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# The paradox of pictorial representation A Wittgensteinian solution

#### Abstract

When Wittgenstein claims that "the expression of a change of aspect is the expression of a new perception and at the same time of the perception's being unchanged" (Wittgenstein 1953: 196), he expresses a paradox that Gombrich (Gombrich 1960) modifies in this way:  $(a_1)$  the observer x perceives a picture P under a new aspect;  $(b_1)$  if x perceives P under a new aspect then x's perception of P has changed;  $(c_1)$  but x's perception of P has not actually changed. I argue that the Gombrich's version of the paradox has become the core of the problem of the pictorial representation. As I will explain, different approaches to depiction solve the paradox by denying one among  $(a_1)$ - $(c_1)$ . Gombrich rejects  $(c_1)$ . Wollheim rejects  $(a_1)$ . The so-called psychological theories of depiction also reject  $(a_1)$ . Every theory of depiction should face what I call the Fictional Issue (FI) and the Representational Issue (RI). Attempting to solve FI and RI, I shall explore an alternative, Wittgensteinian solution, which implies to reject  $(b_1)$ . To do this, we have to interpret the seeing-as as made of two kinds of perception: a simple perception and a representational perception.

#### **Keywords**

Pictorial representation, Seeing-as, Picture perception

Received: 17/12/2020 Approved: 01/03/2021 Editing by: Elettra Villani

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#### 1. Introduction

Looking at certain types of signs, we do not always see them unambiguously. For example, staring at the Necker's cube, it is possible to see the lower-left face as the front side of the cube, or it is possible to see the upper-right face being the front side of the cube. In both cases the starting picture has not changed, what has changed is the *aspect* noticed by the viewer (Wittgenstein 1953: 193)¹. The duck-rabbit figure (D-R figure), introduced in the field of psychology by Joseph Jastrow and made famous by Gestaltists and Wittgenstein, is probably the best-known case of ambiguous picture admitting an aspectual perception². It can appear as a duck or as a rabbit or, better, we can *see* it *as* a duck or we can *see* it *as* a rabbit. However, because of a property of the visual system that is called exclusivity (or uniqueness), it is impossible to see both the aspects at the same time (Leopold, Logothetis 1999)³. Trying to summarize the issue, we could say that a case of seeing-as consists in a shift between two or

 $<sup>^1</sup>$  Some scholars ask if a reference to aspect perception was already in the *Tractatus*. The link concerns the proposition 5.5423, where Wittgenstein, talking about the Necker's cube, claims: "To perceive a complex means to perceive that its constituents are combined in such and such a way. This perhaps explains that the figure can be seen in two ways as a cube; and all similar phenomena. For we really see two different facts. (If I fix my eyes first on the corners a and only glance at b, a appears in front and b behind, and vice versa)" (Wittgenstein 1922: §5.5423). A recent paper on the topic is Michel Ter Hark (2015).

<sup>&</sup>lt;sup>2</sup> As is widely known, Wittgenstein claims that there is a connection between experiencing the meaning of a word and noticing different aspects in the same figure (see Wittgenstein 1980: I, §1064). Although the two things often go together - Wittgenstein himself affirms that investigating the concept of seeing-as helps understanding the notion of experience of meaning –, here I will follow Malcolm Budd, who declares that "it would be mistaken to think of [Wittgenstein's] interest in aspect perception as being entirely derivative from his interest in the experience of meaning. [...] The independent philosophical importance of the concept of noticing an aspect is due to its location at a crucial point in our concept of the mind. [...] This point, as we shall come to recognize, is the juncture of the sensory and the intellectual" (Budd 1987: 1-2). According to Brian O'Shaughnessy, instead, Wittgenstein is interested in aspect perception for two reasons: the first one concerns what happens in the mind when we visually recognize the objects that surround us, while the second deals with the parallel between noticing an aspect and understanding the language (O'Shaughnessy 2012: 40). <sup>3</sup> According to David Leopold and Nikos Logothetis, multistable visual phenomena share three basic properties: exclusivity, inevitability and randomness. Exclusivity ensures that, looking at an ambiguous picture like the duck-rabbit, only one perceptual solution at a time occurs. It is an essential encoding principle of the neurons in the visual cortex (Leopold, Logothetis 1999: 260).

more ways of seeing those pictures that admit a multistable perception<sup>4</sup>. Yet, there is not a single account of 'noticing an aspect', for it seems that sometimes it entails the use of concepts, sometimes it depends on different interpretations, while other times it requires imagination (Eilan 2013: 3). Wittgenstein himself addresses the issue of whether we merely see different things, or rather we interpret what we see in different ways (Wittgenstein 1980: II, §546).

