

Twofold Pictorial Experience

Abstract

Richard Wollheim famously argued that figurative pictures depict their scenes, in part, in virtue of their ability to elicit a unique type of visual experience in their viewers, which he called *seeing-in*. According to Wollheim, experiences of seeing-in are necessarily twofold, that is, they involve two aspects of visual awareness: when a viewer *sees* a scene *in* a picture, she is simultaneously aware of certain visible features of the picture surface, the picture's design, and the scene depicted by the picture. Even though Wollheim's notion of twofoldness has been very influential, a number of philosophers have put forward powerful arguments against it. In this paper, I defend the claim that some pictorial experiences are twofold in Wollheim's sense. My argument has two parts. In the first part, I provide a phenomenal contrast argument in favor of twofoldness. In the second part, I respond to what I take to be the most important objections against twofoldness. I believe that both parts together provide strong support for the claim that some pictorial experiences are twofold in Wollheim's sense.

1. Introduction

Richard Wollheim famously argued that figurative pictures depict their scenes, in part, in virtue of their ability to elicit a unique type of visual experience in their viewers, which he called *seeing-in*.¹ According to Wollheim, experiences of seeing-in are necessarily twofold, that is, they involve two aspects (or folds) of visual awareness. When a viewer *sees* a scene *in* a picture, she is simultaneously aware of certain visible features of the picture surface and the scene depicted by the picture. For example, when you look at van Gogh's painting *Iris* from an appropriate distance, you are simultaneously visually aware of the depicted scene, the irises, and the thick

¹ See Wollheim (1980, 1987, 1998, 2003).

impasto brushstrokes on the picture surface with which van Gogh painted this scene.² On Wollheim's view, both scene and brushstrokes are experienced consciously. Moreover, the viewer's awareness of the scene and her awareness of the brushstrokes are intimately related with each other.

Wollheim's notion of twofoldness has been tremendously influential.³ Yet, a number of authors beginning with Gombrich reject twofoldness altogether. These authors argue that it is not possible for a viewer to be aware of visible features of the picture surface and the depicted scene at the same time.⁴ Visual experiences, according to these authors, cannot represent both an opaque two-dimensional surface and a three-dimensional scene at the same time.

My goal in this paper is to defend the claim that some pictorial experiences are twofold in Wollheim's sense. The paper falls into two parts. In the first part, I present a novel phenomenal contrast argument in favor of twofoldness.⁵ I argue that accounts of pictorial experience that allow for twofoldness in Wollheim's sense can explain a scenario that involves two pictorial experiences that clearly differ in phenomenal character, but accounts that reject twofoldness cannot. However, if visual experiences could not represent both certain features of an opaque two-dimensional surface and a three-dimensional scene at the same time, as Gombrich and others have argued, we would have to conclude that my arguments against the possible explanations of the phenomenal contrast by those who follow Gombrich are not successful. In the second part of this paper, I therefore consider what I take to be the strongest arguments against twofoldness and show how we can avoid them. If successful, both parts of the paper taken together present a

² Vincent van Gogh, *Iris*, 1889, housed at the Getty Museum.

³ Authors who accept Wollheim's notion of twofoldness, as I define it in this paper, include Lopes (1996, 2005), Kulvicki (2009), Nanay (2010), and Cavedon-Taylor (2011).

⁴ Skepticism about twofoldness in Wollheim's sense goes back to Gombrich (1960). In this paper, I will consider recent arguments against twofoldness developed by Hopkins (2012), Chasid (2014a, 2014b), and Zeimbekis (2015).

⁵ My understanding of phenomenal contrast arguments is indebted to Siegel (2006; 2010).

strong case in favor of the claim that some pictorial experiences are twofold in Wollheim's sense.

The sections are organized as follows. Section 2 briefly introduces Wollheim's notion of twofoldness. Section 3 presents the phenomenal contrast argument in favor of twofoldness. Section 4 addresses a number of objections against twofoldness in Wollheim's sense and shows how we can avoid them. Section 5 is a brief conclusion.

2. Wollheim on twofoldness

On Wollheim's mature view, a pictorial experience, that is, an experience of seeing-in, is a single visual experience that involves two distinguishable, but simultaneous aspects, or folds, of visual awareness.⁶ Suppose you see the irises in van Gogh's painting *Irises*. Wollheim characterizes such an experience as follows: "When seeing-in occurs, two things happen: I am visually aware of the surface I look at, and I discern something standing out in front of, or (in certain cases) receding behind, something else" (Wollheim 1987, 46). The surface-oriented aspect of your experience (Wollheim called this the *configurational aspect*) represents what today is typically called the picture's *design*, that is, those visible features of the picture surface that sustain your awareness of the scene.⁷ These features include certain marks on the flat picture surface, namely

⁶ Nanay has argued that Wollheim conflates two different senses of twofoldness. Twofoldness in one sense requires that "we consciously attend both to the depicted object and to some properties of the surface" and twofoldness in the other sense requires that "we represent both the depicted object and some properties of the picture surface (while we may or may not attend to the surface)" (Nanay 2011, 463). See also Nanay (2005). Nanay argues that only twofoldness in the latter sense is a necessary feature of picture perception. In this paper, I will only be concerned with the first sense of twofoldness. I will remain neutral on the question of whether we can also ascribe to Wollheim twofoldness in the second sense.

⁷ Wollheim sometimes uses the term "sustaining features" (Wollheim 1980, 212). In "On Pictorial Representation," he refers to the viewer's visual awareness of the visible features of the picture surface as "the configurational aspect" of the twofold pictorial experience, implying that it represents the picture's "configuration" (Wollheim 1998, 221). It is now more common to use the term "design" instead of "configuration." For definitions of the term "design" along these lines, see, for example, Lopes (1996, 3; 2005, 25), Cavedon-Taylor (2011, 271), and Hopkins (2010, 155). Nanay uses the term "design-properties" (Nanay 2010, 182).

the thick impasto brushstrokes and the visible properties by means of which they sustain your experience of the irises.⁸ Moreover, the surface-oriented aspect of your experience represents the design as features of the picture surface. The scene-oriented aspect (Wollheim called it the *recognitional aspect*) represents the three-dimensional *scene* seen in the painting, which includes the irises and the ground.

According to Wollheim, twofold pictorial experiences do not just conjoin the two aspects of visual awareness, but unify them in a more intimate way.⁹ When you read a novel, you may imagine the scene described in it. You see the words and sentences on the page and, at the same time, imagine a scene. What you read guides your imagination. But the representational content of your imagination is entirely independent of the colors and shapes of the letters that you see on the page. On Wollheim's view, pictorial experience is different. A viewer who enjoys a twofold pictorial experience is not just visually aware of surface and scene at the same time. Rather, the two aspects of visual awareness are unified at the level of their representational contents. In his mature account of pictorial experience, Wollheim tried to explain this by saying that the two

⁸ Two comments are in order at this point. First, Wollheim further argues that a picture's design sustains the viewer's awareness of the scene in virtue of being seen. This claim is contentious. It is possible, for example, that the role of these features is purely causal, as a number of authors have argued. See, for example, Sartwell (1992) and Chasid (2014a). I believe that the picture's design sometimes functions by being seen and sometimes purely causally. For an example of the former, see the discussion of overlap at the end of section 4. For an example of the latter, see my next comment. Second, in many cases, the marks will sustain experiences of the scene by instantiating properties that cannot actually be seen. Suppose you draw four pencil lines on a white sheet of paper that form a trapezoidal shape. Suppose further that, due to other lines that are also on the paper, you see a tilted square in the picture. In this case, the lines sustain your experience collectively. Moreover, even though you may be able to see the lines on the picture surface, you will not be able to see the property by means of which they sustain your experience of the tilted square as a feature of the picture surface. In this paper, I chose to use the term "design" only to refer to marks and the *visible* properties by means of which they sustain the viewer's experience of the scene.

