Seeing-as, Seeing-in, Seeing-with: Looking Through Pictures

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What do we see what we look at pictures? What kind of vision is conveyed by and through pictorial representation? Such questions have been kept aesthetics and visual studies busy for decades. As it turns out, the philosophy of Ludwig Wittgenstein has proven to be a major source of inspiration in these discussions, and in particular his notion of "seeing-as", which is sometimes also referred to as "aspect-seeing". Indeed, it seems plausible to say that pictures never show things in general, but always only in a certain respect, from a certain point of view or under a certain aspect. Besides, what holds true for pictorial representation seems equally valid for the stance taken in front of pictures: looking at pictures requires seeing them in a certain way, that is, *as* pictures. Considering Edward Hopper's *Nighthawks* (1942) as a rectangular object made of oil, canvas, and stretcher bars does not exactly correspond to the kind of vision pictures generally require (Fig. 1). Pictures, in that respect, usually present themselves as objects that should be seen as depictions of something else they are about, and in the case of the Hopper painting, say, of a late-night scene in an American diner, with four human figures seen through a wedge of glass. Other descriptions would be possible too, of course, such as one which would present Hopper's 1942 painting as a depiction of solitude in high industrial modernity.

While initially drawing upon Wittgenstein's notion of "seeing-as" too for devising a robust theory of pictorial representation, Richard Wollheim has

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Fig. 1   Edward Hopper, *Nighthawks*, 1942, oil on canvas, 84.1 × 152.4 cm; Art Institute of Chicago. Artstor (in public domain)

come to see flaws in applying the theory of aspectual perception to pictures. Instead, Wollheim suggested an alternative concept, that of "seeing-in" (of which premises can be found in Wittgenstein too, in fact). Rather than saying that a specific object (the physical object taking space on a wall for instance) is seen as the depiction of something it is about, a more adequate description would have an onlooker capable of seeing the depicted content *in* the object (a late-night scene in a diner in a rectangular canvas covered with oil paint).

Both notions—*seeing-as* and *seeing-in*—boast a considerable career in aesthetics and visual studies in these last decades and have risen to the status of key concepts in image theory. The chapter assesses the promises but also the limits of these two concepts, when trying to assess how pictures work in relation to their beholders. For sure, one might see a passing cloud as a rabbit as well as seeing a rabbit in a passing cloud. But what happens when this account of our perceptual structure is applied to pictures? Is the logic of pictures, and all the more of artifactual pictures, adequately grasped by transferring onto them merely a feature of our perception? Taking an object to display aspects of something that is not currently present, or using one's power of imagination for seeing more than what actually meets the eye are certainly crucial features of what spectators do in front of pictures, but it might not grant sufficient space to the logic of pictures themselves, and to their peculiar iconic operations. Theories of depiction, so the argument, have not sufficiently taken into account the pictorial medium itself with and through which we see. The chapter thus critically assesses some of the advantages as well as some of the quandaries that arise when using Wittgenstein's concept of "seeing-as" and Wollheim's concept of "seeing-in" for addressing the plural realities of images. While putting into evidence the tensions that come into play when applying what was initially

a theory of the gaze to a theory of the image, the chapter shall subsequently discuss three modes of iconic vision: the propositional *seeing-as*, the projective *seeing-in* and the medial *seeing-with*.

1   SEEING-AS

In spite of their divergences, most contemporary image theories seem to agree on the fact that the constitution of an image's meaning is fundamentally code-termined by the gaze directed toward it. Images thus do not have a single sense, but can have plural meanings, depending on the perspective from which one looks at them. Among the most frequently invoked authorities to consolidate such an assertation, we find Ludwig Wittgenstein and his notion of "seeing-as". Between 1946 and 1949, Wittgenstein devoted extensive thoughts on the phenomenon of "aspect seeing" as well as to the correlative one of "aspect change", whereby, in accordance to his own example, in the drawing of a duck's head, we suddenly invert perspectives and see it as a rabbit head. This phenomenon, also known as Gestalt switch, highlights the connection between sensoriality and meaning: a certain sensuous configuration will be taken as having a certain meaning, or, in this specific case, strokes on the paper will be interpreted as showing a duck, but through a change of attitude, one can also see them as representing a rabbit (Wittgenstein 1993, 204sq., §118sq). In the past decades, Wittgenstein's notion of "seeing-as" has unquestionably risen to the status of a key concept in contemporary theories of depiction, and some authors even ventured as far as claiming that the "as-structure" constitutes the prime feature of iconicity (Asmuth 2006).