## 2. The paradox of pictorial representation

Ernst Gombrich's Art and illusion (1960) gave rise to the contemporary debate on the nature of depiction in the field of analytic philosophy interpreting the change of aspect not in terms of duck/rabbit shift, but in terms of surface/object shift. According to Gombrich, the perceptual duality characterizing the ambiguous figures is similar to the surface/object duality characterizing every pictorial representation: the observer is able to see both the surface of the picture and the depicted object, but she cannot see them at the same time. The observer, as Gombrich claims, oscillates between "canvas or nature" (Gombrich 1960: 22), that is to say, between seeing the canvas as a marked surface and seeing the depicted scene. For Gombrich, "we will also 'remember' the rabbit while we see the duck, but the more closely we watch ourselves, the more certainly we will discover that we cannot experience alternative readings at the same time" (Gombrich 1960: 5). This exclusivity also permeates the relation between canvas and nature, since

a picture, before being a battle horse, a nude woman, or some anecdote, is essentially a plane surface covered with paint in a certain arrangement. [...] 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: 224)

Gombrich also says: "We can train ourselves to [...] oscillate between readings, but we cannot hold conflicting interpretations" (Gombrich 1960: 188).

<sup>&</sup>lt;sup>4</sup> William Mitchell describes multistable figures as "dialectical images", which function is to show how different readings can coexist in the same picture. According to Mitchell, the Duck-Rabbit belongs to the wider set of "metapictures", for it leads the viewer toward a reflection on the very nature of visual representation (Mitchell 1994: 45-56).

While Wittgenstein does not develop a theory of depiction, I argue that — mediated by Gombrich — he played a fundamental role in the context of the analytical debate on the nature of pictorial representation. In fact, when Wittgenstein claims that "the expression of a change of aspect is the expression of a *new* perception and at the same time of the perception's being unchanged" (Wittgenstein 1953: 196), he expresses a paradox that we could summarize as follows:

- (a) the observer x perceives an object O under a new aspect;
- (b) if x perceives O under a new aspect then x's perception of O has changed;
- (c) but x's perception of O has not actually changed.

Interpreting the change of aspect in terms of surface/object shift, Gombrich provides his own version of the paradox. He formulates what I call the paradox of pictorial representation (PPR), for, as he states, "Ambiguity – rabbit or duck? – is clearly the key to the whole problem of image reading" (Gombrich 1960: 188). Gombrich's PPR claims that:

- $(a_1)$  the observer x perceives a picture P under a new aspect;
- $(b_1)$  if x perceives P under a new aspect then x's perception of P has changed;
- $(c_1)$  but x's perception of P has not actually changed.

As is well known, an account of depiction aims at answering the following question: what does it mean for P (a picture) to pictorially represent O (an object or a scene)? As I am about to explain, different approaches to depiction solve PPR by denying one among  $(a_1)$ - $(c_1)$ .

#### 3. Gombrich's solution to PPR

Gombrich defends the position that Robert Briscoe has defined as the Continuity Hypothesis (Briscoe 2018: 50)<sup>5</sup>, and that can be summed up as follows: for an observer there is a sort of psychological continuity between experiencing the object depicted in the picture and experiencing

<sup>&</sup>lt;sup>5</sup> Gombrich's account is also known as the Illusion Theory of depiction (Lopes 1996: 37-8; Newall 2011: 24). Nevertheless, not all scholars agree with this label (Bantinaki 2007).

the actual object. The Continuity Hypothesis provides that: (i) a picture is a two-dimensional surface that elicits in the perceiver a non-veridical experience as of three-dimensionality and depth; (ii) there is a phenomenological and representational continuity between the pictorial experience and the actual experience that brings to light a psychological continuity between the two experiences; (iii) the visual system selects one interpretation at once: it is not possible to see the D-R figure in two different ways at the same time (Briscoe 2018: 51-4).