⁹ An extensive discussion of this feature of Wollheim's notion of twofoldness can be found in Flint Schier's book *Deeper into Pictures* (Schier 1986, 199-205). Schier first points out that Wollheim's goal was to present an analysis of what it means to see a picture as a picture of a scene. He then argues that Wollheim's twofoldness account of pictorial experience fails to do justice to this because it does not account for the fact that pictorial experience is explicitly interpretative in nature. More specifically, Schier argues that a viewer can see a scene in a picture's design only if she sees the surface as depicting that scene (Schier 1986, 205). In this paper, I am only interested in the possibility of twofold pictorial experiences and therefore remain neutral about the question of whether genuine pictorial experiences require seeing the surface as depicting the picture's scene.

contents are aspects of one single experience, but abstained from saying anything more specific about the ways in which the contents are unified (Wollheim 1987, 46; Wollheim 1998, 221). I will come back to this in section 4 and present a concrete suggestion about how the contents are unified.¹⁰

We can gather the points from the two previous paragraphs into a slightly more formal definition. In the following, I will call Wollheim's notion of twofoldness *design-scene twofoldness* and define it as follows:

Design-scene twofoldness: A viewer enjoys a design-scene twofold pictorial experience if and only if (i) she is consciously visually aware at the same time of both the picture's design as features of the picture surface and the scene seen in the picture; and (ii) her conscious visual experience unifies the two representational contents.¹¹

Some authors have argued that Wollheim also included a further condition in his characterization of twofoldness. According to these authors, he required that the surface-oriented aspect represent features of the design as design, that is, as features responsible for the viewer's experience of the scene.¹² I did not include this condition in the above definition because I believe that a viewer

¹⁰ A number of authors have argued that the two aspects of visual awareness can inflect each other. More specifically, these authors hold that the viewer's experience of the design can affect her experience of the scene and *vice versa*. See, for example, Lopes (2005), Kulvicki (2009), Bantinaki (2010), Nanay (2010), and Newall (2015). For a critical discussion of inflection, see Hopkins (2010). In this paper, I am not concerned with the question of whether pictorial experience can be inflected.

¹¹ I would like to point out that it is possible that a pictorial experience represents only part of the design as features of the picture surface. Such an experience would be partially design-scene twofold.

¹² Authors who interpret Wollheim in this sense include Lopes (2005, 40) and Bradley (2014, 415). Wollheim writes, for example, that twofoldness "leads us to marvel endlessly at the way in which line or brushstroke or expanse of color is exploited to render its effects" (Wollheim 1980, 216). It seems that a viewer can marvel at this only if she can see the marks as responsible for her experience of the scene.

might enjoy a design-scene twofold pictorial experience without seeing the design as responsible for her experience of the scene.

Wollheim pointed out that some pictures are able to elicit visual experiences in their viewers that are not twofold. For example, when a viewer looks at a *trompe l'oeil* painting under the right circumstances of observation, her visual experience will represent only the depicted scene, but not the picture surface. According to Wollheim, such experiences fail to manifest to the viewer that she is looking at a depiction of a scene, rather than at the scene itself, and therefore fail to be genuine pictorial experiences.¹³ In response to this claim, various authors have pointed out that visual experiences of *trompe l'oeil* paintings do not usually deceive their viewers into thinking that they are looking at the scene, rather than at a depiction of it. These authors hold that, even in cases in which the viewer is not aware of the picture's design, she may nevertheless enjoy a genuine pictorial experience. This will happen, for example, when the viewer's experience involves an awareness of features of the picture surface other than its design, such as the gloss of the surface, the weave of the canvas visible beneath the paint, the reflection of the light that illuminates the surface, or the craquelure.¹⁴ In order to accommodate this fact, proponents of twofoldness now typically argue that some, but not all, genuine pictorial experiences are twofold.¹⁵ I believe that this is correct and will therefore defend the weaker claim that some pictorial experiences are design-scene twofold.

3. A phenomenal contrast argument in favor of design-scene twofoldness

¹³ Wollheim calls genuine pictorial experience “representational seeing” (Wollheim 1980, 205).

¹⁴ For this view, see, for example, Lopes (1996), Levinson (1998), and Feagin (1998). For an interesting and detailed analysis of experiences of *trompe l'oeil* paintings, see also Spinicci (2012).

¹⁵ See, for example, Lopes (1996, 50f) and Lopes (2005, ch.1).

In this section, I present a phenomenal contrast argument in favor of the claim that some pictorial experiences are design-scene twofold. I proceed as follows. I first describe a phenomenal contrast scenario, that is, a scenario that involves two pictorial experiences that clearly differ in phenomenal character. I then argue that accounts of pictorial experience that do not allow for design-scene twofoldness cannot explain the phenomenal contrast, whereas accounts that allow for design-twofoldness can.¹⁶

Suppose you take a photograph of van Gogh's *Iris*es and print it on paper with the same dimensions as the original painting. You make sure that the photograph looks like a copy and not like a photograph of the painting. In other words, you make sure that the painting is not tilted, that one cannot see reflections or shadows on its surface, and that one cannot see the frame of the painting. A photograph produced in this way will look like a reproduction that one might purchase at a museum shop.¹⁷ You then frame the photograph in the same way as the painting and place it on the wall next to the painting. Now suppose you look at photograph and painting from an appropriate distance that is neither too far nor too close. In this situation, you will see the irises in both the photograph and the painting. I submit, however, that there is a significant difference in phenomenal character between the two visual experiences.

The difference in phenomenal character between the two experiences in this scenario, the phenomenal contrast, has two important features. First, most viewers plausibly accept that the two experiences differ in phenomenal character. One important indication of this is the fact that people usually agree that even very high quality photographic reproductions of paintings are

¹⁶ Wollheim also supported twofoldness by appeal to phenomenal contrasts. In particular, he pointed out that seeing a scene in a picture differs phenomenally from seeing the very same scene face to face. See, for example, Wollheim (1974, 277). For similar considerations, see also (Lopes 2005, ch.1). My argument is based on a different phenomenal contrast. Wollheim presented a number of other arguments in favor of design-scene twofoldness (Wollheim 1980; 205-226), which have received extensive criticisms that I will not review here.

¹⁷ For explicit analyses of the conditions under which such a photograph will look like a copy, see Kulvicki (2006, ch.3) and Newall (2004; 2011, ch.5).

much less visually impressive than their originals.¹⁸ Second, although viewers accept that the two experiences differ in phenomenal character, they can, and usually do, disagree on the precise nature of the difference. If this is correct, the difference in phenomenal character between the experience of the painting and the experience of the photograph is a robust phenomenological datum that any viable account of pictorial experience has to accommodate.