The adoption of Wittgenstein's "seeing-as" for image studies can easily be retraced. Virgil Aldrich was among the first to adapt the concept, claiming that the possibility of an image rests on the capacity for aspect seeing (Aldrich 1958), but most influential was Ernst Gombrich with his *Art and Illusion* in 1960, which states that the question "rabbit or duck?" is the "key to the whole problem of image reading" (Gombrich 1984, 188). Some years later, Richard Wollheim's first edition of *Art and Its Objects* asserts that the structure of seeing-as is sufficient for understanding pictorial representation (Wollheim 1968).

It remains to be clarified though whether Wittgenstein's concept really describes (a) traits of pictorial perception and (b) traits of perception at all. Both can be questioned:

Ad (a): When the concept of "seeing-as" is used, mention is often made of Wittgenstein's analysis of the rabbit-duck drawing, which was initially devised by the Polish-American psychologist Joseph Jastrow (Fig. 2). This example might have induced this misunderstanding, according to which Wittgenstein is providing an analysis of how pictures work. But at closer inspection, it turns out, Wittgenstein only uses the drawing for investigating the grammar of the word "seeing". First and foremost, the insistence on aspectuality is instrumental in rejecting the idea of an immediate grasp of things: seeing something, Wittgenstein insists, is taking it as something, from a certain point of view, and
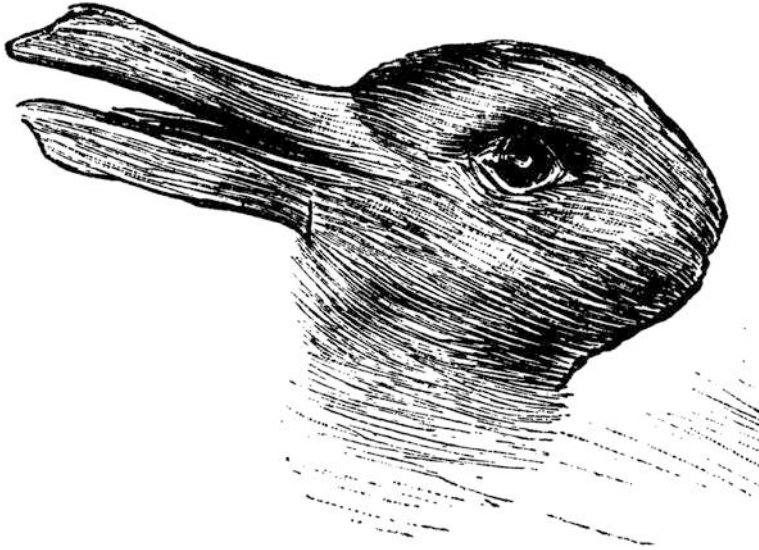
Fig. 2   Joseph Jastrow, *Rabbit and duck optical illusion*, from the 23 October 1892 issue of *Fliegende Blätter* (in public domain)

thus always already implies a form of interpretation. Perceiving—and here Wittgenstein joins the rank of a decisive insight of Husserlian phenomenology—is never about sensuous data, but of things: the sensation of redness is perceived *as* that of a tomato, the humming as that of a bee, and so on, and in that respect, the "as-structure" refers to a recognitional moment. Seeing-as thus seems to describe a feature of perceptual experience, but for sure, as it has been pointed out before, Wittgenstein never attempts to explain depiction in terms of seeing-as (Hyman 2006, 255).

Ad (b): While Wittgenstein's image examples thus induced the wrong impression that he was speaking about structures of depiction, the question has been raised whether, when eliciting the grammar of "seeing", this involved actual perception at all. Indeed, a vast number of examples provided by Wittgenstein rather refer to structures of thinking, where perception only receives an illustrative function to making a point about the limits of one's linguistic concepts. Indeed, when Wittgenstein talks about "aspect blindness", he seems to be chiefly interested in a subject's incapacity of understanding an alternative meaning of a word. The perceptual aspect blindness (i.e., not being able to see the duck in Jastrow's flip-flop picture) mostly serves as an analogy to conceptual aspect blindness (where the "morphology" of a word creates a screen, occulting alternative ones). While "seeing-as" thus incontestably has to do with a structure of experience, it might very well only refer to "experiencing the meaning of a word" (Wittgenstein 1993, II xi, 210).

