

Constancy and Constitution

1. Introduction

In this paper, I propose to argue for the following bi-partite thesis:

- (1) A core Husserlian account of perceptual constancy needs to be given in terms of indicative future-oriented conditionals, but can be complemented by a counterfactual account.
- (2) Thus conceived, constancy is a necessary aspect of content.¹

To clarify the first claim, I speak about a “core Husserlian” account, so as to capture certain ideas that Michael Madary, in his paper, “Husserl on Perceptual Constancy,” presents as the core of Edmund Husserl’s approach to perceptual constancy, viz., that “perception is partly constituted by the continuous interplay of intention and fulfilment” and that this “gives us a way to understand the relationship between different appearances of the same object” (Madary 2012, 145). I agree with Madary that these are important aspects of Husserl’s account, and that the account has philosophical merit. Indeed, I make aspects of Madary’s paper my starting point, because I regard it the most important sustained discussion of the Husserlian views in relation to current debates concerning perceptual constancies. My focus will, accordingly, be on developing and complementing Madary’s core Husserlian account, yielding a broader Husserlian perspective of constancy and content.

However, I may need to correct Madary when he proposes that Jonathan Cohen’s counterfactual account of color constancy be “interpreted” in the core Husserlian terms,

¹ Both of these claims concern visual perception only, and I make no attempt to extend my purview to the other perceptual modalities.

depending on what exactly he means by this (Ibid, 156). I believe that we need to account for shape constancy in terms of Madary's core Husserlian ideas, but it is not required in the case of color constancy. I also believe that when we do invoke the core Husserlian ideas, our account needs to be in terms of indicative future-oriented conditionals, not counterfactuals. However, the core Husserlian account (of shape constancy) can be complemented by a counterfactual account (especially of color constancy), yielding a larger, mixed Husserlian view. I believe this corrective, if such it is, to be of some importance, since the distinction between indicative and counterfactual conditionals is not a mere technicality, but marks a significant difference in terms of the structural complexity and the epistemology of an intentional experience. Since the Husserlian approach aims to faithfully capture the perspective of the experiencing subject, the greater complexity of the counterfactual account will be deemed as reflective of the greater complexity of the intentional experience and epistemic sophistication of the experiencing subject.

My second claim concerns shape constancy specifically. To further clarify this claim, I have in mind a peculiar kind of content, which I would call fulfillment-conditional content. This Husserlian notion enables us to conceive of the perceptual presence of objects and their properties in terms of the anticipated continuations of our experience of them, e.g., as its shape may look when I change my point of view, or as its color may modulate in the changeable lighting. I bridge constancy and fulfillment-conditional content by appealing to the Husserlian notion of constitution, which captures the process in which objectivity and, correlatively, intentional experience, are built up in the experiential flow, out of non-intentional psychological resources.

2. Constancy and Conditionals

I now proceed to argue for my first claim, viz., that a core Husserlian account of perceptual constancy needs to be given in terms of indicative future-oriented conditionals, but can be complemented by a counterfactual account. I will begin by briefly presenting Jonathan Cohen's counterfactual account of constancy, so as to then provide a critique of Madary's comments on it, and propose two distinct approaches to color and shape constancy respectively. To be clear, I will engage only with Cohen's and Madary's views, instead of the broader perceptual constancy debate, so as to prepare the ground for my main ideas, which concern the role of counterfactuals in accounting for constancy.

Consider, first, the way that Cohen sets up the problem of perceptual constancy. He introduces the constancy phenomenon by a kind of operational elucidation, as he invites us to consider a common visual reaction to two regions of a one-colored coffee cup on the table, with one region in direct sunlight, and the other, in shadow,

If you are like most normally sighted subjects, you will find that these two regions are, in some sense to be explained, alike in apparent colour. ... On the other hand, again assuming you are like most normally sighted subjects, you will also find that the regions are easily, obviously, and quickly visually discriminable in apparent colour (in some sense also to be explained). These two reactions to a pair of visual stimuli (in this case, the pair consists of the two simultaneously presented regions of the coffee cup) are the hallmarks of colour constancy. (Cohen 2008, 62)

In addition to such cases of simultaneous color constancy, Cohen also allows for successive color constancy, where subjects are presented with an object (or objects) of the same color under different illuminants in succession, also eliciting the two kinds of reaction.

