processing.

[20] There are various ways of evoking a change-blindness effect. One method is "mudsplashing" where a few high-contrast shapes are temporarily splattered over a scene and make it hard to detect changes in other parts of the scene. In analogy, the focus on SP might catch the subject´s primary attention and leave changes in other aspects of the overall experiences unnoticed. (For an analysis of change-blindness effects, see Myin & O'Regan 2007).

the performance of the MAPC would go awry at the second stage: the subject is having an overall experience with SP and CP aspects. However, the detrimental change-blindness-effect and the selection-effect lead to the inaccurate introspective seeming of only SP.

Those philosophers who think that introspection yields *beliefs* will object that these effects concern perceptual states and introspection is unlike perception. In the case of perception, we can distinguish between the external stimuli and the experience that we have due to these stimuli. The relevant effects are possible because the external stimuli contain more features than the features which end up being presented in the experience. In contrast, there is no such hiatus when introspecting phenomenal experiences. On their view, the mistake is made at the level of belief and an explanation for the false belief is called for.

Therefore, let me also offer an explanation that targets the false belief about the phenomenal character of the experience: the effect of *anti-selection of experience for uptake in belief*. In recent work, Siegel (2017: 164f) discusses this effect that unfolds in such a way as to lead to confirmation bias.[21] The anti-selection effect is generated by the prior expectation of finding particular features and ends up apparently confirming this expectation. This effect is usually discussed at the level of perception. However, it nicely fits with the analysis of the MAPC performances and therefore could also take place in the case of forming an introspective belief about an occurrent phenomenology. The picture is the following: the focus on SP results in the anti-selection of the CP features for uptake in the belief about the experience. Thus, the resulting belief about the target phenomenology is mistaken and apparently confirms the prior belief that the phenomenology of thought is restricted to the sensory kind. Notably, this explanation is also available to those who think that introspection yields a second-order seeming and that we form a belief on this basis. On this threefold distinction, the anti-selection case differs from the change-blindness and selection cases in that the introspective seeming is now perfectly faithful to the target phenomenology.

2.2. Why the problem is pervasive

One might object that, although on some occasions one might make the mistakes outlined above, there is no reason to think that these mistakes are made systematically. Rather, sooner or later most philosophers will realize that in performing the MAPC they were either missing or misattributing CP.[22] Unfortunately, the current status of the debate about cognitive phenomenology does not give us reason for such optimism—in fact, both sides of the debate

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[21] The anti-selection effect is another possible explanation of the weapon bias. On this explanation, subjects see a black person holding a tool and they also have a tool-experience. However, they anti-select this experience for uptake into the belief-formation process, since it is incongruent with their prior beliefs.

[22] Thanks to an anonymous referee for pressing me on this point.

remain steadfast in their views, instead of converging on the issue in the light of the MAPC. This datum calls for an explanation. I presented several options that would explain why the MAPC does not succeed. What these explanations have in common is that running through the contrast case from the first-person perspective, one starts with a particular initial focus. This initial focus might trigger various mechanisms which would either affect the introspective deliverance or affect the belief about this deliverance. In either case, the subject will think that her antecedent view about CP has been confirmed by running the MAPC. This also explains why, for instance, Hurlburt´s suggestion (Hurlburt and Schwitzgebel 2007) that the subjects can be coached against introspective error by simply setting aside the notions that might distort their introspective beliefs does not help in the case of the MAPC. Perhaps it is possible to bracket presuppositions, as Hurlburt suggests, but we cannot bracket the way a MAPC is performed from the first-person perspective. Accordingly, the persistence of the respective views is explained by the fact that we cannot perform the MAPC from a neutral standpoint. Since we always start with a particular focus, the mistake made due to this focus is pervasive.

If this is a plausible explanation of why the MAPC does not lead to any progress in the debate, we should not give too much weight to the skeptic´s' denial of introspectively finding CP, nor to the proponent's claim that she introspectively detects CP. Running through an actual phenomenal contrast case with a specific initial focus gives us reason to doubt the reliability of the resulting belief. Thus, surprisingly, what is considered one of the main advantages of the method—namely that it aims at introspective evidence by being employed from the first-person perspective—turns out to be the main source of the method´s ineffectiveness.