Point (iii) is of particular interest here, since Gombrich makes a crucial change from the duck/rabbit duality to the surface/object duality. Obviously, the principal objection to this view is that the duck/rabbit duality is completely different from the surface/object duality (Lopes 1996: 41; Wollheim 1963: 29). The question, then, is the following: is the alternation surface/object an instance of aspect perception? There are two different explanations: a soft one and a hard one. Let's start from the soft explanation: Wittgenstein does not provide a unique definition of aspect, but he gives a list of examples that have a common denominator, namely a change of attitude in the observer (Budd 1987: 2). According to the following scheme, then:

(A) an observer passes from seeing X as Y to seeing X as Z, given that the Y solution excludes the Z solution, and vice versa.

From this point of view, it is difficult to reject Gombrich's account, since it seems that it perfectly fits in (A):

(A1) the observer passes from seeing a picture as a marked surface to seeing the picture as the depicted object, given that seeing it as a marked surface excludes seeing it as the depicted object.

But, if we look carefully, the "seeing" involved in the perception of the marked surface is not the same "seeing" involved in the perception of the depicted object. Accordingly, let's try to adapt (A) to the case of the D-R figure:

(A2) the observer passes from seeing the D-R figure as a marked surface to seeing the D-R figure as the depicted object.

The first "seeing" in (A2) is not a case of seeing-as. The observer merely sees that the figure is a surface. Only the second "seeing" involves a Wittgensteinian aspect perception, namely seeing the D-R figure as the depicted object. Moreover, with ambiguous figures the experience is doubled, because we can pass from seeing the figure as a marked surface to seeing the figure as a duck, or we can pass from seeing the figure as a marked surface to seeing the figure as a rabbit. Again, how can we make the duck/rabbit duality equal to the surface/object duality, since the two things seem to speak different languages?

As I said before, some scholars answer the question denying that the surface/object duality is a case of seeing-as. I want to try to provide a solution (here starts the hard explanation).

Wittgenstein argues that the seeing-as is half seeing and half thinking (Wittgenstein 1953: II, xi, 197); I argue that, in addition to a representational element, the seeing-as necessarily incorporates a simple visual core responsible for the perception of the graphic properties (what remain unvaried between the duck figure and the rabbit figure, e.g. shape properties, color properties, etc.), since it is not a case of aspect change if the graphic properties of the multistable object do not remain the same during the process. Now, if the simple visual core of the seeing-as were guided by the physical properties of the object – as in fact happens – the distinction between the representation (the depicted scene) and the material object (the surface) is undermined. The eye mainly reacts to the light discontinuities perceived through the retina: it cannot interpret a bunch of contour lines as two different things at the same time. This is valid for the surface/object distinction as well as for the duck/rabbit distinction. Let's see this solution more in detail.

Paraphrasing Jesse Prinz, seeing the D-R figure as a rabbit means applying the concept of "rabbit" to the figure, keeping in mind that the observer sees the D-R figure as a rabbit if and only if: (i) the rabbit-image has an impact on the observer's sensory transducers (those mechanisms that convert sensory inputs into mental representations); (ii) accordingly, the observer elaborates the corresponding perceptual representation; (iii) this perceptual representation is matched with other representations of rabbits, or with pictures of rabbits stored and memorized by the observer herself (Prinz 2006: 435-6).

Nico Orlandi calls this kind of account Concept Application Thesis, or CAT (Orlandi 2011: 17), and, in order to clarify Gombrich's account, I am going to quickly report it. CAT provides that an observer sees an object O as Y or as Z for she is able to employ the concept of Y or the concept of Z.