It is clear that we cannot account for the difference in phenomenal character between the two experiences by appealing to contextual features, such as the viewer's visual representation of the wall or the frames. I designed the scenario in a way that keeps all of these features constant. In my scenario, the viewer will look at the pictures from slightly different directions. For example, if the viewer stands exactly in between the painting and the photograph, one of them will extend to the left and the other to the right. But it is implausible that this alone suffices to explain the difference in phenomenal character between the two experiences. The difference does not diminish or disappear when the viewer moves in relation to painting and photograph.

It is also implausible to suggest that the difference in phenomenal character is a difference in non-sensory phenomenology. As is well known, a number of authors hold that cognitive states such as beliefs have a distinctive non-sensory phenomenal character.¹⁹ One might therefore suggest that the difference between the two pictorial experiences results from the fact that one experience is accompanied by the belief that the picture is a photograph and the other by the belief that the picture is a painting. But this explanation is problematic. The reason for this is that the difference in phenomenal character between the two experiences will not disappear when you learn, for example, that the photograph is actually a photorealistic painting. If this conclusion is correct, we have to assume that the difference between the two experiences

¹⁸ There are, of course, exceptions, such as copies of certain kinds of photorealistic paintings.

¹⁹ For an overview of this debate, see Bayne and Montague (2011).

is a difference in sensory phenomenal character, or, more specifically, in visual sensory phenomenal character.

I will now argue that accounts of pictorial experience that reject design-scene twofoldness cannot explain the phenomenal contrast. Authors who reject design-scene twofoldness follow Gombrich and accept the following general claims about pictorial experience (Gombrich 1961, 1975).²⁰ When a viewer sees a scene in a picture, she enjoys a non-veridical visual experience of the scene. The viewer can shift her attention to the picture surface. When she does so, she enjoys a visual experience of the picture surface. But the two experiences are mutually exclusive. The viewer cannot be aware of scene and surface at the same time.²¹ This view of pictorial experience generates four possible ways in which one might try to explain the phenomenal contrast. But before we can understand these options properly, I need to make an important observation about the contrast scenario.²²

The photograph is a copy of the painting. As such, it depicts both the irises and the brushstrokes. Thus, when you focus your attention on the photograph's scene, you are aware of both the irises and the brushstrokes. Moreover, since the photograph is a copy of the painting, your experience does not attribute the properties of the brushstrokes to the picture surface.²³ This has the consequence that the properties of the irises and the properties of the brushstrokes seem

²⁰ See Chasid (2014a, 2014b) and Zeimbekis (2017).

²¹ Gombrich writes: "But is it possible to see both the plane surface and the battle horse at the same time? If we have been right so far, the demand is for the impossible. To understand the battle horse is for a moment to disregard the plane surface. We cannot have it both ways" (Gombrich 1960, 279).

²² I would like to emphasize that some authors who reject design-scene twofoldness do not follow Gombrich. As Hopkins has made clear, proponents of the experienced resemblance theory can allow for twofoldness in a different sense. According to this theory, when a viewer sees a scene in a picture, she sees the picture's design as resembling the scene in some respect. This, so Hopkins, allows us to distinguish between two aspects of visual awareness. However, these aspects are abstract features of the complex content of one single experience, rather than two psychologically real aspects as required for design-scene twofoldness. See Hopkins (2010). My phenomenal contrast argument does not address these views. For a critique of these kinds of theories, see, for example, Briscoe (2016; 2018) and Jagnow (2017).

²³ One can appreciate this latter point if one compares the photograph in the contrast scenario with a photograph that actually depicts the surface. One can produce a photograph of this latter kind, for example, by tilting the painting.

to be fused together. In my view, it is plausible to describe this situation by saying that your experience of the scene in the photograph represents irises made of brushstrokes.²⁴

The painting, in contrast, does not depict the brushstrokes. But what do you see when you focus your attention on the painting's scene? As far as I can see, those authors who reject design-scene twofoldness could answer this question in three different ways. First, they could say that you see irises made of brushstrokes that look exactly like those seen in the photograph. In this case, there would be no difference in content between your experience of seeing the irises in the painting and your experience of seeing the irises in the photograph. Second, they could say that you see irises in the painting that are not made of brushstrokes.²⁵ In this case, there would be a large difference in content between seeing the irises in the painting and seeing the irises in the photograph. Third, they could say that you see irises made of brushstrokes in the painting, but maintain that the brushstrokes look different than those seen in the photograph. I will flesh out this last answer in a bit more detail later on. In this case, there would also be a difference in content between the two experiences, albeit a smaller one than in the previous case. Having distinguished between these three answers, we can now state the four possible explanations of the phenomenal contrast.

We can state the first option if we assume that the first answer is correct, that is, if we assume that there is no difference in representational content between your experience of seeing the irises in the painting and your experience of seeing the irises in the photograph. The first option tries to explain the difference in phenomenal character between the two experiences in the

²⁴ I would like to emphasize that this formulation is an attempt to capture the phenomenology of the experience, which somehow fuses brushstrokes and scene. I do not claim that the experience represents all material properties of the brushstrokes. For example, when I look at the irises in the photograph, I do not experience the brushstrokes as consisting of paint.

²⁵ Perhaps, the brushstrokes are somehow filtered out. One way to understand this difference here is in analogy to the difference between seeing irises in the photograph of van Gogh's painting and seeing irises face to face.

contrast scenario in terms of differences in the representational contents of the viewer's temporary awareness of the picture surface. The central idea here is the following. When the viewer looks at van Gogh's painting over an extended period of time, her experience will alternate between the irises and the thick impasto brushstrokes on its surface. Similarly, when the viewer looks at the photograph over an extended period of time, her awareness will alternate between the irises and the colored shapes printed on its flat surface.²⁶ One could therefore argue that the two temporally extended experiences of the painting and the photograph differ in phenomenal character because one, but not the other, involves the viewer's temporary awareness of thick impasto brushstrokes on the picture surface.

This explanation will not do, however. Suppose you focus your attention for an extended period of time on the irises in both the painting and the photograph. Since, according to the present assumption, the two experiences would represent identical scenes, they should be indistinguishable. There should be no difference in phenomenal character between your experience of the irises in the painting and your experience of the irises in the photograph. But this does not seem right. Even if you keep your attention focused on the irises, your experience of the photograph differs from your experience of the painting.

One might respond to this worry by saying that the viewer's experience switches quickly and automatically between surface and scene so that it is impossible to focus on the scene for an extended period of time. I believe that this is implausible. When the viewer focuses her attention

²⁶ Gombrich illuminates the relation between the viewer's awareness of the picture surface and its scene by appeal to the duck-rabbit figure. In this context, Gombrich writes: "What is difficult, indeed impossible, is to see all these things at the same time. We are not aware of the ambiguity as such, but only of the various interpretations. It is through the act of 'switching' that we find out that different shapes can be projected into the same outline. We can train ourselves to switch more rapidly, indeed to oscillate between readings, but we cannot hold conflicting interpretations" (Gombrich 1960, 236). Gombrich seems to make two points here, namely that shifting one's attention from surface to scene, and *vice versa*, is like a gestalt-switch and that this switch requires an intentional effort on the viewer's part and is not automatic.

on the scene of the painting, she experiences the irises as arranged in a three-dimensional pictorial space. In contrast, when she focuses her attention on the painting's surface, she experiences the brushstrokes as objects on the two-dimensional picture surface. In other words, when the viewer's experience switches from the scene to the surface or *vice versa*, the viewer should experience a 2-D/3-D gestalt-switch. But, as we know from experiments with 2-D/3-D ambiguous figures, such gestalt-switches are phenomenally very impressive and involve a total reorganization of the stimulus.²⁷ I think that it is implausible to say that viewers who enjoy the irises in the painting and the photograph experience this kind of gestalt-switch.