It would be beyond the scope of this chapter to venture into the discussion about whether "seeing-as" is mostly conceptual or whether it has to be rooted

in some kind of sensorial perception nonetheless (for a survey of the various positions, see Day and Krebs 2010), but suffice it to say that it is by no means certain that Wittgenstein "seeing-as" can be seen as a contribution to a theory of perceptual seeing, let alone to seeing images. For now, it might be enough to stress that the seeing-as structure names a structure of propositionality.

As mentioned, Ernst Gombrich played an important role in this conceptual import of Wittgenstein's aspect seeing into visual studies, and the main side-effect of such an import was to rebuke a naturalistic conception of pictorial representation. Insisting on aspect seeing means to insist on the "beholder's share", or, in Gombrich's words, "no two-dimensional image can be interpreted as a spatial arrangement without such a constructive contribution of our spatial arrangement" (Gombrich 1969, 41). Such a contribution is then further specified as a kind of *projection* (Gombrich 1978, 156 f.): we project more into a two-dimensional object than it actually contains, and it is this projecting-into which Wollheim then prefers rechristening seeing-in, rather than seeing-as.

Before arriving at Wollheim's conceptual reorientation, though, another moment in the debate must be emphasized. When Gombrich draws on Wittgenstein, he sees in him an ally against a naturalistic approach to seeing; yet, the notion of "seeing-as" also, and simultaneously, yields a propositional overload which he rejects on the other side. According to Gombrich, pictures can't be explained through a grammar modeled on verbal language: "a picture can no more be true or false than a statement can be blue or green" (Gombrich 1984, 56), inasmuch as pictures, according to Gombrich, are fundamentally non-propositional. Hence an ambiguity in Gombrich's adoption of a Wittgensteinian framework hasn't been sufficiently underlined to this day. In short, it could be claimed that while Gombrich retains the active and constructive part of the attention switch between aspects, he contends that this switch is a switch between two propositional contents. This ambiguity might explain the flawed analogy, often stressed by commentators (see, e.g., Lopes 2004, 41): it is hard to see why the rabbit-duck example, which serves to explain a switch between two contents, should be helpful at all for addressing the switch of attention between a perceptual awareness of the material design of a picture and the recognition of its referential content.

If Gombrich's theory of projective depiction is read as a non-propositional rephrasing of Wittgenstein's seeing-as, this allows for a better understanding of a feature of pictorial experience which has been often debated. While representational seeing might require to imagining seeing things in a surface which aren't physically present, this insistence on the referential aboutness doesn't deplete what "aspectuality" means for images. As a matter of fact, to take Nelson Goodman's example, it is not enough to say that we take an object *as* a representation of Pickwick, we should say, as long as we aren't tricked into a *trompe-l'oeil* illusion, that we have an awareness of being in front of a picture and that we see the picture *as a Pickwick-picture* (Goodman 1976, ch. 5). Now again, this representational aspect is by far not the only one: pictures often display objects, beings, and states of affairs *in certain respects* or *under certain*

aspects, and quite often, it is this phenomenal aspect which makes for the real significance of the picture. Thus, in pictures we do not simply see the represented subject as such, we see it in a certain guise, for example, we see *Pickwick-as-a-clown* (Goodman 1976, ch. 5).

To use an example that might be particularly speaking: in the case of the photograph of Winston Churchill taken at the age of ten (Alloa 2021, 243, Fig. 5.3), we recognize a number of his adult physical features, just as we note the already characteristic bowler hat. Nevertheless, we cannot avoid seeing him as a child: the picture is a picture of *Churchill-as-a-child*. If we wanted to sum up the image conception common to those theories, we could formalize pictorial perception as follows: *we see pictures as an "x" depicting a "y"*. What is more, in many cases, pictures are not only looked at for *what* they depict, but for the specific way in which they depict, for *how* they show a "y". At this point, the difference between ordinary seeing and pictorial seeing is more obvious still: while pedestrian ordinary seeing generally involves an aspectual "seeing-as" that can perfectly go unnoticed, many cases of pictorial seeing imply a kind of "seeing-as-as", an interest for the *depicted* aspect. This is particularly true of artistic pictures, but not exclusively (when looking at old vintage family photos, the main goal might not be to identify the persons, but to get a general atmosphere, the sign of times, a *zeitgeist*).