In the case of a mulstistable object as the D-R figure, given that the stimulus remains the same, it is plausible to think that what changes is the conceptual contribution of the perceiver, namely the interpretation she gives to the ambiguous figure (Orlandi 2011: 19). According to CAT: "seeing-as involves an interpretation because an interpretation is involved in all of vision. Whenever we visually represent the world to be a certain way, we do so through an interpretive process" (Orlandi 2011: 20). Interpretation is even involved at a very basic level. For example, about the perception of light discontinuities, the visual system assumes that they are caused by edges or that they are caused by cracks, that is to say that vision interprets discontinuities as edges or as cracks applying the concept of "edge" or the concept of "crack" to the same light pattern. In the case of the D-R figure, the observer alternates duck-shaped representations and rabbit-shaped representations before the same light pattern, employing different hypothesis that involve the use of concepts like "duck" or "rabbit" (Orlandi 2011: 20). If – as CAT claims – vision is totally a matter of interpretation, then, at an "estensional" level, there is no difference between the duality surface/object and the duality duck/rabbit, since it is all about infusing sensory stimuli with hypothesis and concepts. From this point of view, a light pattern can be interpreted as a surface or as a contour line. At the higher level, then, the contour line can be interpreted as a duck-figure or as a rabbit-figure. The operation is always the same, namely the application of a concept starting from a sensory stimulation. Gombrich would agree with this account, since "to see the shape apart from its interpretation [...] is not really possible" (Gombrich 1960: 5).

Let's come back to PPR. Now we can say that Gombrich rejects  $(c_1)$ . Perception changes because we pass from perceiving the picture P in a certain way to perceiving P in another way, and, considering that for Gombrich perceiving is interpreting, we pass from interpreting P in one way to interpreting P in another way. This means that the viewer passes from understanding the picture as a mere surface to understanding it as the depicted object. The paradox can be solved as follows:

- (a<sub>2</sub>) the observer x perceives P under a new aspect;
- ( $b_2$ ) if x perceives P under a new aspect then x's interpretation of P has changed;
- $(c_2)$  and x's interpretation of P has actually changed.

The resolution of the paradox is valid for the surface/object alternation as well as for the duck/rabbit alternation, since for Gombrich they are

both cases of aspect perception. Now we see how Richard Wollheim solves PPR denying that the surface/object duality is a case of aspectual vision.

## 4. Wollheim's solution to PPR

Wollheim supports a theory of pictorial representation known as the Twofoldness Claim. First of all, for a picture P depicting an object O means that the observer has a peculiar perceptual experience about P which provides that P depicts O. Wollheim calls this experience "the appropriate experience of the picture" (Wollheim 1998a: 217). According to him – and this is the core of the theory –, seeing a picture is a twofold experience made of a configurational fold, namely the awareness of the mere marked surface, and a recognitional fold, namely the awareness of the subject or of the scene. The two folds occur together and are inseparable, they cannot exist as a stand-alone experience. This perceptual experience is labelled by Wollheim as seeing-in and provides that the observer sees the picture's subject in the pictorial surface: "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 1998b: 46). Wollheim argues against Gombrich that seeing-as is not the proper seeing for the pictorial representation. The Continuity Hypothesis, in fact, claims that there is a continuity between perceiving the depicted object and perceiving the actual object, for the observer "silences" the surface in favor of the pictorial illusion. Wollheim denies this last assumption, affirming that the surface is always before the observer. Wollheim's point is that seeing-in provides the pictorial perception with a peculiar phenomenology, while seeing-as, aiming at justifying the pictorial illusion, merely "steals" the phenomenology of the vis à vis perception (Wollheim 1980). However, looking closely, Wollheim seems not arguing completely against Gombrich's account. He seems to suggest that seeing-as can be encompassed in the pictorial experience as follows: the observer can see a picture as a mere thing or can see it as a pictorial representation, but when she sees the picture as a representation, then seeing-in is the appropriate seeing (given that seeing a picture as a representation is not seeing what is depicted in that representation, Wollheim 1980).

Now consider PPR again. For the reasons given above, Wollheim could accept all three propositions, explaining them in the following way:

- (a<sub>3</sub>) the observer x perceives a picture P under a new aspect;
- $(b_3)$  if x perceives P under a new aspect then x's perception of P has changed, since the recognitional fold has changed;
- (c<sub>3</sub>) x's perception of P has not actually changed, since the configurational fold has not changed.

If we consider the aspect as the picture's subject, the explanation given above fits well with ambiguous figures. In fact:

- $(a_4)$  the observer x perceives the D-R figure as a duck (while a moment before x perceived the D-R figure as a rabbit);
- (b<sub>4</sub>) if x now perceives the D-R figure as a duck, then the recognitional fold has changed;
- $(c_4)$  but x's perception of the D-R figure has not actually changed, since the configurational fold has not changed.