We can state the second option if we assume again that the first answer is correct, that is, if we assume that there is no difference in representational content between your experience of seeing the irises in the painting and your experience of seeing the irises in the photograph. A number of authors have argued that not all phenomenal characters of visual experiences supervene on their representational contents.²⁸ If this is correct, two visual experiences that represent identical scenes may nevertheless differ in phenomenal character. One could then say that the two experiences in the contrast scenario represent identical scenes, but still differ with regard to some non-representational feature. The challenge for the proponent of this type of explanation is to identify and describe the relevant non-representational features. Yet, I believe that we have good reasons to doubt that this challenge can be met. We can best appreciate this if

²⁷ The Necker cube has two different 3-D interpretations, but it is also possible to see it as a 2-D figure. The shift from one of the 3-D interpretations to the 2-D interpretation is dramatic. The so-called Koppermann cubes provide more examples of 2-D/3-D ambiguous figures (Koppermann 1930). One might respond to my observation in this paragraph by pointing out that the picture surface is not actually two-dimensional. The thick impasto brushstrokes have relief. Nonetheless, one would expect a phenomenally impressive gestalt-switch from a more or less flat surface to a three-dimensional scene.

²⁸ These arguments are usually presented as criticisms of representationalism, that is, of the view that phenomenal character is either identical with, or supervenes on, representational content.

we consider a number of possible candidates for non-representational features of visual experiences.

A first class of possible candidates for non-representational features of visual experiences is associated with variations in the conditions of observation, namely with changes in illumination, viewing angle, and viewing distance. Consider the following three pairs of experiences:

- (1) A visual experience of seeing the white color of a wall in bright sunlight and a visual experience of seeing the same color in shadow;
- (2) A visual experience of seeing the rectangular shape of a page that is perpendicular to your line of sight and a visual experience of seeing the same rectangular shape at an angle of 45° to your line of sight;
- (3) A visual experience of seeing the height of a tree at a distance of 10m and a visual experience of seeing the height of the same tree at a distance of 20m

The two experiences belonging to each of these pairs clearly differ in phenomenal character. But they also attribute the same objective properties to their respective objects, namely the same color, shape, and size. Some authors have concluded from this that the two experiences belonging to each of these pairs have identical representational contents, but differ with regard to some non-representational aspect.²⁹ I am not convinced by these arguments. In fact, all of these examples have been challenged.³⁰ But even if we put these criticisms to the side, it is clear that non-representational features associated with changes in the conditions of observation cannot

²⁹ See, for example, Peacocke (1983) and Smith (2008).

³⁰ For a recent criticism of these examples, see Bourget (2015).

explain the difference in phenomenal character between the two visual experiences in my contrast scenario. I described this scenario in such a way that the viewer looks at both the painting and the photograph under identical conditions of observation, including identical illumination and viewing distance. And, as I pointed out above, it is implausible to explain the phenomenal contrast in terms of differences in viewing angle.

A second class of possible non-representational features of visual experiences is associated with visual acuity. Consider the following two pairs of visual experiences:

- (1) A visual experience of seeing a circular plate clearly and a visual experience of seeing the very same plate blurrily;
- (2) A visual experience of seeing a circular plate clearly and a visual experience of seeing that very same plate through a haze

The two visual experiences belonging to each of these pairs clearly differ in phenomenal character, but, nevertheless, attribute the same objective shapes to their respective objects. Here, too, a number of authors have argued that these experiences differ with regard to some non-representational aspect.³¹ These examples have also been challenged.³² But, for the sake of argument, let us assume that visual experiences that represent the same scene can still differ with regard to blurriness or haziness. One might therefore suggest that the two visual experiences in the contrast scenario differ because they represent the same scene, but one of them is more blurry or hazy than the other.³³

³¹ See, for example, Boghossian and Velleman (1989).

³² See Bourget (2015).

³³ Chasid has recently argued that when a viewer sees a scene in a picture, the features of the picture surface (brushstrokes, ink splotches, etc.) become phenomenal noise “much like the ‘hazy’ phenomenal aspect of blurred or

This suggestion does not seem right from a phenomenological point of view. Neither of the two visual experiences in my contrast scenario seems to be blurry or hazy. Consider first the experience of the irises in the painting. The boundaries of the brushstrokes on the surface overlap with the boundaries of the irises. Since the boundaries of the brushstrokes are neither blurry nor hazy, the same must be true of the boundaries of the irises. Consider now the experience of the irises in the photograph. The photograph is a high quality color photograph that is perfectly focused. Since the brushstrokes on the surface of the painting are neither blurry nor hazy, the same must be true of the brushstrokes depicted by the photograph. Moreover, since the boundaries of these brushstrokes overlap with the boundaries of the irises in the photograph, the irises will be neither blurry nor hazy. I think that these considerations provide good reasons for doubting that it is possible to identify and describe non-representational features that would explain the phenomenal contrast.

We can state the third option if we assume that the second answer is correct, that is, that you see irises in the painting that are not made of brushstrokes. One could then explain the difference in phenomenal character between your experience of seeing the irises in the photograph and your experience of seeing the irises in the painting in terms of the difference between their representational contents.

In my view, this option implies an implausible explanation of the fact that viewers easily recognize that the photograph is a copy of the painting. Let me first say how the proponent of this option would have to account for this fact and then explain why it is implausible. In order to recognize that the photograph is a copy of the painting, the viewer would have to make two comparisons. First, the viewer would have to recognize that the brushstrokes depicted by the

distorted experiences” (Chasid 2014a, 476). The present suggestion could be elaborated in further detail by appeal to Chasid’s argument.

photograph are similar to the brushstrokes on the surface of the painting. Second, the viewer would have to recognize that the irises depicted by the photograph are similar to those depicted by the painting. This requires that the viewer refocus her attention from the scene in the photograph to the surface of the painting and then to the scene in the painting. On the basis of these two subsequent comparisons, the viewer would then judge that the photograph is a copy of the painting.

This account is implausible because it fails to do justice to an important feature of our experience of copies. I believe that the photograph in my scenario strikes the viewer immediately as a copy of the painting. As a consequence, it would be difficult for the viewer to miss the fact that the former is a copy of the latter. But, according to the account in the previous paragraph, the viewer can recognize this fact only if she focuses her attention in the right way. If she fails to do so, say, for example, if she is absorbed in the contemplation of the two scenes, she could easily miss that the photograph is a copy of the painting. Suppose you visit the museum shop of the Getty Museum after seeing van Gogh's *Iris*es and look at a copy of the painting. Having failed to pay attention to the surface of the painting, you might now wonder whether this is a copy of the painting or a photograph of a different scene. This, I think, is a very implausible scenario.

We can state the fourth option if we assume that the third answer is correct. According to this answer, you see irises made of brushstrokes in both the painting and the photograph. But the brushstrokes in the two scenes look different. More specifically, one could say that the brushstrokes in the photograph look flat in comparison to those in the painting. One could then explain the phenomenal contrast again in terms of a difference in representational content. This proposal has a number of advantages over the previous ones. First, it is phenomenologically

plausible. It seems correct to say that the irises in the painting appear to be made of brushstrokes and that the brushstrokes in the photograph look flat in comparison to those in the painting.