He introduces color constancy, as I have noted, in this operational fashion, so as to avoid pre-judging the issue between his own view and other views, especially the invariantist view, according to which color constancy is “an invariance of apparent color across changes in illumination” (Ibid., 64). According to Cohen’s own counterfactual view, constancy is similarity to a counterfactual apparent color, “Visual systems answer this question: would region *R1* (presented under illumination *I1*) share an apparent colour with region *R2* (presented under illumination *I2*) if, contrary to fact, both regions were presented under the same illumination—namely, both under *I1* or both under *I2*?” (Ibid., 80). On such a view, color constancy amounts to a kind of counterfactual similarity relation between apparent colors, e.g, in regions *R1* and *R2*.²

Madary devotes Section 4.3 of his paper to conducting a comparison of Cohen’s and Husserl’s views. More generally, his paper sets forth a Husserlian account of perceptual constancy, and situates it among current views, notably, Susanna Schellenberg’s, Alva Noë’s, Jonathan Cohen’s, and Sean Kelly’s. Regarding the Husserlian account, Madary explains that it is concerned with giving an account of perceptual constancy, in the sense that we experience a property as remaining constant, even though our experience of it undergoes variation (Madary 2012, 146). This “a priori” notion of constancy is to be distinguished from an “a posteriori” notion of constancy, meaning that our representation of a property stays the same, despite variation in the stimulus. While views of perceptual constancy vary in regard to the amount of emphasis they place on experience of particular perspectives, and perspective-independent experience, as when I experience the tilted round coin as elliptical, or as round, respectively, Madary commends Husserl’s account for doing justice to both of these aspects of perceptual

² Cohen’s views of color constancy make an appearance also in his more recent book, *The Red and the Real*, as part of a larger view of color perception and color ontology (Cohen 2009, 53-56).

experience. Importantly, he sees the core of the Husserlian view as associated with the idea that “[p]erception is a process constituted by the continuous synthesis of partial intention and fulfillment,” a view that he duly supports by appeal to various primary sources (Ibid., 148). A “total intention” is formed as “partial intentions” fuse in this synthesis, or interplay, with fulfillment being the transition by which the aspects of objects that are given “emptily” in perceptual experience, e.g., the object’s back side, are brought to a “full,” i.e., immediate, givenness, e.g., when I turn the object around. Such fulfillment non-inferentially confirms what was previously “emptily” anticipated, and generates further anticipations in its turn, yielding a kind of tightly-knit, unified, harmonious process—unless, of course, it is broken by a “disappointment,” viz., when the tacit anticipations are frustrated. Accordingly, Madary takes it to be a key accomplishment of the core Husserlian view that it solves Schellenberg’s “*unification problem*, [i.e.,] the problem of how different viewpoints are “integrated into the perception of an object”.³

Madary begins his comparison of Husserl’s and Cohen’s views by noting that the two views have significant aspects in common, insofar as both the partial intentions and the counterfactuals are about “how things would appear if things were different,” and both are “crucial to the way in which we perceive the non-perspectival color of objects” (Madary 2012, 156). He next draws our attention to two important differences. The first is that Cohen’s model is concerned with the subpersonal level, while Husserl’s patently is not. The second difference is that Husserl’s partial intentions “can be fulfilled through action,” but Cohen’s counterfactuals “are somewhat static and disembodied” (Ibid.) Indeed, Madary is aware that Cohen explicitly distances himself from action-oriented accounts of perception—and that he purposely refrains

³ Schellenberg 2007, 609-610; cited in Madary 2012, 150.

from extending his counterfactual account from color constancy to shape constancy.⁴

Nevertheless, Madary deems feasible, and advisable, the following adjustment to Cohen's view,

Despite Cohen's aversion to action-oriented accounts of color constancy, I think it would not take much work to interpret counterfactuals in terms of implicit anticipations that can be and actually are fulfilled through action. Indeed, it may be a natural complement to Cohen's theory. Besides judging how parts of surfaces would appear under particular conditions, we can also anticipate how they will appear given current conditions and given the way continuous movements are changing those current conditions. Those anticipations can either be fulfilled or not. (Ibid.)

As can be seen, Madary is not calling for Cohen to abandon the counterfactual approach to color constancy, but proposing that we "interpret [the] counterfactuals in terms of implicit [fulfillable] anticipations," thereby bringing the counterfactualism in line with the core Husserlian view. Clearly, the purpose would be to give a better account of color constancy, while achieving the objectual unification that Madary emphasizes as an important accomplishment of the core Husserlian view. However, I believe that the counterfactual approach cannot be incorporated into the core Husserlian view, as understood by Madary, and there is, in any case, no need to do this. In the rest of this section, I will accordingly argue that Cohen's counterfactual approach to color constancy can be left as it is, while being complemented by the core Husserlian account of shape constancy.

However, I would first briefly note that I am open to the possibility that there is not a great deal of disagreement between Madary's view and mine after all. While the first part of the

⁴ Madary cites Cohen 2008, fn. 9, where Cohen offers clarifications of his views, by way of contrast with the relevant aspects of Alva Noë's views, as developed in Noë 2004. See Madary 2012, 156.

above quotation, with its suggestion of re-interpreting the counterfactual approach, suggests that there is, the second part makes it look like there might not be, provided that Madary's idea is merely to "complement" the counterfactual account with the core Husserlian account. In the latter case, the following discussion should be viewed as developing, instead of correcting, Madary's views.