This explanation does not work with non-ambiguous figures (or stable figures). This is because the duck/rabbit duality is comprised in the recognitional fold. In the case of ambiguous figures — and only inside the recognitional fold — we have a double seeing-in experience (surface/duck and surface/rabbit). Accordingly, the three propositions of the paradox can all be accepted, specifying that only the recognitional fold has changed. With regard to stable figures, instead — and assuming that stable figures exist 6—, there is not an alternative recognitional aspect that the observer is able to perceive. From the stable figures perspective — and considering that now "aspect" refers to the recognitional and configurational folds, à la Gombrich —, Wollheim could solve PPR rejecting  $(a_1)$ . So we have that:

- ( $a_5$ ) the observer x does not perceive a picture P under a new aspect (because the recognitional fold and the configurational fold are experienced simultaneously, so one cannot alternately see only the surface or only the depicted object);
- ( $b_5$ ) if x does not perceive P under a new aspect then x's perception of P has not changed;

<sup>&</sup>lt;sup>6</sup> Referring to the experiments of Adelbert Ames Jr., Gombrich claims that the ambiguity is a distinctive feature of all images, it does not only concern ambiguous figures. An observer sees X as a picture of Y until she is able to see X even as a picture of Z (Gombrich 1960: 199-201).

 $(c_5)$  and x's perception of P has not actually changed.

Rejecting (a<sub>1</sub>) means to deny that the surface/object duality is a case of aspect perception. The duck/rabbit alternation and the surface/object alternation are not on the same level. The former is comprised into the latter. An observer does not perceive only a mere marked surface (configurational fold) where a few seconds before she perceived only the picture's subject (recognitional fold), for the two experiences occurs together. Obviously, it is different in case of ambiguous figures, since according to Wollheim the perceiver cannot have two simultaneous experiences of seeing-in, that is to say that she cannot have a simultaneous experience of surface/duck and surface/rabbit.

## 5. Psychological theories of depiction's solution to PPR

The so-called psychological theories of depiction (Hyman, Bantinaki 2021:  $\S 3$ ) – which divide into experienced resemblance theories and imagination theories – reject ( $a_1$ ), as Wollheim does, since they support a seeing-in perspective of the pictorial representation. Even for this group of theories, rejecting ( $a_1$ ) means denying that the surface/object duality is a case of aspect perception.

Robert Hopkins, for example, defends an experienced resemblance theory. His account is based on the notion of *outline shape*, which is the mark, relative to an observer's point of view, that an object projects on a hypothetical plane, standing between the object and the observer herself (Hopkins 1998: 60-2)<sup>7</sup>. So, according to Hopkins, a picture P depicts an object O if the observer experiences that the outline shape of P resembles the outline shape of O (Hopkins 1995: 443, Hopkins 1998: 77). Experienced resemblance theories solve PPR in the following way:

(a<sub>6</sub>) the observer *x* does not perceive a picture P under a new aspect, because configurational fold and recognitional fold are experienced simultaneously. The experience of the surface is similar to the experience of the depicted object (in relation to the outline shape, if we embrace the Hopkins' account);

 $<sup>^7</sup>$  See also Hopkins (Hopkins 1995: 441). The notion of outline shape is very close to the notion of "occlusion shape", coined by John Hyman (Hyman 2006: 75-6).

- (b<sub>6</sub>) if x does not perceive P under a new aspect then x's perception of P has not changed;
- $(c_6)$  and x's perception of P has not actually changed.

Kendall Walton supports an imagination theory of depiction where pictorial representations are considered as *props* in what he calls "the games of make-believe". These games, he argues, are imaginative in nature (Walton 1990: 11)<sup>8</sup>. For Walton, a representation, like a picture P, requires that an observer imagines that q. First of all, q is fictional inside the world made by P if the full appreciation of P requires that the observer imagines that q. Moreover, q is true in the fictional world made by P if the appreciation of P requires that q is imagined to be true inside the fictional world made by P (Walton 2013: 9). We can summarize Walton's account of depiction in this way: a picture P depicts an object O if the observer *imagines* that the perception of P is the perception of O. Accordingly, Walton's imagination theory solves PPR as follows:

- $(a_7)$  the observer x does not perceive P under a new aspect, because configurational fold and recognitional fold are experienced simultaneously. The observer imagines that the perception of the surface is the perception of the depicted object;
- $(b_7)$  if x does not perceive P under a new aspect then x's perception of P has not changed;
- $(c_7)$  and x's perception of P has not actually changed.