Let me summarize the problem. The common aspect in running the MAPC is that both proponents and skeptics of CP explain the contrast in terms of the very phenomenology they took for granted at the outset. I offered an explanation of this steadfastness by highlighting the first-person performance of the MAPC, which involves an initial focus that results in defective mechanisms for one of the two sides. Due to these defective mechanisms, either the proponents of CP are making the mistake of falsely believing they find a phenomenology that does not exist, or the skeptics make the mistake that they miss a phenomenology which in fact is there.[23] Obviously, one side is getting their phenomenology wrong and one is getting it right. For those who are getting their phenomenology wrong, the initial focus triggers a defective mechanism. For

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[23] Some philosophers will think that the latter mistake is more likely than the former one. If so, my explanation of the dialectical ineffectiveness of the MAPC would speak in favor of CP. Obviously, which psychological mechanism is more likely to kick-in is an empirical question and needs further investigation. As it stands, I prefer to remain neutral on the issue. What matters for the present purpose is that the MAPC does not help to adjudicate who is making the mistake.

those who are getting it right, the initial focus is harmless. Unfortunately, the MAPC does not illuminate *who* is making a mistake and, hence, does not help to adjudicate the issue.

I do not claim to have provided a full explanation of the psychological mechanisms underlying the performances of the phenomenal contrast task. Nonetheless, I hope that my proposal illuminates why the MAPC is problematic. The weakness of the method is to be found in the first-person performance which brings along an initial focus on the defended phenomenology. Presumably, we cannot start from a neutral perspective when it comes to judging our own phenomenal states. As a result, we cannot perform the MAPC from the first-person perspective in a way that precludes that a defective mechanism, which ensures that the antecedent view is apparently confirmed by the MAPC, might be triggered. I conclude that the MAPC is a flawed method to adjudicate the debate.

3. *Hypothetical* Phenomenal Contrast (HPC)

A further common way to argue for the existence of CP invokes *hypothetical* cases of phenomenal contrast (Horgan 2013, Kriegel 2015). These instances of the method of phenomenal contrast differ from the previously analyzed ones in their setup and in the strength of their target thesis. The setup is such that the focus lies in *abstracting* from the uncontroversial SP, thereby highlighting that a CP remains. The target thesis that can be established by hypothetical phenomenal contrast cases (hereinafter: HPCs) is stronger than that aimed at by the MAPC. Actual contrast cases, if successful, can at best establish a CP that is irreducible to sensory phenomenology. In contrast, most HPCs, if they succeeded, would establish the existence of a CP that is modally independent of sensory phenomenology. A closer examination of an instance of HPCs will illustrate this.

Consider Kriegel´s (2015) "Zoe argument" that aims at establishing the existence of a CP that is modally independent from SP. For achieving his goal, Kriegel proposes the following scenario of hypothetical contrast. First, he asks the reader to conceive of different creatures, versions of a philosophical zombie, who lack one single kind of phenomenology. We start with conceiving of someone who lacks all sensory phenomenology. Next, we conceive of someone suffering from an algedonic lacuna. Again, in a distinct act, we conceive of someone lacking all kinds of emotions. Finally, he invites us to do the following:

"Having now conceived in separation partial zombies with sensory, algedonic and emotional […] lacunas, […] we may perform another act of imaginative synthesis and envisage a person lacking all of these phenomenologies at once." (2015: 55)

Kriegel calls this person "Zoe". She lacks all kinds of phenomenology that we countenance. Moreover, Zoe is a mathematical genius and spends her time proving mathematical propositions. In the final step of the scenario, Kriegel asks us to conceive of Zoe as having an understanding experience of a mathematical proposition.