"If I move further to the left, the tilted coin will present a more pronouncedly elliptical appearance," is a straightforward example of an indicative future-oriented conditional. However, the difference between counterfactual conditionals, and future-oriented conditionals of the kind I wish to enlist, may be obscured by their superficial similarity of grammatical form. Borrowing David Lewis's examples, "If kangaroos had no tails, [then] they would topple over," is a counterfactual conditional, insofar as the speaker asserts the antecedent as false. This is not the case with "If our troops entered Laos next year, [then] there would be trouble," a future-oriented conditional, which Lewis regards as semantically analogous to indicative conditionals, rather than to counterfactual conditionals (Lewis 1973, 1, 4). Cohen's account of perceptual constancy is given in terms of counterfactuals. Appearances to the contrary, it cannot be brought into conformity with the core Husserlian account, which involves anticipations concerning where one's *actual* perceptual experience might be going, thereby giving rise to the interplay of intention and fulfillment.⁵ Such anticipations cannot be captured in terms of counterfactual conditionals. The Husserlian perceptual anticipations are about the actual situation, and it is precisely for this reason that they can actually be fulfilled. There can, I suppose, be

⁵ I am not saying that the core Husserlian account permits just one projected continuation of one's actual experience. Instead, it allows for several possible continuations' being experienced as somewhat probable, or as live options.

counterfactual anticipations, but they are about a counterfactual situation, and therefore cannot be fulfilled by the way the perceptual experience actually unfolds. Such fulfillments would likely provide evidential support to certain related counterfactuals, viz., based on the relevant similarity of the actual and counterfactual situation, but that support would be inferential in nature, viz., involving an inference from the actual to the counterfactual situation, and we should not conflate the fulfillment itself with the uses to which it may thus be put. Therefore, when Madary says that Cohen's counterfactuals and Husserl's partial (anticipatory) intentions are about "how things would appear if things were different," we would do well to construe this as an ambiguous claim, along the lines of Lewis' clarifications.

However, it seems to me that there is, in any case, no need to revise Cohen's counterfactual approach of color constancy, with a view to doing justice to the fact of the continuity of experience, as Madary proposes.⁶ When I consider Cohen's account as it is, I do not see how a greater emphasis on continuity could provide an improvement. As for the synchronic case, I am not sure that the requirement of continuity is even applicable, since it is temporal continuity that we are talking about, and not spatial *contiguity*, as when the two regions *R1* and *R2* are adjacent to each other, rather than farther apart. It might be suggested that the pertinent counterfactual would need to capture a continuous experiential "path" from, say, *R2*'s being presented under illumination *I2*, to its being presented under illumination *I1*, allowing the experience to transition from *I2* to *I1* in a "privileged" fashion, as it were. Yet, what kind of a

⁶ Notice that we have already quoted three passages where Madary refers to the continuity of experience, and are now returning to this leitmotif of his (Madary 2012, 145, 148, 156). Experiential continuity is, indeed, an important Husserlian leitmotif, as we shall presently observe—while heeding the differences between the cases of shape and color.

transition would it be? Perhaps we might say that *R2* needs to be in view without interruption, and the change from *I2* to *I1* needs to take place gradually, rather than abruptly—but I really cannot see wherein the privilege of such a transition might consist, over any other kinds of transition. Regarding the diachronic case, is it perhaps that the experience needs to proceed from the presentation of *R1*, at an earlier time, to the presentation of *R2*, at a later time, in a continuous fashion? But again, I am not entirely sure what this means, and why we should privilege any such continuous experiential transition in our account of color constancy.

Yet, it might be suggested that a revised account of color constancy might somehow bring with it objectual “unification,” and be advantageous in that respect. To clarify, the participants in this debate speak of unity in the sense of objectual identity, and of unification in the sense of such identification.⁷ But it is not obvious how color constancy could be either necessary or sufficient for the experience of objectual identity. In regard to necessity, consider the most basic cases of the identification of spatial objects, as envisioned by Husserl in his *Thing and Space* lecture series. Abstracting away from the conceptual sophistication of realistic (human) perceivers, Husserl conceives of the possibility of identifying spatial objects just based on demarcating them from their background, in continuous experience. He argues that color plays a necessary part in it, insofar as demarcation requires a difference in color, or a color

⁷ E.g., while Husserl, of course, discusses various kinds of unity in *Thing and Space*, the following remarks capture a leitmotif. Husserl argues that “[a] square surface ... has in a certain sense its “sides,” and it is given and can be possessed only in the form of “sides,” i.e., adumbrations. It is unity in multiplicity, i.e., identity in continuity; it is what presents itself in the continuity of appearance as a continuity of adumbrations of the object, and only in this presentation does it come to givenness and demonstrate itself for what it is” (Husserl 1997, 85).

See also Schellenberg 2007, 609-610.