## 6. A Wittgensteinian solution to PPR

## 6.1. Simple perception and representational perception

I shall sketch an alternative, Wittgensteinian solution to PPR, which implies to reject  $(b_1)$ . To do this, we have to interpret the seeing-as in a certain way. It can be conceived as made of two kinds of perception: a *simple perception* and a *representational perception*. According to Wittgenstein, indeed, "the flashing of an aspect on us seems half visual experience, half thought" (Wittgenstein 1953: II, xi, 197). It seems that for Wittgenstein there is a "seeing" and an "aspect seeing". The former is not subject to

<sup>&</sup>lt;sup>8</sup> Walton develops his account of pictorial representation starting from Gombrich's famous essay *Meditations on a hobby horse* (Kulvicki 2014: 73).

the will, it concerns the perception of color and shape, and has a fundamental epistemic role in our learning about the world (Wittgenstein 1980: I, §976). I call it *simple perception*. The latter is a voluntary form of seeing, it is not committed with the perception of the graphic properties of an object, and, due to its dependence on the will, it is not able to 'teach' us something about the world. I call it *representational perception*. The simple perception catches what does not change, for in the dawning of an aspect graphic properties (like shape, color and surface) remain the same. What changes is the representational perception, which concerns "not a property of the object, but an internal relation between it and other objects" (Wittgenstein 1953: II, xi, 212).

Now let's try to find out what Wittgenstein means by "internal relation between [the object] and other objects". As is well known, he introduces the concept of 'noticing an aspect' through the example of the perceived resemblance between two faces (Wittgenstein 1953: II, xi, 193). By transferring the criterion of the perceived resemblance to the D-R figure, we can say that there shall be at least a similarity between the D-R figure and a real duck and between the D-R figure and a real rabbit. But what kind of resemblance are we talking about? It is obvious that real ducks do not share many properties with their two-dimensional counterparts (real ducks are not made of ink lines and sheets of paper, of course). To avoid the Cratylus question, Wittgenstein presents the notion of "internal relation". First of all, when referring to an internal relation, we take into account not only the role of the observer noticing the change of aspect, but also the nature of the picture, for the internal relation concerns the similarity between the picture and the object that the picture depicts (Munz 2016: 112). We could put the question in the following terms: an observer x perceives an internal relation between the D-R figure and, say, an object D if and only if x sees D-R as a thing that belongs to the same category to which D itself belongs. In the same way, an observer x perceives an internal relation between the D-R figure and, say, an object R if and only if x sees D-R as a thing that belongs to the same category to which R itself belongs9.

<sup>&</sup>lt;sup>9</sup> Here I am not claiming that Wittgenstein provides sufficient conditions for pictorial experience, as he uses this account also to describe a lot of cases that do not fall inside the concept of pictorial representation (for example, when, in relation to Köhler figure, he talks about optical aspects, which appear and change automatically and are not determined by thoughts and associations, see Wittgenstein 1980: §970, §1017). Nevertheless, some of Wittgenstein's indications can provide important insights in the

## 6.2. Solving PPR rejecting (b<sub>1</sub>)

If the seeing-as does not incorporate a pure perceptual element (the *simple perception*), we would not recognize a pictorial representation as a pictorial representation, since we would not perceive the graphic properties that differentiate the representation from the real scene. Wittgenstein has the last word on the issue: "If I saw the duck-rabbit as a rabbit, then I saw: these shapes and colours (I give them in detail) — and I saw besides something like this: and here I point to a number of different pictures of rabbits" (Wittgenstein 1953: II, xi, 196-7). That is to say that we see the D-R figure as a rabbit first of all because we perceive certain appearances (simple perception) and then because we perceive an internal relation between the D-R figure and other pictorial representations of rabbits (representational perception). The paradox could then be solved as follows:

- (a<sub>8</sub>) the observer x perceives a picture P under a new aspect;
- (b<sub>8</sub>) if x perceives P under a new aspect then x's simple perception of P has not changed (because what changes is the representational perception);
- $(c_8)$  and x's simple perception of P has not actually changed.

