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REPRESENTATIONALISM AND AMBIGUOUS FIGURES

abstract

The phenomenon of ambiguous figures raises difficulties for the theories of the content of our visual experience that hold that its phenomenal character is identical to its representational content and wholly nonconceptual. This phenomenon seems to show that there can be a difference in the phenomenal character of two visual experiences, without a difference in their representational nonconceptual content. Firstly, I shall try to illustrate that these “representationalist” theories cannot provide a compelling explanation for the phenomenon of ambiguous figures. Secondly, I will present an account of it grounded on Peacocke’s “dual nonconceptual content” view. The distinction he draws between two levels of nonconceptual content can be used to explain the phenomenon without abandoning the thesis that the phenomenal character of our visual experience is a representational wholly nonconceptual content.

keywords

Representationalism, ambiguous figures, visual experience, phenomenal character nonconceptualism

1. Introduction

The phenomenon of ambiguous figures consists in the fact that a single figure can ground experiences of, at least, two different and incompatible percepts, even though the geometrical properties of the figure are not experienced as changing. In other words, ambiguous figures are those that a subject can see in two sharply different ways, while being aware of the fact that the shape, size, texture, etc. of the figure remain constant. Moreover, a subject can “switch” from seeing the figure in one way to seeing it in another way (this is called “figure reversal” or “*Gestalt* switch”). This phenomenon poses difficulties for the theorists of the content of visual experience and, in particular, for the advocates of representationalism.

Concerning the debate about the content of our visual experience, I hold that there are good reasons to consider it to be, at least in part, nonconceptual. This claim is supported by several arguments that underline, in particular, that our experience is characterized by a wealth of elements and details that cannot be fully captured in conceptual terms. Nevertheless, the case of ambiguous figure seems to show that an exhaustive specification of the content of the corresponding visual experiences must include conceptual constituents. As Wittgenstein remarks, the phenomenon of ambiguous figures seems to be an intermediate case between visual experience and thought.¹

The main claim of (strong) representationalism – in the versions I am concerned with: Tye (1995) and Dretske (1995) – is that the phenomenal character of a visual experience, i.e., the “what-it-is-likeness” of having it, is identical to, or completely determined by, its representational content. In addition, it states that this content is of a nonconceptual kind. Yet, the experience of an ambiguous figure seems to show that there can be a difference in the phenomenal character of two visual experiences without a difference in their representational nonconceptual content. In that case, representationalism confronts the following disjunction: either it renounces its main thesis—the phenomenal character is not exhaustively representational; or it abandons the claim that this character is wholly nonconceptual.

I shall outline an account of ambiguous figures, based on Peacocke’s “dual nonconceptual content” view, that intends to elude the above-mentioned disjunction. If successful, phenomenal character could be both wholly representational and nonconceptual and yet there could be a phenomenal difference between the experiences corresponding to seeing, e.g., the Duck/

¹ See Wittgenstein (1953).

Rabbit figure as a Duck or as a Rabbit. In this way, my account intends to preserve representationalism's main claim – that phenomenal character is representational – and nonconceptualism about phenomenal character.

2. Ambiguous Figures and Representationalism

I shall try to show that representationalism cannot provide an adequate explanation of the phenomenon of ambiguous figures. I will formulate an argument whose structure is similar to that of Macpherson (2006)².

Let us consider the paradigmatic case of the Duck/Rabbit ambiguous figure (F):



On the one hand, the figure F can be seen as a Duck (A) or as a Rabbit (B). Thus, it seems clear that F is at the origin of two experiences that differ in their *phenomenal* character: in one experience a Duck appears and in the other a Rabbit. Now, recall that, according to representationalism, phenomenal character is a representational nonconceptual content. Thereby, following representationalism, between the experiences of seeing F as A and seeing F as B there must be a difference in the nonconceptual representational content.

On the other hand, it seems intuitively clear that, since both A and B are caused by the same figure F, there must be something in common in the contents of these experiences. And indeed, the subject of the experience does not notice any change in the properties of F when she switches from seeing A to seeing B: the colors, shapes, and textures she experiences appear to be the same in both cases. Thus, it is reasonable to hold that the representational content of both experiences is identical at the *nonconceptual* level.³ Now, for representationalism this content is identical to the phenomenal character. Thereby, following representationalism, the experiences of seeing F as A and seeing F as B should *not* differ in their phenomenal characters.

In sum, on the one hand, representationalism requires the experience of

² However, I propose a different analysis of the problem of ambiguous figures and, unlike Macpherson (2006), I consider that Peacocke's "dual nonconceptual content view" offers the resources to elaborate a compelling solution. See Uggè (2012).