“leap” (Husserl 1997, 58, 207). However, he does not say that this need involve constant color, and it seems right. I can demarcate between two regions in space, even if the color on both sides of the demarcation line is merely a changeable confusion. It just takes a somewhat different changeable confusion, for a demarcation line to appear.⁸

Is color constancy sufficient for objectual unification? If a subject encounters a clearly delineated region of red, she could, in principle, partition it into “red things” in any number of ways—we normally would not regard “a red thing” as a sortal phrase. But it seems that, in the context of the Husserlian discussion, distinguishing a red thing (or a red object) would require a peculiar kind of experiential motivation, viz., as provided by apparent lines of demarcation. Within a continuous expanse of uniform color, such lines of demarcation would not seem to obtain. Yet it seems to me that, at least in some cases, our experience of objects could also be shaped by other kinds of basic experiential motivation. Consider a figure obtained by drawing two intersecting circles and uniformly coloring its entire area, rendering invisible the lines that demarcate the intersection. Assume also that the area of the intersection is fairly small, compared with the total area of the figure. In the spirit of the Gestaltists, I would regard it as plausible that our sense of “good continuation” would render it likely that we experience this figure as two

⁸ I hope that I have said enough to shift the argumentative burden upon the supporter of the opposite view, viz., that color constancy is required here. But I accept that this discussion is perhaps not entirely conclusive, insofar as one could go on to ask whether color constancy may be needed to make sense of some of the modifications that Husserl envisions as aspects of an experience of spatial objectivity (rather than a mere image in the field), e.g., turning. See Husserl 1997, § 72. The supporter of the opposite view would need to establish that color constancy is needed not just in some cases, but in every case of our experience of an object’s turning.

objects, one of which conceals a part of the other by occlusion. But if so, color constancy does not suffice for objectual unification.

In sum, as far as the considerations rehearsed here are concerned, the counterfactual account of color constancy is just fine as it is.⁹ But I believe that there is reason to complement it with a core Husserlian account of shape constancy, yielding a larger, mixed Husserlian account. My discussion of shape constancy will extend into the next section, but I would like to begin by supporting my claim in a minimal way.

One could perhaps set up the problem of shape constancy in much the same way as Cohen sets up the problem of color constancy. E.g., if we are looking at two round coins from different perspectives, we might say that they are, in some sense yet to be explained, alike in apparent shape. However, since the perspectives are different, the coins are also easily, obviously, and quickly discriminable in apparent shape. One could pose this problem either synchronically or diachronically, and there seem to be no obstacles to solving it by appeal to counterfactuals.

We, however, are primarily concerned with a different kind of diachronic shape constancy, viz., by first approximation, an experience of constant shape in the sense of unchanged shape. It seems that this kind of shape constancy cannot be divorced from objectual identity, because otherwise we would risk losing our grasp on what it means for a shape to be unchanged. To say that the shape is unchanged from before, we must have a sense of dealing with the same token shape, the same object. (Once again, for now, take it to be a kind of basic perceptual situation, in which we have abstracted away from much of the conceptual

⁹ I set aside the point, evident from our above discussion, that Cohen's is an account of a posteriori constancy, in Madary's sense, and Husserl's, of a priori constancy.

sophistication of realistic human subjects.) Also, when we regard the shape as unchanged, notice that we are concerned not only with the beginning- and end-state of the perceptual process, but with the process in its entirety, insofar as possibilities of changes and reverse changes would have a bearing on whether we can regard the shape as genuinely unchanged between the beginning- and end-state.

We now have an initial grasp on a kind of shape constancy that is concerned with a continuous process, and that comes with objectual identity, viz., conceived as numeric identity, not as merely qualitative identity. While there may be a point of difference between me and Madary in regard to color constancy, I see no disagreement in regard to shape constancy thus conceived, so long as it is regarded in non-counterfactual terms. I will next explore the broader significance, in perceptual experience, of this kind of constancy.

3. Constitution and Content

I will now argue for my second claim, viz., that (shape) constancy, as we have conceived of it, is a necessary aspect of (fulfillment-conditional) perceptual content. In making such a connection between the notions of constancy and content, I will appeal to the Husserlian idea of constitution as a mediating concept. My discussion will be divided into two parts, each focusing on a major aspect of the following argument:

(P1) Without shape constancy, there can be no constitution of spatial objectivity.

(P2) Without the constitution of spatial objectivity, there can be no fulfillment-conditional perceptual content.

(C) Without shape constancy, there can be no fulfillment-conditional perceptual content.

((P1), (P2) hypothetical syllogism)

I take it that the discussion of the present section complements Madary's views and pursues further the Husserlian idea of perceptual constancy. In speaking of the experience of constant shape, I have in mind something like the experience of unchanged shape, which I already brought up in the previous section. To see that this idea of shape constancy makes a difference to the issue at hand, consider that if we were to conceive of shape constancy in a manner analogous to the way Cohen conceives of color (but not shape) constancy, the very setup of the problem of shape constancy would strongly suggest that the second part of our thesis, i.e., the conclusion of the above argument, is false. Thus, e.g., if we look at two round coins from different perspectives, and are able to say that in some sense (to be explained) they are alike in apparent shape, and yet also easily, obviously, and quickly discriminable in apparent shape, then the explanation might be that our perceptual experiences represent certain counterfactual properties of these coins. In other words, these counterfactuals are a part of the perceptual content. But it is conceivable and, I believe, a common occurrence, that we have perceptual experiences of coins (from certain perspectives), without making any such experiential "comparisons" of the coins' shapes. E.g., consider a situation where just one coin is visually present to me for a brief period of time, in an unchanged perceptual experience. It seems plausible that shape constancy, as we have just described it, plays no part in such a perceptual experience.