> "Zoe´s relevant episode of suddenly realizing that some mathematical proposition p is true qualifies as cognitive (…), as phenomenal, [and] by the nature of the thought experiment, it is irreducible to sensory, algedonic and emotional phenomenology (since Zoe has none of those). [… The conclusion is essentially CPP, cognitive-phenomenal primitivism."
>
> (2015: 60-61)

The upshot of the thought experiment is that we can conceive of a person who lacks all acknowledged phenomenal features but still enjoys conscious phenomenal states. In particular, she enjoys conscious thoughts. Thus, conscious thinking involves CP that is independent of sensory phenomenology.[24]

Let me clarify the specific phenomenal contrast that is supposed to do the main work in this argument. The contrast at issue here is that between Zoe´s lack of grasping the mathematical proposition first, and her mental state of getting it later. Ex hypothesis, both mental states lack emotional, algedonic and sensory phenomenology. However, the Zoe-scenario highlights that—given that there is a *phenomenal* contrast between the two envisaged states—at least the latter mental state (or both states) qualifies as phenomenal. Contrary to the MAPC, here the objective of the comparison is not to make CP more salient over SP, but rather to demonstrate the dispensability of SP for having phenomenally contrasting conscious states.[25]

If we think that we can conceive of Zoe, does this provide us with reasons to believe that conscious thoughts are characterized by CP? Maybe, in everyday life, this kind of phenomenology is not salient since other phenomenologies are present as well and catch our attention (one might add reasons why sensory phenomenology is more salient). However, given that we can make sense of the scenario described by Kriegel, we do have a conception of what it is like to consciously think that eludes sensory phenomenology. Or so the defender of CP might argue. However, skeptics of CP are not moved by the HPC either. Again, I think there is an explanation of their steadfastness. The explanation of the dialectical ineffectiveness of HPCs differs from the reason why the MAPC fails, though. The concern is that when aiming at insights about our own phenomenal states we should not be guided by our intuitions regarding the conceivability of

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[24] Even if Kriegel tells us: "Zoe´s relevant episode […] is irreducible to sensory, algedonic and emotional phenomenology", the complete absence of these kinds of phenomenologies points towards the stronger conclusion that CP is *modally independent* of them.

[25] The Zoe-argument is supposed to show that we can conceive of someone having CP without having SP. Another possibility to argue for CP would be to show that having SP does not suffice for having conscious thoughts. This is what Horgan (2013) does in his morph-sequence argument.

scenarios like the Zoe-case. The reason is that we might be able to negatively conceive of Zoe, i.e. we do not see a contradiction involved in conceiving of the scenario. However, we are not able to positively conceive of the scenario such that this would entail its possibility. (For considerations along this line see Pautz 2013, Chudnoff 2015b).[26]

In what follows, I offer a reason for why we cannot accomplish the task of positively conceiving of the Zoe-scenario in the way that is required to establish CP. For a phenomenal contrast to establish a kind of phenomenology, positive conceivability requires imaginability.[27] More specific, the capacity that is called for in performing the HPC is imagining understood as "experiential perspective taking." (Balcerak-Jackson 2016: 45) When we run the thought experiment, we are asked to subtract imaginatively all the phenomenologies we enjoy to then arrive at what it would be like to have only CP. My worry is that taking our own experiences as a starting point and then subtracting phenomenologies in imagination is not a promising method to find out about the phenomenal character of the allegedly remaining experience, for *phenomenal holism* of our actual phenomenal states limits our imaginative capacities significantly.

Phenomenal holism comes at different strengths. Here I just assume a weak form of phenomenal holism which has it that the phenomenal parts of our conscious experiences are not independent of each other, leaving it open whether the influence is causal or constitutive.[28] Research findings of cross-modal interference[29] support this weak phenomenal holism. A well-known example is the "McGurk effect" (McGurk and MacDonald 1976) that highlights the interaction between visual and auditory experience.[30] But cross-modal interference is not restricted to visual and auditory phenomenology. More recent studies demonstrate that, for example, tactile experiences interact with other sense modalities as well.[31] The main point for the present purpose is that our actual phenomenal experiences are such that the involved phenomenologies are intertwined with each other. If this weak reading of phenomenal holism is true, it will have impact on our capacities to aptly imagine isolated sensory phenomenologies.[32]

In fact, there is strong evidence that our capacities to imaginatively separate experiences of one sense modality or another from our actual overall experiences are very limited. In particular,

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[26] For the distinction between negative and positive conceivability, see Chalmers (2002).