Many other arguments have been put forward to reject the claim that aspect seeing in pictures is equivalent to propositional recognition. Such an attention to the "how" or—in other terms—to the *style* of the visually organized field is not restricted to the gaze of the art critic or the *connoisseur*. Experiments with pigeons (i.e., birds with a high capacity of orientation in landscapes seen from above) have shown that through specific training, the pigeons are able to distinguish between cubist and impressionist paintings (Watanabe et al. 1995). It would be hard, however, to seriously attribute a notion of "cubism" or "impressionism" to the birds; and it is improbable that they recognize women, fruits, or rags or the fact that their representation is twisted. Nevertheless, and very strikingly, the pigeon's identification of the *style* of painting is almost flawless. Drawing on similar experiments, Arthur Danto thus concluded in his essay *Animals as Art Historians*: "Pictures as such are not like propositions, nor can we speak of a pictorial language, as Wittgenstein endeavored to do in his *Tractatus*, since animals demonstrably have pictorial competence while animal propositional—or sentential—competence remains undemonstrated" (Danto 1992, 20).

To summarize, transferring "aspect seeing" to the structure of pictorial experience requires taking many other aspects into account, beyond a mere recognition of the represented object, and for that matter, the question has been raised whether "seeing-as" may aptly feature as a necessary condition for iconicity. For sure, the specific pictorial competence that can be acquired or trained is different from the *seeing-as* insofar as it cannot be taught independently of the perceptive situation. While seeing-as can easily be translated into similar expressions devoid of any sensory dimension such as "interpreting-as"

or "understanding-as", the situated visual discrimination can *only* be made in front of the object. As opposed to linguistically mediated learning of the propositional content of the "as", the discrimination is made along lines *within* the artifact. Or as Danto formulates it, beings without propositional competence but with pictorial competence like pigeons are, though not capable of seeing-as, capable of *seeing-in* (Danto 1992, 28), which leads to analyzing the second candidate as a defining feature of image vision, the concept of seeing-in introduced by Richard Wollheim.

2   SEEING-IN

While in his first edition of *Art and Its Objects*, Richard Wollheim drew on Gombrich's aspect seeing, considering that the seeing-as was a necessary condition for image vision, he later reworked his position, claiming that what Gombrich describes as the projection into a two-dimensional object should be labeled more aptly as "seeing-in". The aim of this shift, Wollheim explains, is to better account for the phenomenological situation: In the case of Vermeer's *View of Delft*, we may of course say that we take the painting as one of the many paintings representing the Dutch city, and one might even imagine a catalog where all such paintings would be listed, but when looking at pictures, the merely conceptual recognition cannot account for the robustness of the perceptual experience. Rather than saying that we see a canvas—skillfully—covered by paint *as* a view of Delft, we actually see Delft *in* the picture. While taking the baton from Gombrich's idea of projection as a necessary condition for representational seeing, Wollheim also adds a further condition: the localization requirement. Seeing-in is not an unbound form of imaginary projection; the pictorial projection is a projection within the strict boundaries of the material object taken as a picture vehicle. According to Wollheim, while we may analytically distinguish the configurational awareness of the markings on a surface from the recognitional awareness of the picture's aboutness, in our experience, these two aspects are not temporally separated and make up for what Wollheim calls the simultaneous *twofoldness* of pictures. This insistence on the twofoldness marks a move away from Gombrich's disjunctivism, whereby we may only *either* see what is represented *or* be attentive to the canvas, but we can never see both at the same time: "To understand the battle horse is for a moment to disregard the plane surface. We cannot have it both ways" (Gombrich 1984, 279).

   This position has not remained uncriticized. Michael Polanyi contested Gombrich's disjunctive logic, inasmuch as he showed that the seeing-*what* and seeing-*in* do not operate on the same level but correspond to a "focal" and to a "subsidiary" or "peripheral awareness" (Polanyi 1970, 153). Wollheim, in turn, not only contests the claim that "we cannot have it both ways", he moreover maintains that images *require* "simultaneous attention to what is seen and to the features of the medium" (Wollheim 1980, 212). Images are neither fully transparent with respect to their referential object nor totally opaque, exposing

their material qualities of the medium: according to Wollheim, images always imply an attentional "twofoldness" (a *trompe l'oeil* would thus not meet the requirements for being an image, and some commentators have criticized Wollheim for such a counterintuitive perspective: see Levinson 1998, 228).