³ Colors, shapes and textures are paradigmatic nonconceptual contents of visual experience. This kind of contents is the object of the "fineness of grain" argument for the thesis that the phenomenal character of visual experience is nonconceptual.

seeing an A and the experience of seeing a B to differ in the representational nonconceptual content. On the other hand, it seems that the representational nonconceptual content is in common in both experiences. Hence, representationalism seems unable to account for the difference in the phenomenal character of the experiences of seeing F as an A and seeing F as a B, without abandoning one of its main tenets.

At the conceptual level there is clearly a difference between the experience of a Duck and the experience of a Rabbit, since two different concepts are involved. Thus, a possible explanation for the phenomenal difference between these experiences might be that concepts determine, somehow, their phenomenal characters. There are two possibilities to account for the relation between concepts and the content of experiences: first, to claim that concepts enter into the content of the experience; and second, to claim that concepts are not constituents of the content of the experience.

The first possibility is not available for the advocates of representationalism. First, it doesn't seem to them that the phenomenal character of our visual experience includes concepts. Several arguments can be mentioned, e.g., the argument from infants and superior animals, and the argument from the fineness of grain.⁴ According to the latter, visual experience represents the world with a determinacy of detail that is not capturable in purely conceptual terms. Second, for representationalism the phenomenal character of our experience is identical to or completely determined by its representational content. If concepts entered into the phenomenal character we would have a representational content that has concepts as constituents and thus is (at least partly) conceptual.

The second possibility is to claim that concepts determine (top-down) the difference in the phenomenal character between, e.g., seeing the Duck/Rabbit figure as a Duck or as a Rabbit while staying outside of the phenomenal contents themselves. This proposal is problematic for the following reasons. First, it supposes that there is cognitive penetrability of perception by thought, and this is a controversial claim. Indeed, the advocates of representationalism defend the cognitive impenetrability thesis according to which "both the phenomenal character and the intentional content of perceptual states are impermeable to states of their subjects' cognitive systems" (Voltolini 2011, 1). Evidence against the penetrability of perception by thought comes from the phenomenon of the persistence of the illusion.⁵ Consider, for instance, the famous case of the

4 See Tye (1995).

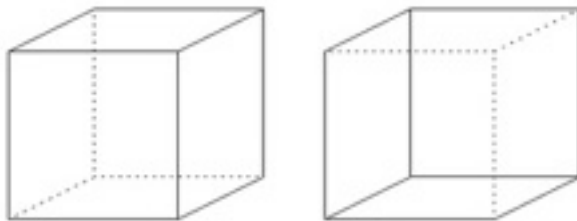
5 See Fodor (1983).

Müller-Lyer illusion. When we are looking at the figure we see two segments that appear to us as being of different lengths, but actually they are of the same length. Now, the fact that we learn that the segments are of the same length does not change the way they appear. Second, the question remains, for the representationalist, regarding what is the difference in the representational nonconceptual content that accounts for the phenomenal difference between seeing the Duck/Rabbit as a Duck and as a Rabbit.

Representationalists can claim that concepts have an influence on the content of visual experience that does not involve cognitive penetrability. This proposal is developed by Tye (1995). He holds that the experience of ambiguous figures might involve concepts. This is clear in the case of the Duck/Rabbit: in order for a subject S to see the figure as duck-shaped she has to possess the concept “duck”. But, according to Tye, concepts play a *causal role* and not a *constitutive role* in the experience. The concepts cause two experiences with a different content, but this content can still be nonconceptual. In Tye’s words, “one has a sensory representation whose phenomenal content is then brought under the given concepts. Still, the concepts do not enter into the content of the sensory representations and they are not themselves phenomenally relevant” (1995, 140).

However, the proposal just mentioned does not seem able to provide a compelling explanation of what is the difference in the phenomenal character of the experiences determined under the concepts “duck” and “rabbit”. First, note that in the case of the Duck/Rabbit we do not notice any difference in the nonconceptual content of our visual experience before and after the occurrence of the *Gestalt* switch. Thus, it seems that the nonconceptual content remains the same in both cases, either when we perceive the picture as a Duck or as a Rabbit.

Second, consider the case of the Necker Cube (N):



A

B

This figure differs in an important respect from the case of the Duck/Rabbit,

since it involves only one concept (the cube). Its ambiguity concerns the two different orientations that the cube appears to have. Thus, the thesis that concepts are not part of the content of our visual experience but, nevertheless, have an effect on its phenomenal character, seems incapable of explaining the case of the Necker Cube.