Second, this proposal also has a plausible explanation. We can say that the brushstrokes look different in the two scenes because the visual system receives information about the relief of the brushstrokes from the surface of the painting, but not from the surface of the photograph.

In spite of these advantages, I believe that this option is problematic. But before I can state the problem, I need to make two observations. The first observation concerns the visual cues that provide the viewer's visual system with information about the relief of the brushstrokes on the painting's surface. I think that there is only one binocular cue that is sufficiently sensitive to yield this type of information, namely disparity.³⁴ The viewer can verify this by looking at a painting with raised brushstrokes while opening and closing one eye. The brushstrokes will appear to flatten when viewed monocularly. I also think that there is only one monocular cue that is sufficiently sensitive, namely information from shading and shadows.³⁵ Again, the reader may verify this by looking at a painting with raised brushstrokes while changing the direction of the illuminant. The brushstrokes will appear to flatten when the light source approaches a position that is perpendicular to the painting's surface. If this is correct, the fourth option is committed to the claim that the viewer's visual system uses information from disparity, shading, and shadows in order to represent the shape properties of the brushstrokes in the picture's scene. The differences in visual information about the structure of the two surfaces has the consequence that the brushstrokes in the photograph look flat in comparison to those in the painting.

³⁴ Binocular disparity refers to the relative lateral displacement of the two retinal images due to the distance between the two eyes.

³⁵ Shading refers to variations in the amount of light reflected from the surface as a result of variations in the orientation of the surface relative to a light source. Depth information from shading differs from information provided by cast shadows. Under appropriate conditions of illumination, the raised brushstrokes on the picture surface provide both types of information.

The second observation concerns the phenomenal contrast. Suppose you look at the painting and the photograph in the contrast scenario with one eye closed and through a reduction screen that covers their respective frames. Doing so will remove all binocular visual cues that might indicate the presence of a surface in front of you. The important point for my argument is that even though this procedure diminishes the phenomenal contrast, it does not erase it. The viewer can verify this by looking at a painting with raised brushstrokes and a photograph of that painting through a reduction screen. In conjunction with my point in the previous paragraph, this observation implies that the fourth option has to explain the remaining phenomenal contrast exclusively by appeal to information from shading and shadows.

With these two observations in place, I can now formulate the problem for the fourth option as follows. Suppose that you view van Gogh's painting and the photograph monocularly through a reduction screen. As we have seen, your experience of seeing the irises in the painting and your experience of seeing the irises in the photograph will still differ in phenomenal character. As we have also seen, the proponent of the fourth option would have to explain this phenomenal contrast by appeal to information from shading and shadows. However, shading and shadows not only provide information about the three-dimensional structure of the brushstrokes, but also indicate the presence of a surface in front of the viewer. A viewer cannot be aware of the way in which the surface is shaded and the way in which the raised features cast shadows without also being aware of the surface itself. This is problematic for the fourth option. The reason for this is that such an experience would locate the brushstrokes on the picture surface and would therefore be design-scene twofold. We can reinforce this point if we consider what would happen if we were to remove shading and shadows by changing the illumination of the painting. In this case, we would also remove any indication of the presence of a surface in front of the

viewer. It would then seem to the viewer as if she were seeing the irises face to face. In other words, the viewer would have an illusory experience. But I did not describe the contrast scenario as involving illusory experiences of this kind.

Before concluding this discussion, I need to address one further option. Up to this point, I assumed that those authors who reject design-scene twofoldness accept Gombrich's claim that the viewer cannot be aware of scene and surface at the same time. However, a number of authors distinguish the design, that is, the marks on the picture surface and the visible properties by means of which they sustain the viewer's experience of the scene, from other visible properties of the picture surface, such as the weave of the canvas visible beneath the paint, the gloss of the surface, and the craquelure (Lopes 1996; 2005). Call these latter properties *mere surface properties*.³⁶ Given this distinction, one could reject design-scene twofoldness and still maintain that viewers can be aware of scene and mere surface at the same time. One could then explain the phenomenal contrast by saying that the two experiences attribute different mere surface properties to the two surfaces. For example, when you see the irises in the photograph, you are aware of the flat surface with its high gloss, and when you see the irises in the painting, you are aware of the weave of the canvas visible beneath the paint.

I agree that some pictorial experiences are twofold in the sense that they involve only the viewer's simultaneous visual awareness of scene and mere surface. And I also agree that the viewer's experience of van Gogh's painting typically includes an awareness of mere surface properties, such as the weave of the canvas. But, once we admit this, it is no longer plausible to say that the viewer's awareness of the picture surface is limited to mere surface properties. As we have just seen, the same visual cues – monocular and binocular – that inform the visual

³⁶ This option and the terminology has been suggested to me Robert Hopkins.

system about the presence of the surface of the painting also inform it about the relief of the brushstrokes. So if we concede, for example, that the viewer's experience of seeing the irises in the painting represents the weave of the canvas beneath the paint, we should also concede that this experience represents the relief of the brushstrokes. Such an experience would be design-scene twofold.

If my arguments so far are accepted, it follows that accounts of pictorial experience that do not allow for design-scene twofoldness cannot explain the phenomenal contrast. Proponents of design-scene twofoldness, in contrast, can say that the two experiences differ in phenomenal character because their respective surface-oriented aspects differ in representational content. Specifically, they can say that the experience of the painting differs from the experience of the photograph because the surface-oriented aspect of the former, but not that of the latter, represents thick impasto brushstrokes. In order to clarify this further, I would like to make the following comment.

My explanation of the phenomenal contrast requires only that the viewer's visual experience of the painting be design-scene twofold. It does not also require that her experience of the irises in the photograph be design-scene twofold. In fact, I do not think that typical visual experiences of photographs are design-scene twofold. When a viewer sees a scene in a photograph, she is not usually also visually aware of the picture's design, that is, of the flat shapes and colors printed on its surface. She may be aware of other features of the surface, such as its flatness and its high gloss. But I do not need to argue in favor of this view here. The fact that the surface-oriented aspect of the viewer's experience of the painting, but not that of the photograph, represents thick impasto brushstrokes suffices to account for the phenomenal contrast.

4. *Objections to design-scene twofoldness*

In the previous section, I presented a phenomenal contrast argument in favor of the claim that some pictorial experiences are design-scene twofold. However, a number of authors have put forward powerful arguments against Wollheim's notion of twofoldness. In particular, these authors have argued that visual experiences cannot represent both an opaque two-dimensional surface and a three-dimensional scene at the same time. If these authors are correct, we would have to conclude that my arguments against the various options in the previous section are not successful. In this section, I will therefore address what I take to be the three most important objections to design-scene twofoldness.

The first two objections, raised by Zeimbekis and Hopkins, concern the spatial contents of design-scene twofold experiences (Zeimbekis 2015, Hopkins 2012). Since both objections arise from two assumptions about design-scene twofold experiences, it will be helpful to first make these assumptions explicit. The first assumption is that design-scene twofold experiences locate elements of the design and the corresponding elements of the scene in the same direction relative to the viewer. For example, when you point at a particular iris in van Gogh's painting, you will at the same time point at the corresponding brushstrokes, and *vice versa*.³⁷ The second assumption is that design-scene twofold pictorial experiences represent their respective contents at different absolute distances from the viewer's point of view.³⁸ For example, when you enjoy a design-scene twofold pictorial experience of the irises in van Gogh's painting, you will see the brushstrokes as closer to your point of view than the irises.