[27] As Chudnoff (2015b: 53) points out, positive imaginability need not be grounded in sensory phenomenology for if it were, the Zoe-argument would not get off the ground in the first place.

[28] For a defense of a strong version of phenomenal holism, namely that *all* parts of *all* experiences are *necessarily* interdependent, see Dainton 2010.

[29] For a helpful taxonomy of cross-modal experiences, see MacPherson 2011.

[30] Observers who see a woman mouthing the syllable "ga" and hear an auditory recording of "ba," report that their auditory experience is of a third phoneme —"da". The effect is an instance of multisensory integration.

[31] For a discussion of recent studies about cross-modal interferences, see O´Callaghan 2008.

[32] I confine myself to this weak form of phenomenal holism and to provide an explanation of the ineffectiveness of HPCs on the basis of it. Chudnoff (2015b: 120f) goes one step further and offers a sophisticated argument for a stronger reading of phenomenal holism, based on the idea that a phenomenal state depends on its centrality connections to other phenomenal states.

in the case of multisensory integration, where information from two sensory systems is integrated to yield new information, "this new information cannot be further easily manipulated, so as to separate out again the information derived from each sensory organ" (MacPherson 2011: 47). But already the weaker thesis of multisensory processing—the interaction of processing that originate from different sensory organs—gives us reasons to doubt our capacities to imaginatively isolate sensory phenomenologies. In accordance with the weak phenomenal holism assumed here, Paul (2014) holds that our sense modalities are processed together and make up the holistic phenomenal character of a conscious experience and she concludes:

> "you can´t know what it´s like to be blind simply by closing your eyes. You can´t know what it´s like to be deaf (or Deaf) simply by stopping up your ears. […] Empirically, there is no question that at the most basic conscious level, the first personal experience of the congenitally blind or congenitally deaf is deeply different in kind from first personal experience of sighted and hearing individuals." (2014: 69)

As a consequence, people who see or hear cannot imagine what it would be like to be blind or deaf, since they won´t arrive at the latter by imaginatively subtracting away this sensory phenomenology from their overall experience. So "[…] our ability to imagine losing a dominant sensory ability may be as limited as our ability to imagine having a new sensory ability." (Paul 2014: 70)

If our capacity to subtract in imagination one kind of SP from our overall phenomenal experience is already limited, then it will be even harder for us to aptly imagine a lacuna of *all* SP. Accordingly, the required capacity to imaginatively take the distinctive first-person perspective of Zoe is constrained by the actual phenomenology we are enjoying. Thus, even if we think we can accomplish this task, there are serious constraints on our imaginative capacities and the outcome of running the thought experiment will not be reliable. Presumably, it will be a distorted mixture of abstracting from some phenomenal aspects without being able to positively imagine the impact these lacunas would have on the resulting experience. This suggests that trying to imaginatively subtract SP is the wrong way to gain knowledge whether Zoe´s experience of grasping a mathematical proposition would be phenomenal at all, and if it were, what it would be like. Thus, our endeavor to imagine the phenomenology of Zoe´s mental state fails.

I want to emphasize that conceiving of Zoe differs significantly from running the orthodox zombie thought experiment against physicalism (Block 1980, Chalmers 1996). I suggest that the outcome of performing the Zoe thought experiment is not reliable because our imaginative capacities to figure out if and what a *phenomenal state* would be like, if it did not exhibit any SP, are limited. In contrast, we might be much better in imagining zombies since in the latter case our

imagination involves only physical and functional features. There is no first-person perspective or phenomenology of zombies to be imagined.