Let us take up the first premise of our argument, viz., stating that shape constancy is required for the constitution of objectual identity. In arguing for it, I will first explicate Husserl's idea of constitution in general, and then the constitution of spatial objectivity. This discussion will yield an argument for our first premise, instead of amounting to a mere overview of

Husserl's position, insofar it will serve to highlight that Husserl is, indeed, establishing a relation between shape constancy and objectual identity, and that his ideas are compelling.

As I have already noted in the Introduction, I am speaking of constitution in the Husserlian sense, viz., as the process in which objectivity, and, correlatively, intentional experience, are built up, ultimately out of non-intentional psychological elements. Husserl's investigation distinguishes layers of constitution, where the items constituted at the higher levels depend for their constitution on the resources available at the lower levels, but not vice versa. Thus, at each level, a constitutive account may appeal to the non-intentional and non-objective constitutive resources, as well as what intentional and objective items have already been accounted for. Husserl speaks of constitution as a kind of unification, where a unity emerges out of a multiplicity of constituting elements (Husserl 1997, 85-87). However, such constitution should not be understood as amounting to composition: the constituting items cannot generally be regarded as parts of the constituted items, e.g., as if a material thing could be composed of the subject's sensations or experiences. Instead, at the various constitutive levels, new layers and realms of sense are created, capable of yielding altogether new kinds of item, such that it would be a category mistake to regard the constituting resources as amounting to parts of what is constituted.

Thus, we are dealing with a process of unification. To put it differently, this is an account of the various aspects of the experience of identity, and it emphasizes the temporality which pertains to the experience of identity, a topic which has been discussed in detail by James Mensch, who regards the Husserlian account as development upon the Kantian idea of a synthesis of apprehension, which enables the object, viz., as a unity, a "one-in-many," an "X" that is distinct from the synthesized elements, to arise from a temporally dispersed multiplicity of

intuitions (Mensch 2010, Ch. 1, § 3). In Mensch's view, the Husserlian approach amounts to an improvement upon the Kantian, insofar as it investigates this topic by invoking constitutive layers or strata (Ibid., Ch. 2, § 1). In the constitutive process, a subjective and objective side come apart,

On the subjective side, the side of what is really present (or immanent) in consciousness, we have both the interpretations and the contents-there-to-be-interpreted. ... On the objective side, we have "the identical temporal object, the sound." As a one-in-many, it transcends the many. As such, it "is not really and immanently given." (Ibid., Ch. 2, § 6)¹⁰

These remarks, as well as the ones made by Husserl in the quotation in our footnote 7 (Husserl 1997, 85), should not be taken as an attempt to define identity, or as suggesting that there could be varieties of identity, depending on the nature of the "many" that yield the "one." Instead, it is a discussion of conditions of possibility of (the experience of) identity, and of identity criteria, and aspects thereof. With all that has just been said, we can still agree with Colin McGinn that identity is

that unique relation a thing has to itself and to no other thing—period. ... Its logical properties are reflexivity, symmetry, and transitivity. It is simply the relation x has to y when x is nothing other than y , when there is no distinction between x and y , when x is y . And when we grasp the notion of identity we implicitly understand that it admits of no qualification or variation. (McGinn 2000, 1-2)

The levels of constitution which Husserl investigates include, from the lower to the higher, the strata for the spatial, the material, and the lifeworldly object. As promised, we can

¹⁰ Mensch is quoting from Husserl 1991, 294.

now consider the way in which Husserl, as part of this larger framework, discusses the relevance of shape constancy for the constitution of spatial objectivity in his *Thing and Space* lectures. In this lecture series, he systematically explores the necessary and sufficient conditions for a visual perceptual experience of unchanged, and, then, changing, spatial objectivity. The basic idea is that of a perceptual experience which involves relations of “motivation” between visual and kinaesthetic experiences, giving rise to tacit anticipations, which are resolved in fulfillments (or disappointments), yielding an interplay of intention and fulfillment.¹¹ This basic idea is developed in terms of adding layers of complication, viz., to the anticipations and the pertinent fulfillment conditions, concerning the various possible modulations of the perceiver’s relation to the object. In this way, Husserl centrally achieves a clarification of what it takes for the experience to transform from one of an image in the visual field, to a “thing” in three-dimensional space.¹²

Even though Husserl does not use the term “constancy” in our sense,¹³ his entire account is effectively about what it takes to achieve shape constancy. But it is not just about that. Constant shape is still merely apparent shape. However, on the Husserlian view, it is by experiencing an object’s constant shape, and only thereby, that we experience its intrinsic shape.

¹¹ Concerning the role of the kinaestheses in perceptual experience, see Husserl 1997, Sect. IV. Husserl’s views of motivation can be found, more specifically, in § 51 and Ch. 10. For a recent discussion of the Husserlian notion of motivation, see Walsh 2017, 410-435).