³⁷ For this assumption, see especially Hopkins (1998, 196), Kulvicki (2009, 391), and Newall (2015, 134).

³⁸ For this assumption, see, for example, Kulvicki (2009, 390-392) and Newall (2015, 133-136).

Zeimbekis illustrates his objection to design-scene twofoldness with an ambiguous figure. But I will use my original example of van Gogh's painting to explain it. Suppose you enjoy a design-scene twofold experience of one of the irises in the painting. Given the two assumptions above, your experience would locate the iris and the corresponding brushstrokes in the same direction, but the iris would look farther away from you than the brushstrokes.

Zeimbekis first points out that the claim that twofold pictorial experiences represent the same stimulus at two distinct locations is in conflict with the phenomenology of picture-perception.

You do not actually see the iris and the corresponding brushstrokes at two distinct locations.

Zeimbekis then argues that this phenomenological claim is supported by empirical results. In order to locate the stimulus at two different distances from the viewer's point of view, the visual system would have to construct two inconsistent depth-interpretations. Yet, this is in conflict with empirical facts about the visual system (Zeimbekis 2015, 312). Experiments conducted by Cutting and Massironi show that the visual system assigns depth and depth order through the application of rules about lines and regions (Cutting and Massironi, 1998). If conflicting depth interpretations are possible, the visual system yields only one consistent interpretation at a time.³⁹ The visual system might switch between the two interpretations, but it cannot maintain both at the same time.

Hopkins's objection to design-scene twofoldness takes the form of the so-called *rotation argument* (Hopkins 2012). Suppose again that you enjoy a design-scene twofold experience of one of the irises in van Gogh's painting. Using my example, this argument goes as follows:

- (1) If design and iris are represented as lying at different distances in the space before me, then if my perspective on the design manifestly shifts, while my perspective on

³⁹ The authors also mention the Necker cube, Mach's folded sheet, and Schröder's staircase.

- the iris manifestly stays the same, the relative orientation of iris and design must look to change.
- (2) As I move in front of the picture, my perspective on the design manifestly shifts, but my perspective on the iris stays the same.
- (3) As I move in front of the picture, it is not the case that the iris's orientation relative to the design looks to change.
- So,
- (4) Design and iris are not represented as lying at different distances in the space before me.⁴⁰

Stated in this way, the argument may not be sound. I agree with Hopkins that (1) and (3) are true. But I am worried about (2). When I move in front of the painting, my perspective on the iris remains the same. But, in my view, this also holds for the design. As long as I see the entire iris, I will see the entire design, that is, all the corresponding brushstrokes, no matter how I move in front of the painting.

I believe that we can fix this problem with Hopkins's rotation-argument if we formulate it in terms of viewer-relative directions, rather than perspective. According to the first assumption above, a design-scene twofold experience locates brushstrokes and iris in the same direction from the viewer's point of view. According to the second assumption above, a design-scene twofold experience locates the brushstrokes closer to the viewer's point of view than the irises. Thus, if the viewer were to move to the right (or the left) relative to the painting, the brushstrokes would appear to move to the left (or the right) of the iris. But no matter how the viewer moves in front of the painting, brushstrokes and iris always appear in the same direction. Thus, the viewer does not see brushstrokes and iris at different distances from her point of view.

In my view, the arguments put forward by Zeimbekis and Hopkins show convincingly that the assumption that design-scene twofold pictorial experiences represent their respective

⁴⁰ I modified Hopkins's formulation so that it applies to my example. For Hopkins's formulation of the argument, see Hopkins (2012, 656).

contents at different absolute distances from the viewer's point of view is false. We can give up this assumption, however, and still hold on to the possibility of design-scene twofold pictorial experiences. The key to this is to realize that design-scene twofold pictorial experiences do not represent the absolute distance between viewer and scene. I will now elaborate and defend this proposal.

According to my view, the surface-oriented aspect of a twofold pictorial experience places the picture surface with its design in the viewer's egocentric space. The viewer's egocentric space is the actual space surrounding the viewer. The viewer's experience represents the objects contained in this space relative to her point of view. This representation specifies both the absolute distance of the picture surface from the viewer and the direction of surface and design relative to her position. Moreover, the viewer's experience presents the surface as actually present in front of her, just like all the other objects that populate the visible portion of the actual space around her.

The scene-oriented aspect, in contrast, places the scene in a separate pictorial space.⁴¹ This aspect represents the relative distances between the apparent locations of the depicted objects in pictorial space and the directions of these locations relative to the viewer's position. But, importantly, the scene-oriented aspect does not represent the absolute distances between the viewer and the apparent locations of the depicted objects in pictorial space. Another way of putting this is by saying that the scene-oriented aspect of a twofold pictorial experience represents the objects contained in its scene as being visible in a specific viewer-relative direction, but not as having absolute location in the viewer's egocentric space. Whereas

⁴¹ The distinction between actual and pictorial space is widely recognized by authors writing about picture-perception. See, for example, Koenderink (2003), Rogers (2003), and Vishwanath (2011) for scientific analyses of pictorial space.

egocentric space is the actual space surrounding the viewer, pictorial space is a type of virtual space (Gibson 1992, Briscoe 2016). This has the consequence that viewers who are not subject to illusions elicited by certain *trompe l'oeil* paintings do not experience the objects contained in pictorial space as actually being located in front of them.

I would like to illustrate these points with an example. Consider again one of the irises in van Gogh's painting. If you are enjoying a twofold pictorial experience, you are simultaneously aware of the iris and the corresponding brushstrokes. The surface with the brushstrokes is part of your egocentric space. You can actually touch them. The iris, in contrast, is located in pictorial space. You can tell, for example, that it appears in front of another iris. But you cannot tell how far the iris is away from you. You can neither get closer to the iris, nor touch it. Nonetheless, when you point to the brushstrokes, you also point to the iris, and *vice versa*. Both appear in the same direction relative to your point of view. We can make similar observations for all pictures that are able to elicit design-scene twofold experiences.

My proposal is supported by psychophysical facts about picture perception. First, perceived direction is given through the location of the image on the retina, that is, through what used to be called in the psychophysical literature *local signs*. This has the consequence that the experience necessarily locates elements of the design (the brushstrokes) and the corresponding elements of the scene (the irises) in the same direction relative to the viewer. Second, vision scientists usually draw a distinction between relative depth, that is, depth characterized by depth order, surface slant, and 3D shape, on the one hand, and absolute depth, that is, egocentrically scaled depth, on the other (Cutting and Vishton, 1995; Mausfeld, 2003; Nédirée and Heyer, 2003; Vishwanath, 2011). Moreover, Vishwanath has argued that in typical pictorial experiences,

these two depth representations come apart (Vishwanath 2011, 224).⁴² This has the consequence that the picture surface, but not the scene depicted by the picture, is represented at a certain absolute distance from the viewer.⁴³

If what I have said in the previous paragraphs is correct, my proposal avoids the objections raised by Zeimbekis and Hopkins. According to my proposal, the two aspects of visual awareness locate elements of the design and the corresponding elements of the scene in the same viewer-relative direction, but do not place design and scene at different absolute distances from the viewer. These facts avoid Hopkins's rotation argument. Elements of the design and the corresponding elements of the scene will not appear to change their viewer-relative direction when the viewer moves in front of the painting. These facts also avoid Zeimbekis's objection. Since design-scene twofold experiences do not place the same stimulus at two different absolute distances from the viewer, they do not involve inconsistent depth-interpretations.