In particular, two criticisms have been moved to Tye's account. According to Orlandi,

“The main problem with this way of arguing is that it is strikingly *ad hoc*. Once one accepts that concepts are required to have a given visual experience, it is hard to see what could decide between a causal and a constitutive view [...] if concepts are required, even if only causally, to have visual experiences with given contents, then we wouldn't be able to ascribe content to creatures that lack them, and we wouldn't be in a position to give a story of how we acquire concepts.” (2011, 312)

In addition, Voltolini remarks that Tye's account seems unable to avoid cognitive penetrability, even though he holds that concepts have a causal and not a constitutive role. According to him, the fact that the change in the phenomenal character is conceptually driven is sufficient to undermine the cognitive impenetrability thesis, which states that both the phenomenal character and the intentional content of experience are not permeable by the subject's cognitive states.⁶

If what we have said so far is on the right track, the legitimate conclusion to draw is that representationalism seems unable to provide a compelling account of the phenomenon of ambiguous figures. In the next section I shall argue that Peacocke's (1992) distinction between two levels of nonconceptual content can be used to ground a compelling explanation of this phenomenon, without abandoning the thesis that the phenomenal character of our visual experience is a representational wholly nonconceptual content.

3. Peacocke's "Dual Nonconceptual Content" and the Phenomenon of Ambiguous Figures

Firstly, I shall briefly introduce Peacocke's "dual nonconceptual content" view. Secondly, I shall discuss the phenomenon of ambiguous figures in the light of Peacocke's distinction between two levels of nonconceptual content.⁷ According to Peacocke, our visual experience has a representational content,

6 See Macpherson (2012) and Voltolini (2011). I'm indebted to Alberto Voltolini for this remark.

7 Even though Peacocke (1992) does not develop his theory of a "dual nonconceptual content" view to account for the cases of the Duck/Rabbit and the Necker Cube ambiguous figures, I will try to show that it can be used for this purpose.

since it represents the world as being a certain way. Now, this content includes both conceptual and nonconceptual constituents. In particular, it includes two kinds of representational nonconceptual contents that he labels “scenario content” and “protopositional content”. A “scenario” is considered to be a “spatial type”, characterized by a way of filling out the space around the perceiver, consistent with the veridicality of the perceiver’s experience. In order to specify a spatial type we have to fix an origin and some axes. These elements are not grounded in specific places or directions in the world, since a type can be instantiated at different places, but they are relative to the perceiver who is always present regardless the location at which a type is instantiated.⁸ A “protopositional content” is a nonconceptual content that has a different structure than that of the scenario content. Protopositional content includes individuals, properties, and relations. For instance, some of the properties or relations represented are: “parallel to”, “curved”, “square”, “equidistant from”. It is belief-like (it has a mind-to-world direction of fit), and is called “protopositional” since it has a subject-predicate form where the individuals are the subjects and the properties or relations the predicate. Now, this content is not uniquely determined by the scenario: two experiences could have the same scenario but a different protopositional content. Peacocke remarks that it is precisely on the basis of this distinction, at the level of nonconceptual content, that is possible to ground our experiential concepts in a non circular way.

In short, Peacocke argues that our experience has three layers of content: scenario content (nonconceptual); protopositional content (nonconceptual); and conceptual content.

Now, let us discuss the cases of the Duck/Rabbit and the Necker Cube. I will try to show that the distinction between two nonconceptual levels of content can be used to account for the ambiguity of these figures.

The Duck/Rabbit

This figure (F) can be seen either as a Duck (A) or as a Rabbit (B). However, a subject that undergoes both experiences is aware of being perceiving *the same* figure, and the corresponding *Gestalt* switch does not imply any change in its shape, color or texture. This invariance can be accounted for by claiming that there is no difference at the level of the *scenario* content between seeing F as an A or as a B. In both cases, the space around the perceiver is filled in the same way.

⁸If we assign a time to a scenario and fix real directions and places in the world for the origin and axes, we have what Peacocke labels a “positioned scenario”.

Now, when a subject sees F as an A, the left part of the figure represents the beak of a duck, the right side its head, and the eye is experienced as pointing to the left. By contrast, when she sees F as a B, the left part represents the ears of a rabbit, the right side its snout, and the eye is experienced as pointing to the right. These differences can be captured, at least partially, at the protopropositional level; they concern relations between different parts of the figure.

Hence, if the phenomenal character is constituted by Peacocke's two types of nonconceptual content, it is possible to account for what is in common, and for what differs, in the experiences of F as an A and as a B.