This solution of course solves the paradox of the changed/unchanged perception during the duck/rabbit switch, but also can shed light on the surface/object duality. Following Roger Scruton and Colin McGinn, I consider the fact that seeing-as involves imagination (McGinn 2004: 48-55; Scruton 1998: 109). Moreover, I take into account that a pictorial representation is a threefold relation 10 between (i) the pictorial surface, (ii) the representing or depicting object (Husserl 2006) or the three-dimensional object visually encoded in the surface (Nanay 2017), and (iii) the represented or depicted object. From this perspective, the simple perception

field of depiction theories. Moreover, Gombrich itself exploits the Wittgensteinian concept of aspect to define the pictorial experience.

<sup>10</sup> A threefoldness account is supported by Husserl (2006), Mion (2019), Nanay (2017) and Wiesing (2010). For a critical analysis, supporting the fact that a picture is of course three-layered, but the pictorial experience is however a twofold experience, see Voltolini (2018). A key point is that the threefoldness account I am supporting is not based, like Nanay's, on Wollheim's seeing-in. Here, I am just borrowing the three folds proposed by Husserl and Nanay, but the relationship between these three elements, as I explain in the following lines, is different from a seeing-in perspective.

concerns the relation between (i) and (ii), while the representational perception concerns the relation between (ii) and (iii). In this respect, imagination is the bridge between what the observer sees in the picture and what the picture depicts. Through imagination, indeed, I represent what the picture refers to, which is not in front of my eyes: this is the way in which the seeing-as involves imagination <sup>11</sup>.

An important objection to this view could be that, according to Scruton, McGinn and Dorsch (Dorsch 2016a: 3), imagination is subject to the will, so the consequence is that, if picture perception requires imagination, then the observer can see in a picture what she wants and not what is depicted. In response to this objection one can make two observations. The first one is that is plausible that imagination depends on the will, but there are some constraints that lead to the right imaginative experience 12. In the case of pictorial perception, these constraints are the marks on the surface, the pictorial conventions, the agreement between the picture maker and the observer, the intentions of the picture maker, the observer's knowledge, and so on (Cavazzana, Bolognesi 2020: 39-44). The second one concerns the nature of imagination. We should note that not all imagination is voluntary. Adam Zeman's studies on aphantasia (which is the condition of reduced or absent voluntary imagery) show that the majority of participants experienced involuntary imagery during wakefulness (10 out of 21 participants) and/or during dreams (17 out of 21 participants, Zeman et al. 2015: 378-80).

For what concerns the surface/object alternation, we can say, with Gombrich, that "we will also 'remember' the rabbit while we see the duck" (Gombrich 1960: 5). The so-called *inattentional blindness* experiment shows that we are not conscious of what we are not attending to,

<sup>&</sup>lt;sup>11</sup> One could say that this account of pictorial experience is not consistent with Wittgenstein's general account of seeing-as perception, if we consider aspect vision only in terms of Gestalt switches (that mobilizes low-level and high-level perceptual properties as regards simple and complex perception of a figure respectively). Nevertheless, according to Malcolm Budd, "the question 'What does noticing an aspect consist in?' dissolves into a number of different question", "there are many kinds of state from which we can change and there are many kinds of state in which we can find ourselves after the change. For example, we can pass from: [...] (ii) seeing something as a non-pictorial sign to seeing it as a picture (or vice versa)" (Budd 1987: 2). Following this last quotation, it seems plausible to consider the pictorial experience as a case of seeing-as perception.

<sup>&</sup>lt;sup>12</sup> Here I embrace what Amy Kind calls *imagining under constraints*, where she argues against the fact that imagination is subject to the will (Kind 2018).

despite we are looking to it (Simmons, Chabris 1999). So, while we perceive the depicted object, we do not perceive the pictorial surface, insofar as we are not attending to it (Nanay 2017: 166-7).