I would like to consider two possible objections to my proposal. First, Kulvicki considers the claim that twofold pictorial experiences place surface and scene in separate spaces (a proposal that he ascribes to Wollheim) and then rejects it (Kulvicki 2009, 390-393). His complaint is that this proposal is unable to accommodate the second clause of the definition of design-scene twofoldness, namely that such an experience unifies the two representational contents. If pictorial experiences place the two contents in two separate spaces, it is difficult to see how the contents can seem to be unified. My proposal avoids this problematic consequence. According to my proposal, the two aspects of visual awareness necessarily also locate elements

⁴² Vishwanath formulates this as follows: "In pictorial space, we have no real sense of absolute depth because we have no sensory information about absolute distance" (Vishwanath 2011, 224).

⁴³ For similar views, see Ferretti (2018) and Briscoe (2018).

of the picture's design and the corresponding elements of the scene in two separate spaces. Yet, these two contents are nevertheless unified because they appear in the same viewer-relative direction.

Second, some authors take it to be obvious on phenomenological grounds that twofold pictorial experiences present the scene either in front of, or behind, the picture surface.⁴⁴ I am not sure that this is true.⁴⁵ But, even if this were true, my proposal would be consistent with it. My proposal concerns only the absolute distance between design and scene, claiming only that a design-scene twofold experience does not represent the scene as so-and-so far away from the viewer. My proposal does not say anything about other spatial relations between design and scene. It is therefore possible for a design-scene twofold experience to represent the design in front of, or behind, the scene. In order to illustrate this, suppose that as you look at van Gogh's painting, you position your hand in such a way that it occludes an iris. In this case, your hand appears in front of the iris. But it makes no sense to ask about the absolute distance between the two. Similarly, it might be possible for your experience to represent certain brushstrokes as located in front of the corresponding iris without however representing the absolute distance between the two.⁴⁶

I will now turn to the third objection against design-scene twofoldness. Chasid has recently argued that design-scene twofold pictorial experiences are in conflict with the fact that it is not possible for a viewer to experience simultaneously two determinates of the same

⁴⁴ See, for example, Newall (2011) and Kulvicki (2009).

⁴⁵ Hyman explicitly rejects the claim that the scene appears either in front of, or behind, the surface (Hyman 2006, 133).

⁴⁶ Newall has argued that some, but not all examples of seeing-in can be understood as instances of transparency perception (Newall 2015). I think that my proposal is compatible with most of his examples. I agree that some twofold pictorial experiences can be understood as transparency effects, and that these experiences present the scene behind the picture surface. But, on my view, these experiences are not design-scene twofold. For example, a scene in a photograph might look like seen through glass or through a white veil or mist, depending on the structure of the surface (Newall 2015, 145).

determinable in the same region of her visual field (Chasid 2014a, 2014b). As I read him, Chasid individuates regions in the visual field in terms of viewer-relative directions. Regarding color properties, he writes:

Looking at a flat surface, you discover that it is a large picture of a slightly shaded wall. You can then experience either a white-hued wall, or a grey-hued surface (grey being the actual hue used to depict the wall as shaded). Yet in focusing on this area of your visual field, you cannot simultaneously experience both a white wall and a grey surface (Chasid 2014a, 477).

Regarding shape properties, he writes:

Suppose you're looking at a picture of a flying saucer. On Wollheim's view, you experience the saucer as perfectly round. The picture's configurational feature, however—the physical paint stain on the canvas—is elliptical, so you experience the stain as elliptical. According to the twofoldness thesis, you therefore experience the flying saucer as perfectly round, and a certain paint-blot as elliptical, with both occupying the same region of your visual field. But as in the previous examples, this duality is phenomenally impossible (Chasid 2014a, 477).

Accordingly, it is phenomenally impossible for a viewer to experience the same region of her visual field as containing both a grey surface and a shaded white surface, and it is phenomenally

impossible to experience the same region of the visual field as containing both an elliptical and a round object.

If we call determinates of the same determinable that cannot be represented in the same region of the visual field *incompatible properties*, we can state Chasid's objection as follows. Except, perhaps, in the case of transparency experiences, it is not possible for a visual experience to attribute incompatible properties to objects in the same region of the visual field. The sense of incompatibility here is not logical incompatibility. It is logically possible for the visual system to represent two opaque objects at different distances in the same direction. Rather, the incompatibility is a type of computational incompatibility. Except, perhaps, in the case of transparency experiences, the relevant perceptual mechanisms that attribute low-level properties such as color and shape do not allow for the possibilities illustrated by Chasid's examples. The examples mentioned in the two quoted passages from Chasid's paper provide evidence for this kind of computational incompatibility.

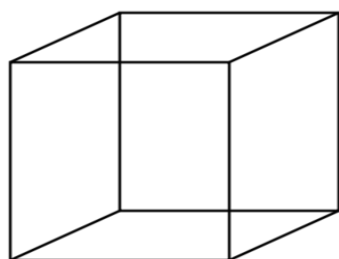
I believe that Chasid is correct in saying that it is not possible for a visual experience to attribute incompatible properties to two opaque objects in the same region of the visual field. Yet, Chasid's argument does not force us to reject the possibility of twofold pictorial experiences. Twofold pictorial experiences are still possible as long as the two aspects of visual awareness attribute only compatible properties to their respective contents. I will now illustrate two ways in which this can happen.

First, incompatibility is avoided in cases where the visual system attributes the same properties to both surface and scene, that is, in cases of overlap.⁴⁷ Van Gogh used the thick brushstrokes in such a way that their color, shape, and texture properties overlap with the color,

⁴⁷ For a discussion of the phenomenon of overlap, see Hopkins (2010).

shape, and texture properties of the irises. For example, the blue color of the brushstrokes matches the blue color of the irises. Similarly for the shape and texture properties. Compare this with Holbein's painting *The Ambassadors*. A typical experience of this painting attributes all the color, shape, and texture properties to the scene. In the case of this painting it requires a significant effort on the viewer's part to focus on the colors, textures, and shapes of the brushstrokes on the picture surface. And when she succeeds, she will lose awareness of the scene.

Second, incompatibility is avoided if one of the aspects of visual awareness abstains from representing a property that would be incompatible with a property represented by the other



aspect. In order to illustrate this, we need to switch to an example in which there is no overlap. Consider the Necker cube. If you look at this cube from an appropriate distance, you will enjoy a design-scene twofold experience. The scene-oriented aspect of your

experience represents a cube and the surface-oriented aspect represents black ink lines on a white surface. However, the two aspects attribute different properties to their respective contents.

Whereas the surface-oriented aspect attributes properties such as *being black*, *being made of ink*, and *lying on the picture surface* to the ink lines, the scene-oriented aspect does not represent these properties. The cube's edge does not have a color, and it is not experienced as consisting of ink. As a consequence, the two aspects do not attribute incompatible properties to surface and scene. Note that similar observations will apply to line drawings in general.⁴⁸

⁴⁸ Briscoe argues in favor of what he calls *weak onefoldness*. According to this view, “[h]aving the experience as of virtual depth and 3D structure when looking at a picture . . . excludes representing some, but not all of its superficial properties” (Briscoe 2018, 66). My proposal in this paragraph is similar to Briscoe's. But, on my view, these experiences are design-scene twofold and the selective attribution of properties goes both ways.