Certainly, different concepts are involved when the figure is seen as a A and as B. But these concepts do not need to be taken as constituents of the *phenomenal* character of the experience. In fact, Peacocke's conceptual level of content can be taken to be outside a visual experience's phenomenal character. There can be top-down effects from concepts to the protopropositional level of content, and bottom-up effects in the inverse direction. Somehow, when the image is subsumed under the concept "duck" some relations among the parts of the figure are represented, and these relations differ from the ones that are likewise represented when it is subsumed under the concept "rabbit". Indeed, according to Peacocke's theory, the different levels of content are not autonomous and there are both top-down and bottom-up effects⁹.

The Necker Cube

This two-dimensional figure (F) represents the flat projection of a three-dimensional cube. The figure can be seen either as a three-dimensional cube oriented downward (A) or as a three-dimensional cube oriented upward (B). Since a subject who experiences F as an A or as a B is aware of perceiving the same figure, and its geometrical properties are not experienced as changing after a *Gestalt* switch, we can say—following Peacocke's distinctions—that these experiences have the same scenario content. Yet, the experiences of an A and of a B differ in the *relations* being represented as holding between the faces and the edges of the cube. If we look at the figure on the left, the front-face of the cube is seen in the front plane and gives rise to the A percept whereas if we look at the figure on the right, the front-face of the cube is seen in the back plane and thus gives rise to the B percept. It is possible to account for these differences by claiming that the experiences of F as an A and as a B differ in

9 In this way, The Autonomy Thesis - according to which a subject can be in a nonconceptual state without possessing any concept - is not preserved. In a more recent work Peacocke changed his mind and accepted the 2)

their protopositional content.

The case of the Necker Cube supports the claim that the phenomenal differences between two alternative percepts of an ambiguous figure can be captured at a nonconceptual level. It is not necessary to involve different concepts as constituents of the phenomenal character. Indeed, the experiences of a Necker Cube as an A or as a B – by contrast with the case of the Duck/Rabbit – do not frame the figure under different concepts. Both experiences represent a cube. Differences at the level of the protopositional content seem sufficient to account for phenomenal differences between seen F as an A and as a B. In both the Necker Cube and the Duck/Rabbit figures, concepts certainly have a top-down effect on the content of experience. In the case of the Necker Cube, we can suppose that an infant or an animal that do not possess the concept “cube” would not be able to see the image as a three-dimensional cube. And similarly, in the case of the Duck/Rabbit, if a subject lacks the concepts of “duck” or “rabbit” she will not be able to see the figure as a Duck and as a Rabbit.

In addition to top-down effects, it seems there are bottom-up ones between the nonconceptual levels and the conceptual level. It has been argued that differences in the places where the subject focuses her attention elicit different concepts. This could be due, at least in part, to the fact that different points of focus would privilege the representation of different relations among the parts of the figure. Thereby, protopositional contents would elicit the exercise of different concepts. To summarize, the distinction between two layers of nonconceptual content can account for the existence of:

- *A nonconceptual representational content that is in common in the alternative experiences of an ambiguous figure (the scenario content).*
- *A difference in the phenomenal character of the alternative experiences of an ambiguous figure (different protopositional contents).*

4. Conclusion I have tried to show that ambiguous figures are troublesome for the advocates of representationalism. What is particularly problematic in the case of ambiguous figures is that it proves difficult to provide an explanation of this phenomenon exclusively in terms of the nonconceptual contents of the corresponding visual experiences. In fact, when a figure F is seen as an A or as a B, it seems, on the one hand, that there is a difference in the phenomenal character of these experiences. But on the other hand, it seems that the qualitative properties of F such as its shape, size, color, texture, etc. – that are presumably represented in experience in a nonconceptual way – are shared by these experiences. In other

words, the phenomenal difference that there is between seeing F as an A or as a B does not seem to concern nonconceptual contents.

As a plausible account of the case of ambiguous figures, compatible with the thesis that the phenomenal character of experience is nonconceptual, I used Peacocke's distinction between two levels of nonconceptual content. When a figure F is seen as an A or as a B, the corresponding experiences share the same scenario content, but differ in their protopositional content. The scenario concerns how the space around the perceiver is filled, while the protopositional content is the representation of the relations between elements of the scenario.

Peacocke's "dual nonconceptual content" view allows for both top-down and bottom-up effects between the conceptual and the nonconceptual levels of content. Thus, it seems able to ground a thorough explanation of the case of ambiguous figures that, as happens with the Duck/Rabbit, require or involve the exercise of different concepts on the part of the perceiver. In order to have this explanation we need, first, a detailed account of the relation between concepts and the phenomenal character. Second, to provide an in-depth clarification of how the relations between concepts and nonconceptual contents change, in particular, whenever a *Gestalt* switch occurs.

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