To summarize: Wollheim's concept of *seeing-in* firstly aims at readjusting the conceptualist bias of the *seeing-as* logic, which focuses on the fleshed out "recognitional" aspect, in order to rehabilitate a "configurational aspect". Secondly, it aims at rehabilitating the material, objective qualities of the image's medium, *in* which something is seen. This second point, although claimed by Wollheim, can be doubted, however. By insisting on the creational aspect of seeing-in, referring to our capacity to see dragons' heads in clouds and vampires in a Rorschach inkblot (Fig. 3), Wollheim reduces the "recognitional" dimension intrinsic to seeing-as. But can we distinguish seeing-in from a seeing-into? In other words: can we distinguish the perception of a form emerging from a canvas and an arbitrary projection onto a surface, regardless of its configuration?

As a matter of fact, Wittgenstein's theory of "aspectual seeing" (*Aspektsehen*) doesn't deny its voluntarism. In front of an unstable image such as Jastrow's rabbit-duck drawing, says Wittgenstein, I need to make a willful choice to change from one aspect to the other: The aspect "is subject to the will" (Wittgenstein 1982, 544). In that respect, *seeing-as* already implies certain imaginative projections Wollheim is keen on stressing with his conception of *seeing-in*: "The aspect is dependent on the will. In this way it is like imagination" (Wittgenstein 1982, 452). One might think of Leonardo da Vinci, who is famous for exhorting his apprentice painters to look at stained walls:
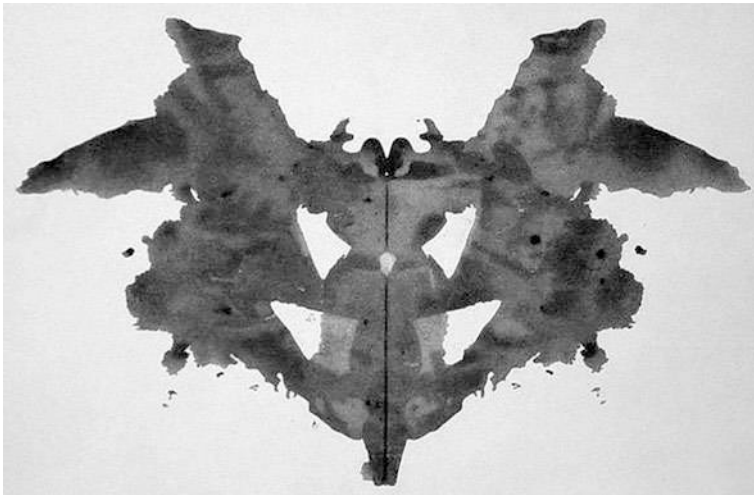
Fig. 3   Hermann Rorschach, *Inkblot test (bat, butterfly, moth)*, 1921. Artstor (in public domain)

> Look at walls splashed with a number of stains, or stones of various mixed colours. If you have to invent some scene, you can see there resemblances to a number of landscapes, adorned with mountains, rivers, rocks, trees, great plains, valleys and hills, in various ways. Also you can see various battles, and lively postures of strange figures, expressions on faces, costumes and an infinite number of things, which you can reduce to good integrated form. (da Vinci 2008, 173)

Still, according to Wollheim, a difference remains between pure imaginative projection into or onto things and pictorial *seeing-in*. Thus in order to avoid the impression of arbitrariness, Wollheim is required to introduce a further element: while in standard perception, we may virtually project everything into everything, pictorial seeing-in is only successful when we see in the image what the artist wanted us to see in it. Or, to put it yet differently, Wollheim speaks of a "standard of correctness", and this standard, he goes on explaining, is entirely defined by "the maker of the maker of the representation, or 'the artist' as he is usually called" (Wollheim 1980, 205). A depictional seeing is only successful if and when we see exactly what the maker or "artist" wanted us to see in it.