5. Conclusion

In this paper, I defended the claim that some pictorial experiences are design-scene twofold. I first presented a phenomenal contrast argument in favor of this claim and then addressed three important objections against it. If my arguments are successful, the assumption that at least some pictorial experiences are design-scene twofold explains the phenomenal contrast between an experience of the irises in van Gogh's famous painting and an experience of the irises in a copy of that painting. Moreover, if, as I have argued, the scene-oriented aspects of twofold pictorial experiences do not represent the objects contained the picture's scene as being located in the viewer's egocentric space, we can avoid the spatial inconsistencies that troubled Zeimbekis and Hopkins. Finally, if we assume that the two aspects of visual awareness do not attribute incompatible properties to their respective contents, we can avoid the visual field inconsistencies described by Chasid.⁴⁹

References

- Bantinaki, K. (2010). "Picture perception as twofold experience," in Catharine Abell and Katerina Bantinaki (eds.), *Philosophical Perspectives on Depiction*. Cambridge: Cambridge University Press, 128-50.
- Bayne, T. and Montague, M. (eds.) (2011). *The Cognitive Phenomenology Debate*. Oxford: Oxford University Press.
- Bourget, D. (2015). "Representationalism, perceptual distortion and the limits of phenomenal concepts." *Canadian Journal of Philosophy* 45, 16-36.
- Bradley, H. (2014). "Reducing the space of seeing-in." *British Journal of Aesthetics* 54(4): 409-24.

⁴⁹ I would like to thank the two reviewers for this journal for their insightful and extremely helpful comments. I would also like to thank Min Tang and Rob Hopkins for their comments on the phenomenal contrast argument at the annual meeting of the Central Division of the APA 2019. Their comments allowed me to further improve the argument in this paper.

Briscoe, R. (2016). *Depiction, pictorial experience, and vision science*. *Philosophical Topics* 44(2): 43-81.

Briscoe, R. (2018), "Gombrich and the Duck-Rabbit," in Michael Beaney (ed.), *Aspect perception after Wittgenstein: Seeing-as and novelty*, Routledge, 49-88.

Cavedon-Taylor, D. (2011). "The space of seeing-in." *British Journal of Aesthetics* 51(3): 271-78.

Chasid, A. (2014a). "Pictorial experience; not so special after all." *Philosophical Studies* 171 (3), 471-491.

Chasid, A. (2014b). "Pictorial experience and intentionalism." *Journal of Aesthetics and Art Criticism* 72 (4), 405-416.

Feagin, S. (1998). "Presentation and representation." *Journal of Aesthetics and Art Criticism* 56(3): 234-240.

Ferretti, G. (2018). "Are pictures peculiar objects of perception," *Journal of the American Philosophical Association* 3(3), 372-393.

Hopkins, R. (1998). *Picture, Image, and Experience*. Cambridge: Cambridge University Press.

Hopkins, R. (2010), "Inflected pictorial experience: Its treatment and significance," in Catharine Abell and Katerina Bantinaki (eds.), *Philosophical Perspectives on Depiction*. Cambridge: Cambridge University Press, 151-180.

Hopkins (2012). "Seeing-in and seeming to see." *Analysis* 72(4): 650-9.

Koendenrink, J.J. and van Doorn, A.J. (2003). "Pictorial space." In H. Hecht, R. Schwartz, and M. Atherton (eds.), *Looking into Pictures*, Cambridge: MIT, 239-300.

Kopfermann, H. (1930). "Psychologische Untersuchungen über die Wirkung zweidimensionaler Darstellungen körperlicher Gebilde." *Psychologische Forschung* 13(1), 293–364.

Kulvicki, J. (2009). "Heavenly sight and the nature of seeing-in." *Journal of Aesthetics and Art Criticism* 67(4): 387-97.

Levinson, J. (1998). Wollheim on pictorial representation. *Journal of Aesthetics and Art Criticism* 56(3): 226-33.

Lopes, D. (2005). *Sight and sensibility*. Oxford: Oxford University Press.

Nanay, B. (2005). Is twofoldness necessary for representational seeing? *British Journal of Aesthetics* 45(3), 248-257.

- Nanay, B. (2008). Picture perception and the two visual subsystems. D. S. McNamara & J. G. Trafton (eds.): *Proceedings of the 30th Annual Conference of the Cognitive Science Society (CogSci 2008)*. Mahwah, NJ: Lawrence Erlbaum, 2008, 975-980.
- Nanay, B. (2010). "Inflected and uninflected experience of picture," in Catharine Abell and Katerina Bantinaki (eds.), *Philosophical Perspectives on Depiction*. Cambridge: Cambridge University Press, 181-207.
- Nanay, B. (2011). Perceiving pictures. *Phenomenology and the Cognitive Sciences*, 10(4), 461-480.
- Nedirée, R. and Heyer, D. (2003). "The dual nature of picture perception." In H. Hecht, R. Schwartz, and M. Atherton (eds.), *Looking into Pictures*, Cambridge: MIT, 77-98.
- Newall, M. (2009). Pictorial Experience and Seeing. *British Journal of Aesthetics* 49(2), 129-141.
- Newall, M. (2011). *What is a picture?* Basingstoke: Palgrave Macmillan.
- Newall, M. (2015). Is seeing-in a transparency effect? *British Journal of Aesthetics* 55(2): 131-56.
- Peacocke, C. (1983). *Sense and content: Experience, thought, and their relations*. Oxford: Oxford University Press.
- Rogers, S. (2003). "Truth and meaning in pictorial space." In H. Hecht, R. Schwartz, and M. Atherton (eds.), *Looking into Pictures*, Cambridge: MIT, 301-320
- Sartwell, C. (1991). "Natural generativity and imitation." *British Journal of Aesthetics* 31(1), 58-67.
- Smith, A.D. (2008). "Translucent experiences." *Philosophical Studies* 140(2), 197-212.
- Velleman, J.D. and Boghossian, P.A. (1989). "Color as a secondary quality." *Mind* 98, 81-103.
- Vishwanath, D. (2011). "Visual information in surface and depth perception: Reconciling pictures and reality." In L. Albertazzi, G. van Tonder, and D. Vishwanath (eds.) *Perception beyond Inference: The Information Content of Visual Processes*.
- Voltolini, A. (2012). "Toward a syncretistic theory of depiction," in C. Calabi (ed.), *Perceptual Illusions: Philosophical and Psychological Essays*, Basingstoke: Palgrave, 164-191.
- Voltolini, A. (2015). "Why, as responsible for figurativity, seeing-in is can only be inflected." *Phenomenology and the Cognitive Sciences* 14, 651-667.
- Wollheim, R. (1980), *Art and its objects*, Cambridge: Cambridge University Press.

Wollheim, R. (1987). *Painting as an art*. Princeton: Princeton University Press.

Wollheim, R. (1998). On pictorial representation. *Journal of Aesthetics and Art Criticism* 40(9), 217-26.

Wollheim, R. (2003). In defense of seeing-In. In Heiko Hecht, Robert Schwartz, and Margaret Atherton (eds.), *Looking into Pictures* (Cambridge: MIT), 3-16.

Zeimbekis, J. (2017). Seeing, visualizing, and believing: Pictures and cognitive penetration. In John Zeimbekis & Athanassios Raftopoulos (eds.), *The Cognitive Penetrability of Perception: New philosophical perspectives*. Oxford University Press, 298-327.