Finally, every theory of depiction has to solve at least two issues. I call the first one the Fictional Issue. Solving this problem means to explain why a picture P (depicting O, which is a fictional version of the actual object) is not the actual object O. The second one is what I call the Representational Issue. Solving this problem means to explain why a picture P (depicting O) is just a picture of O and not a picture of, say, Z<sup>13</sup>. Considering the seeing-as as made of two kinds of perception should solve both the Fictional Issue and the Representational Issue. In fact, while the simple perception catches the graphic properties that differentiate the representation from the real object (solving in this way the Fictional Issue), the representational perception catches those internal relations between the depicted object and the actual object (solving the Representational Issue).

### 7. Conclusion

We have seen that Wittgenstein's thought – mediated by Gombrich – has been fundamental in the development of the contemporary debate on pictorial representation. Despite the fact that many theories embrace the seeing-in solution – inflected in many different forms – to solve the problem of depiction, seeing-as has not been completely abandoned. Gombrich, of course, considers the pictorial surface and the depicted object

<sup>13</sup> For example, Gombrich's account seems to have some problems in facing these issues. First of all, he does not solve the Fictional Issue. According to him, while the viewer perceives the object, she does not perceive the surface. This then would mean that the viewer does not perceive what differentiates the picture of an object from the actual object. Actually, Gombrich does not even solve the Representational Issue. In fact, his solution does not establish any relationship between the sign on the canvas and the depicted object. If perceiving is simply interpreting, then every sign can be interpreted in any way. But there must be a relationship between the sign and the object, otherwise any sign would refer to any object (and here the very sense of representation would fall). Moreover, if interpreting is a purely intellectual process, and perceiving is interpreting, then also perceiving is a purely intellectual process depending on the will. But, as Wittgenstein remarks, seeing is not volitive in nature: we cannot command someone watching a green leaf to see it red (Wittgenstein 1980: I, §899). Likewise, we cannot interpret a green leaf as a green leaf: if there is no choice, there is no interpretation (Wittgenstein 1974: I, § 9).

as two distinct aspects, treating the pictorial experience as a case of aspect perception: we can see the canvas or we can see the depicted object, but we cannot experience both simultaneously. Wollheim, as we have seen, also tries to include seeing-as in his twofoldness account. He does it in two different ways. In the first one, he suggests that the observer can have a seeing-as experience of a picture insofar as she sees it as a mere object or as a pictorial representation, specifying that only in the latter case the observer has a seeing-in experience. In the second one, he proposes that the alternation between the two aspects of the D-R figure (the duck and the rabbit) is comprised in the recognitional fold of the seeing-in experience, therefore an ambiguous figure is a case of multiple seeing-in. The conception of the aspect changes from the first to the second case: in the first case the two aspects are the pre-pictorial experience and the pictorial experience, while in the second case they refer to the ambiguous figure's subjects<sup>14</sup>.

Again, I aimed at demonstrating that Wittgenstein's discussion on aspect perception is essential in the contemporary debate on depiction, trying to organize from a new Wittgensteinian perspective the theories of pictorial representation. Finally, I tried to sketch a Wittgensteinian solution of what I call the PPR, leveraging the Wittgenstein's notion of seeingas. Solving the paradox means, first of all, specifying the relation between the surface and the depicted object, and then between the observer and the picture as a whole, trying to make the two relations consistent: this is the main purpose of a depiction theory<sup>15</sup>.

<sup>&</sup>lt;sup>14</sup> Other scholars have tried to reconcile seeing-as and seeing-in. Dorsch, for example, recently developed an Aspect View of pictorial experience. According to him, in fact, inside the recognitional fold, the observer has a seeing-as experience of the picture surface as having the appearance of a three-dimensional scene or as not having this appearance. The switch occurs in the observer's mind, since the object remains the same (Dorsch 2016b: 228-31). Also Voltolini supports the view that seeing-as is involved in seeing-in. Considering the D-R figure, inside the configurational fold the observer can have a seeing-as experience of the *grouping properties* from left to right (and this leads to see the rabbit) or from right to left (and this leads to see the duck) (Voltolini 2015: 20-2).

 $<sup>^{15}</sup>$  I would like to thank the two anonymous referees for their precious comments.

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