Wollheim has further elaborated on his notion of "seeing-in" in later essays. In the lecture "On Pictorial Representation" (Wollheim 1998), he takes the capacity of seeing-in to be a skill specific to humans (and possibly to some other non-human species), which emerged at some point in the evolutionary history, even before the stage of representation. Being able to imagine things *into* rock patterns, cave walls, or cloud formations would thus ontogenetically precede the capacity of representing things that aren't there, through a material depiction. It is symptomatic that Wollheim then seems to omit this difference in the course of this lecture, and seems to equate seeing-in with pictorial representation. While objects can be looked at in many different ways, he asserts, not all of them can claim for the same standard of correctness: "the experience of seeing-in that determines what it represents, or the appropriate experience, is the experience that tallies with the artist's intention" (Wollheim 1998, 226). If this wasn't enough, the correct performances of this intention require a specific kind of standard spectators that would be "suitably sensitive, suitably informed, and, if necessary, suitably prompted" (Wollheim 1998, 217).

While some artists may spectacularly fail in offering an artifact that would enable to realize their intention—most famously, Balzac's painter Frenhofer in *The Unknown Masterpiece* who kept covering his canvas to the point of unrecognizability—the realization of the creator's intention remains the goal to attain for the spectator. Now, of course, such a normative approach raises a lot of issues: Am I missing the artist's intention when in a medieval fresco of the *Mystical Lamb*, I see the lamb in the fresco, but can't identify it as a proxy for Jesus Christ? Does the artist intention require to see the Savior according to Christian faith or simply the animal which, according to zoological taxonomy, represents a young sheep? Already vast when it comes to figurative depictions, such puzzles are even greater when we move to abstract painting. But basically, it is hard to see why the artist's intention should be the sole reference for a

picture's meaning: After all, if the meaning of an utterance can very well diverge from what a speaker intended to say, why wouldn't the same apply to depictions?

It is somewhat curious how Wollheim, who claims to advocate an "object theory" of images, counterbalances the excessive subjectivity of the spectator's gaze with the subjectivity of an artist's intentional gaze. But a theory of the gaze does not yet provide us with a theory of the image. Once again, the co-constitutive function of the material medium of the image is eluded and rather than considering that the mediality of the image itself limits arbitrariness, Wollheim introduces the notion of the "artist's intention" as a new standard of normativity. It is this normativity of intention which will then allow for a disambiguation of the multiple possible perceptions of an image.

While arguments can be brought forth questioning the possibility of such a disambiguation (Lopes 2004, ch. 8.3), one could raise a number of further questions: Why does the ambiguity of images have to be reduced to the two-foldness of denotation and medium? Isn't Wollheim's "bivalence" theory yet another reduction to a static simultaneity of what is, phenomenologically speaking, constantly oscillating? Can we really exclude *trompe l'oeil* from the domain of images straight away, simply because they do not meet the requirements of the simultaneous perception of figure and medium? Isn't Wollheim's formalization of the structure of the image leading straight ahead to what Merleau-Ponty likes to call "bad ambiguity"? What remains to be answered is whether an image theory could be developed which would not think images in terms either of a disjunctive logic (like Gombrich) or of simultaneous twofold-ness (like Wollheim), but rather in their very manifoldness. Fortunately, the theoretical debate has moved forward in the last years.

3   Seeing-with

Beyond the question of whether beholders can have a simultaneous attention to the pictorial features such as style and to the depicted content, it was suggested that more importance should be granted to how pictures are organized themselves. In that sense, some advised describing the phenomenal-appearing dimension of pictures as an "inflection" of their content: that the way a picture is arranged—its "design"—inflects what they are about (Hopkins 2010; Nanay 2010). Instead of saying that in front of Seurat's 1889 representation of the Eiffel Tower, spectators simultaneously attend a depiction of the architectonic landmark of the French capital and the light radiations of the painter's brush-stroke, it seems indeed more appropriate to say that the vision of the Eiffel Tower is strongly inflected by the unique painterly technique. Rather than trying to capture how images work by merely coming up with a theory of attention (whether disjunctive or conjunctive), such an approach at least grants some importance to the medium of the image itself.

But is a theory of inflection really sufficient in this case, to explain how a subject's vision is oriented and guided through image devices? To state that "our experience of pictures is sometimes 'inflected' by our awareness of

properties of the picture's surface" (Hopkins 2010, 151) is a still rather cautious formulation, when it comes to making more space for how pictures are shaped and organized in and of themselves. Besides, one might suspect that with such a minimalist definition, the material properties of images could be easily subordinated to subjective stances again: if no word is said about how an attention to the surface properties is prompted by these properties themselves, one might well believe that how beholders attend pictures is entirely dependent on their mental availability or temporary mood. Furthermore, the claim can be contested that only *some* pictures are inflected, while others aren't. Non-inflected pictures would be tantamount to transparent pictures, that is, to pictures where the phenomenal appearance has no bearing whatsoever on the referential aboutness. The validity of such a claim can be doubted: to say that phenomenal features are overlooked doesn't mean that such features don't contribute to orient the specific attention to what appears in a picture. Although many visual media stress their neutrality and transparency toward their content, they are nevertheless already shaping and arranging what they visualize (for a more detailed account, see Alloa 2021).