My explanation of the failure of HPCs is the following: HPCs are not based on the pure conceptual conceivability of contrast scenarios. Given that the method of phenomenal contrast in general aims at the introspective recognition of a specific kind of phenomenology, it rather heavily relies on our *imaginative* capacities that essentially involve phenomenal features. Accordingly, the detailed first-person imaginability of the scenario turns out to be crucial. Kriegel seems to acknowledge the importance of the first-person imaginability of hypothetical contrast scenarios when he claims: "it seems to me perfectly possible to imagine such an inner life, even to imagine it from the first-person perspective". (2015: 57) However, as outlined above, phenomenal holism gives us strong reasons to doubt that our imaginative capacities can provide us with an insight of what a phenomenal experience would be like for someone who lacked the majority of the phenomenologies we are enjoying.[33]

At this point, one might object that my explanation cuts only one way. Phenomenal holism might explain why we cannot achieve the goal to imagine what pure CP would be like, if stripped off all SP. However, this explanation is not available to the skeptic about CP. Since the skeptic denies the existence of CP, the alleged mistake of her opponents to "invent" CP cannot be explained by holding that CP is entangled with SP.[34]

Let me clarify how phenomenal holism can also explain why, if there were no CP, its proponents would falsely believe that they can imagine pure CP. Suppose that phenomenology is restricted to the sensory, and that the different sensory phenomenologies are all intertwined with each other to make up the phenomenology of conscious thought. So the overall phenomenology of conscious thought will differ from the one we imagine when we, first, consider various sensory-phenomenal aspects in isolation and, then, put side by side. Now the Zoe-scenario invites us to imaginatively isolate particular sensory phenomenologies. Due to considering singular sense modalities in a first step, the proponent of CP then thinks that the overall experience of conscious thought is different from the sum of these sensory phenomenologies. Given phenomenal holism, she is right. What she is wrong about is that — since a conscious thought is different from isolated sensory phenomenologies put side by side — there is an additional kind of phenomenology, which is *independent* of SP.

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[33] Chudnoff discusses a similar line of explanation. He argues that on the assumption that we are not actually acquainted with a pure cognitive phenomenal state, our resources to imagine such states are limited (2015: 122f)

[34] Thanks to anonymous referee for drawing my attention to this worry.

So the explanation of the failure of HPCs due to phenomenal holism cuts both ways. No matter whether CP exists, due to phenomenal holism we are not able to aptly imagine what pure CP would be like. However, depending on whether CP exists, the explanations of the respective mistakes will differ. If CP exists, why should the skeptic believe that it doesn´t? Due to phenomenal holism, the skeptic would correctly believe that she cannot imagine *pure* CP. Her mistake would be rather found in the wrong conclusion that, since she cannot imagine pure CP, there is no CP at all. If CP does not exist, why should its proponents believe that it does? Due to phenomenal holism, the proponent would correctly believe that the phenomenology of conscious thought is different from sensory phenomenologies, put side by side. Her mistake would be rather found in the wrong conclusion that, therefore, there is an additional, independent, CP. Again, my aim is not to argue who is right and who is wrong. My point is that HPCs require an imaginative capacity that we do not have in either case and, therefore, HPCs is a flawed method to adjudicate the debate.

Our difficulties in finding out what Zoe´s grasping of a proposition would be like explain the different reactions to HPCs. While proponents of CP find the conceivability of Zoe or similar scenarios obvious, skeptics firmly hold that they cannot imagine such scenarios:

> "[Imagine] our cognitive phenomenal properties "dis-embodied" in the sense that they are not ever accompanied by any *sensory* properties. In other words, we have no visual experiences, auditory experiences, no mental imagery, no "inner speech" […] We *cannot* positively imagine such a case." (Pautz 2013: 219)

The reason is that the belief whether we can imagine Zoe or not does not result from an apt performance of the thought experiment. Rather, the outcome of our imaginative endeavors depends on the view initially held. If you believe in CP at the start, you will think that Zoe is conceivable. If you think phenomenology is restricted to the sensory, you will think that Zoe is inconceivable. Thus, also HPCs are dialectically ineffective. This is so because we cannot actually run the Zoe thought experiment in the way needed to arrive at the target thesis – we just utilize it to restate the view held at the outset. Obviously, to sell the respective judgment as a conclusion derived from positive imaginability is an illegitimate move.