¹² See Husserl 1997, Sect. V. The thing, and, correlatively, three-dimensional space, are achieved by complicating the kinaesthetic circumstances, so that, in addition to eye movements, we are now also considering the experienced movements that yield experiences of objectual “expansions” and “turnings.”

¹³ In the English translation of *Thing and Space*, “constant” frequently occurs as a translation of “stetig,” which could also be rendered as “continuous.” See Husserl 1997.

Moreover, Husserl thoroughgoingly emphasizes that his investigation concerns objectual identity—and I mean numerical, not just qualitative identity.

I will present a series of quotations, to help the reader get a sense of the significance of the topic of identity in the constitutive analyses of *Thing and Space*. Husserl first takes up the topic of identity in § 10, where he argues that in “presentational perception” (as opposed to “self-posing perception”), it is possible for *different* perceptions to present, e.g., the *same* house, giving rise to an identity-consciousness in regard to the object. As we see the house from various perspectives, we gain evidence, albeit defeasible, to the effect that the object is, indeed, the same (Ibid., 23-24). Such an identity-consciousness cannot conjoin different phenomena or perceptions in an arbitrary fashion, or else it would be “merely said and thought” (Ibid., 24). Instead, “whether or not the connection is possible depends on the essence of the phenomena involved. A perception or representation of an elephant and that of a stone cannot be fit, according to their essence, into an identification; their essence excludes this identification” (Ibid.).

However, in Husserlian phenomenology such essentialist ideas can only be pursued by recourse to the experiential relations between the subject and the object. In § 11, we accordingly learn that the identity-consciousness is founded in

the peculiar essence of perception, which makes it fit to found an identity-consciousness and precisely thereby to exclude difference-consciousness, or, conversely, to found the latter and thereby exclude the former. That is, in the essence of the respective perception are grounded ... ideal possibilities for identity connections with other perceptions of such and such a character, actual or possible. (Ibid., 26)

In § 12, Husserl, relatedly, casts important light on the very shape of the constitutive project, “The main point here is that, for the study of things as objects—and, we will see immediately, for the study of objects in general—we are led back at the very outset to the study of the unity of giving acts, to identification, distinction, and their various differentiations and appertaining formations...” (Ibid., 29-30).

However, the topic of identity is not just something that Husserl touches upon when making general remarks concerning the rationale, or the methodology, of his specific analyses. The following quotation from § 67 shows that identity is a crucial issue also *in medias res*, insofar as it is the details pertinent to the preservation of identity, that are at stake in the move from the level of a mere image in the visual field, to that of an object in three-dimensional space,

With mere displacement and rotation . . . , we would always have a mere oculomotor Objectivity, simply somewhat amplified, i.e., one whose identity would be preserved not only as it is unfolded in the system of eye-movements but also as it is in the new displacements and rotations which are kinaesthetically motivated in such and such a way. The “Object” would therefore be what is identical in this system of displacements and rotations, and it would be a stationary Object if the general type of the stationary manifold were at hand: every kinaesthetic course provides a determinate series of appearances, and the same course always yields the same series. But this Object would still always be a kinaesthetic image and not yet a thing. It is only the multiform system of expansions that makes possible a new dimension which creates a thing out of the image and space out of the oculomotor field. (Ibid., 200)

Thus, it can be seen that it is through perspectival appearances, and by experiencing various aspects of objects in sequence, that we can have a sense of their identity. Shape

constancy comes into it, because it is, at bottom, by experiencing constant shape that we are able, in a rudimentary way, to experience an object. Once we let go of shape constancy, we would lose our basic grasp on objectivity, and just be left with primal experiential chaos (or at least be thrown back upon mere images). But as I have said, this is just a kind of rudimentary grasp on objectivity, and we have not yet provided for its re-identification across different perceptual situations, or in communication between different subjects. It is for this reason that Husserl's account is about continuous experience, as is reflected in Madary's rendition of what I refer to as the core Husserlian account.

Now we have given a more detailed discussion of what we spoke about in the previous section as shape constancy as pertaining to unchanged shape—except that there is a sense in which we got the cart before the horse then. For Husserl, as can be seen from the order of his analyses in *Thing and Space*, objective change gets its sense by recourse to a contrast with objective sameness, not vice versa (Ibid., 235). Certainly, objects can change their shape and still maintain their identity, but an experience of objectively changing shape presupposes an experience of sameness of the object, and this, in turn, presupposes an experience of constant (apparent) shape. When I speak about shape constancy being a presupposition of a kind of experience, I mean that even if we are not being presented with a constant shape, but instead with an objectively changeable shape, a sense of (or for) constancy must form part of this experience, its fulfillment conditions, enabling us to experience rule-governed objective change, instead of a mere pre-objective experiential confusion—because if we lose our sense of what it is to experience constant shape, we thereby lose our grasp on what it is for an object to preserve its identity through experience. We did not establish this claim by empirical confirmation, and neither can it be empirically overturned. E.g., if somebody were to point me to our ability to

visually track a ceaselessly shapeshifting jellyfish, I would reply that a sense for shape constancy must be embedded in the fulfillment conditions of this experience. I *could* make sense of *this*, were it not changing its shape, thereby first investing it with an objectivity. Thanks to being able to do so, I can also make sense of it through the changing shape. And thanks to being able to do that, I am in a position to apply the sortal “organism,” or “jellyfish,” bringing in its train fully-fledged identity conditions.

We have shown that, on the Husserlian framework, which we accept, shape constancy is required for the constitution of spatial objectivity. I now proceed to the second premise, viz., that the constitution of spatial objectivity is needed for fulfillment-conditional content. To get the discussion going, let us note that the second premise has considerable *prima facie* plausibility, insofar as it is closely related to the straightforward point that if I have a perceptual experience of an object, I thereby have an experience of a spatial object. Let us consider three challenges to our version of this compelling idea, each more drastic than the previous.

Thus, first, regarding the argument at the start of the present section, someone might concede that premise 2 may well hold, but if it does, then premise 1 does not. In arguing for premise 1, we were considering Husserl’s discussions of the constitution of spatial objectivity, but the perceptual experiences involved there were rudimentary and unrealistic, insofar as they were conceived so as to rigorously exclude presuppositions based on higher-level constitutive accomplishments, e.g., material things. In this context, it could, indeed, be that a certain kind of continuous experience of constancy is required to experience spatial objectivity, but in realistic, everyday perceptual experiences, it may well be that the perceptual processes are not continuous but fraught with considerable interruptions, and it may also be that taking just one look at an object, from one perspective, is enough to experience an object’s intrinsic spatial properties, i.e.,

shape and size, as well as some of its spatial relations to other objects. Indeed, this is Schellenberg's proposed solution to the unification problem (Schellenberg 2007, 618-619).

Second, I made a point of arguing that constitution is about the experience of the identity of the object. If this is an aspect of perceptual content, then, in today's parlance, content would have to be deemed as "object-involving" or "singular." But there is a large debate concerning whether contents are singular or not, the alternative view being that they are entirely descriptive (of perceptual properties). It could be argued that unless I adequately engage with this debate, I have not established that premise 2 is true.

Third, it could also be argued that while Husserl discusses perceptual experiences chiefly with a view to his constitutive project, which might be regarded as a kind of general, metaphysical project, many accounts of perceptual experience are concerned with perceptual experiences not with a view to their constitutive significance, but as interesting in their own right, especially in regard to their phenomenal and epistemic properties. Husserl's discussions in *Thing and Space* are concerned with constitution, and completely bypass the phenomenology and epistemology of realistic perceptual experiences. Someone might wonder whether, in accounting for their phenomenology and epistemology, we could, likewise, completely set aside considerations pertaining to their constitutive roles. But if these are such altogether separate concerns, and topics, could premise 2 be false?

My replies to all these challenges will invoke the idea of fulfillment-conditional content, an idea that I have already briefly introduced in this paper. It goes, of course, with the idea of fulfillment, which we have elucidated in our discussion of Madary's core Husserlian view. Madary holds that the dynamic of intention and fulfillment plays an important role in perceptual experience, but we are taking one step further, insofar as we believe that the very presence of an

object, and all its perceptual properties, can be accounted for in terms of fulfillment conditions—yielding a distinctive notion of perceptual content.¹⁴

In response to the first of these three challenges, I would contend that even in realistic, everyday perceptual experiences, shape constancy is needed, in order to constitute, in experience, spatial objectivity. Constancy in continuous experience is such a basic aspect of perceptual experience that there is no way to make up for it by any kind of top-down inputs or cognitive penetration, of the kind that Husserl “brackets,” as he discusses perceptual experience in *Thing and Space*. Continuous contact with objects’ shapes in perspectively changing perceptual experience is a ubiquitous fact of our experiential lives, and the case of a brief glimpse of an object, in unchanged perception, needs to be understood as a kind of limiting case, where we can make sense of the object’s shape by implicitly inserting this object into a span of perspectively changing experience, giving us the sense of where the experience we are having might have come from, and where it might lead (or have led), while allowing for this trajectory to be somewhat indeterminate. Notice that I am giving this account in counterfactual terms, but this counterfactual sense of the way we might have engaged with the object’s shape is parasitic upon our ubiquitous, future-directed sense of the way that we are ongoingly engaging with the object’s shape as the experience unfolds. This future-directed anticipatory sense is based on the actual

¹⁴ In his more recent book, Madary, too, articulates the idea of a kind of perceptual content that is conceived in terms of its relation to perceptual anticipations and fulfillments, calling it, accordingly, “AF content.” Given his aims in that book, he prefers to develop this idea without recourse to the Husserlian topic of constitution. See Madary 2017, 60, 180-182. Such fulfillment-conditional content is also discussed in Laasik 2011, 451, and Laasik, 2014, 424.

perceptual circumstances, and supported by the kinaesthetic motivations, of which we have spoken above. Consider, finally, that this idea goes naturally with the notion of fulfillment-conditional content, which always, due to the dynamic of fullness and emptiness, situates the perceiver in the experiential flow, in such a way that he has a sense of an experiential trajectory and his position thereon.