4. The Problem and the Lesson to Draw

Confronted with the method of actual and hypothetical phenomenal contrast, proponents and skeptics of CP remain steadfast in their views. I offered an explanation of this steadfastness in terms of psychological mechanisms that underlie the individual performances of the phenomenal contrast tasks and that result in the belief that introspection delivers the very phenomenology

already granted at the outset. In the final section, I want to sketch how the provided analysis can be used to motivate new methodological approaches within debates about different kinds of phenomenology.

Given that the target question of these debates concerns the phenomenal character of conscious mental states, we consider introspective evidence as crucial. Accordingly, we think that, in order to be convincing, arguments for favoring one view over the other have to appeal to first-person phenomenal states. Unfortunately, if philosophers see evidence for their view given their introspective data *alone*, and thus resort to arguments from phenomenal contrast for convincing their opponents, they fail for the reasons elaborated in this paper.

First, a close investigation of the MAPC indicates that judgments about phenomenology are regimented by how the task is performed. Since both sides of the debate do not share the same background assumptions, they run the thought experiment in significantly different ways. Initial neutrality on the issue at the outset of the task seems desirable. However, how could introspection of the phenomenology we think we are enjoying ever occur against a totally neutral backdrop? The requirement to start off from a neutral background is a heavy burden for employing the MAPC that we hardly can meet.

Second, HPCs fail if they require a performance that outstrips our imaginative capacities. I suggested on the basis of weak phenomenal holism that neither proponents nor skeptics of CP can succeed in their imaginative endeavors to perform the thought experiment in a way to aptly characterize what Zoe´s experience would be like. One option would be to give up on imagining the scenario and restrict the task to considering only conceptual conceivability of the hypothetical scenario. Unfortunately, pure conceptual conceivability is not considered an adequate method to gain insights about phenomenology.

The problem can be summarized as follows. On the one hand, relying solely on conceptual conceivability of hypothetical scenarios or on arguments based on theoretical reasons is considered as inadequate to settle questions about phenomenology. On the other hand, first-person performances of the MAPC and first-person imagining of HPCs do not lead to any progress in the debate.[35] The lesson to draw from this is that neither theoretical considerations alone nor the method of phenomenal contrast alone will advance the debate significantly. Thus, I suggest not giving up on the view that first-person introspective evidence is crucial but to combine this requirement with strong theoretical reasons for the view defended. Such theoretical reasons for the existence of CP encompass the argument from introspective access (Pitt 2011), the argument about the phenomenal determination of thought content (Horgan and Graham

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[35] Not all proponents of CP rely solely on the method of phenomenal contrast. For example, Chudnoff (2015b), Horgan & Graham (2012), Pitt (2011), and Siewert (2011) develop forceful theoretical considerations in favor of their view.

2012), and the argument from intuiting abstract states of affairs (Chudnoff 2015b). Here is a sketch of how defenders of CP could proceed. First, they could argue on theoretical grounds that phenomenology determines thought content. Second, they could develop arguments from phenomenal contrast that make the skeptic acknowledge that the phenomenal contrast is content-specific. Such an approach would take the first-person perspective at face value by invoking an experience of phenomenal contrast. However, to get a successful argument from phenomenal contrast off the ground, it has to be additionally backed up with theoretical reasons why the phenomenal properties responsible for the contrast differ from the sensory-phenomenal ones. In other words, the theoretical reasons given first will preclude alternative interpretations of the contrast scenarios in terms of SP. In a last step, one might utilize the explanation elaborated in this paper for why the skeptics do not recognize CP introspectively, even if they now see the theoretical reasons and some evidence in the phenomenal contrast for it.

Conclusion

The method of phenomenal contrast fails to settle the debate about the existence of a proprietary cognitive phenomenology. I argued that the method is dialectically ineffective because of its characteristic to heavily rely on the first-person perspective. In the case of the MAPC, the first-person performance triggers self-confirming mechanisms. In the case of HPCs, the requirement of an apt first-person performance cannot be met. As a result, confronted with actual and hypothetical cases of phenomenal contrast, the judgments about phenomenology are regimented by the view initially held. Now that we have an explanation of the dialectical stand-off in the light of the method at hand, we can develop new methods to illuminate the existing kinds of phenomenology.

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