Let us move on to the second challenge. Here, we encounter very large debates, even if we just limit ourselves to what has been said about the topic of singular content in the context of Husserlian phenomenology. Thus, David Woodruff Smith, in his influential account, interprets the Husserlian notion of the perceptual “noema” (i.e., roughly, perceptual sense) as involving a descriptive and a singular (or demonstrative) element (Smith 2007, 284), while other philosophers, notably John Drummond, have disagreed with this perspective, and offered competing interpretations (Drummond 1990, 104-141). To contribute to this important debate would require a paper of its own. I would therefore venture to bypass the debate, and offer a brief discussion based just on the motifs that we have already been exploring in the present paper. To be clearer on where we stand, consider that Smith operates with the mainstream distinction between descriptive and singular contents. However, notice how close a connection there emerged between the perception of an object (*this* enduring object!) and the perception of its spatial properties, especially shape. It seems to me that if we invoke the notion of a fulfillment-conditional content, we find ourselves in a realm where there is no room for the descriptive and the singular to come apart in this way. The object is present to the perceiver in terms of anticipated experiential possibilities, and these are, primarily, what Husserl refers to as “motivated,” or “real” possibilities, i.e., what one would actually expect to happen (Husserl 1997, § 84). McGinn has argued that perceptual contents are not singular, in view of the the fact

that distinct objects can seem precisely the same (McGinn 1982, 39), e.g., in scenarios of objects' being swapped for qualitatively indistinguishable ones. Were this to happen, our perceptual experiences would systematically fail to inform us of these changes, constituting strong support to the view that perceptual contents are not singular. However, on our view, this consideration can be weighed relative to three different situations. First, as in the case of the perceptual experiences that Husserl discusses in *Thing and Space*, such swapping possibilities do not enter into the perceiver's purview at all. The sense of the object's identity is so rudimentary that the fulfillment conditions make no provision for such swapping scenarios, and such scenarios can therefore be discounted. Second, it may be that the perceiver has a sense of such possibilities, but not as "motivated" possibilities. Therefore, in pursuing her perceptual experience, she discounts them, same as she discounts the possibility of a global hallucination (Husserl 1997, 251). Third, the swapping scenario may present itself to the perceiver as a "real" possibility—e.g., due to the clever look in the other person's eyes. There are perhaps various ways in which such a situation might play out, and be accounted for, e.g., in terms of suspension of belief in regard to objectual identity, or wavering between the possibilities of swapping and no swapping. But it will, in any case, be a localized problem, one that we have contained, and that should not play a role in shaping our general account of perceptual contents.

Regarding the third challenge, the topics of constitution and fulfillment-conditional content do not come apart, in the way that was suggested above. An object is constituted in every perceptual experience. There may be a gap between the way that this happens, and the Husserlian analyses, say, in *Thing and Space*, because the latter focus on a specific aspect of constitution and look away from any others. But the notion of a fulfillment-conditional content precisely captures the way that an object, in its various aspects, is constituted in experience. It

homes in on the phenomenology (phenomenal character) of the experience, with an especial focus on the phenomenal contrast between the empty and the full—but, in the case of realistic perceptual experiences, also with a regard for the complicated and nuanced interface between the perceptual and the cognitive. It also captures the thoroughgoing epistemic dimension of constitution, insofar as constitution, precisely, involves anticipated possibilities of fulfillment, or a kind of immediate experiential confirmation. In realistic experiences, however, this basic idea must be considered with a view to how perceptual experiences justify beliefs and judgments, and the weight and significance of such immediate experiential evidence within total evidence. In other words, constitution is not a parochial philosophical concern, but every perceptual experience is constitutive of its objects, and this is captured by fulfillment-conditional content.

We thus have reason to accept both the first and second premise of our argument, and the conclusion follows by hypothetical syllogism: (shape) constancy, as we have conceived of it, is a necessary aspect of (fulfillment-conditional) content.

4. Conclusion

I have just argued for the following claims:

- (1) A core Husserlian account of perceptual constancy needs to be given in terms of indicative future-oriented conditionals, but can be complemented by a counterfactual account.
- (2) Thus conceived, constancy is a necessary aspect of content.

My discussion took as its starting point Michael Madary's core Husserlian account of perceptual constancy, centered on the idea of continuous interplay of intention and fulfillment, with a unifying effect on perceptual experience. I chose this starting point due to the importance

of Madary's paper, which currently stands out as offering the best sustained discussion of Husserl's views and other current views of perceptual constancy, and sought to embed it within a larger Husserlian perspective, achieved by complementing Madary's points with other considerations. In particular, these considerations pertained to the ideas of constitution and fulfillment-conditional content, thus giving a more complete picture of the role of shape constancy in perception, viz., as a necessary aspect of fulfillment-conditional content. My one apparent point of disagreement with Madary pertained to what I understood to be his view that the framework of anticipations and fulfillments can be thoroughly articulated in terms of counterfactuals, and so used to account for color constancy. I accordingly took issue with these ideas.

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