It is time to acknowledge that images can't be equated with straightforward representations of things; rather than passive slates for mental projections, they are in fact agents that contribute to inflect and displace what we see. Accordingly, they aren't only illustrations of what aspect blindness means (such as in the rabbit-duck example) but also devices eliciting different and new ways of seeing, which can at times end up correct aspect blindness. Or in other terms: images aren't merely reproductions of what is already visible out there, but allow new visibilities to dawn. If this is true, then a new description of image-related seeing is required. Some strands of phenomenology yield such alternative account, which should then be reconnected with current attempts to descript the operativity of images.

Beyond the propositional seeing-as and the projective seeing-in, Maurice Merleau-Ponty's phenomenology of visuality offers resources for a renewed understanding of what it means that images are key players orienting our gazes, and his remarks can be summarized into a new concept: the *seeing-with*. In *Eye and Mind*, Merleau-Ponty affirms that we "do not look at [a painting] as one looks at a thing […] Rather than seeing it, I see according to, or with it" (Merleau-Ponty 1993, 126). This *seeing-with* underscored by Merleau-Ponty has long been underestimated in contemporary image theories, which either excessively focus on images as mere things or, on the contrary, focus on the constitutive force of the gaze.

While Merleau-Ponty elsewhere criticizes the idea of images as "second things" (*choses secondes*), devoid of any own efficacy, in this statement, he implicitly targets the dominance of a gaze theory of images, in particular that of Sartre. Sartre's *L'Imaginaire* is thoroughly based on a concept of consciousness that can be compared to that of Wittgenstein's "change of aspects" (*Aspektwechsel*). In order to see an image, I need, according to Sartre, to "deny" the materiality of the painting. We may either look at the material qualities of

the image-object in a "perceptive attitude" (*attitude perceptive*) or, by changing our consciousness state and negating the material world, we may have an image emerging in an "imaging attitude" (*attitude imageante*) (Sartre 2004). For Merleau-Ponty on the contrary, an image does not emerge *despite* its material support, but *thanks to it*. In an unpublished manuscript, Merleau-Ponty notes: "What is a *Bild*? It is manifest that we do not look at a *Bild* the way we look at an object. We look according to the *Bild* [selon le *Bild*]" (Merleau-Ponty, BNF, vol. VIII: 346). In other words, we do not only see *in* images, rather seldom *as* images, never *despite* them but always *with* them and *through* them.

Such observations are not by any means limited to artistic images. In Plato's slave scene in the *Meno* (82b-84c), the geometric schema drawn onto the ground is neither seen *as* the theorem of Pythagoras, nor is the theorem projected *into* the schema, rather, evidence emerges *with* and *through* the schema which will only later become a theorem. Accordingly, Ludwig Wittgenstein's early technical drawings from the Manchester period for a novel type of aero-engine with propeller-blade tip-jets (Fig. 4) exemplify the shortcomings of any theory of *seeing-as* or *seeing-in*. It is only progressively, through a familiarization with the picture and its constructive principles that we begin to see what could not be seen in any other way, not even in front of the real combustion engine, had it ever been built.

Indeed, it seems that very often images enable one to see what remains otherwise inaccessible, latent, or unseen. With the invention of his chronophotographic dispositive, in 1878, Eadweard Muybridge put a definitive halt to the speculations about the positions of the horse legs while galloping, famously depicted in Géricault's *Derby d'Epsom* from 1821; today, scanning tunneling microscopy (STM) or magnetic resonance tomography (MRT) visualizes what remains otherwise unattainable to the human eye. In this respect, imaging devices are not merely generating replicas of reality, they are decisively contributing to shape what counts as real, as one could argue with Gilbert Simondon (Hoel 2020). When using such visualizing devices, the images in play are not mere telescopes onto reality, let alone transparent windows: as Wittgenstein says in another context, one thinks "that one is retracing nature over and over again, and one is merely tracing round the form through which we see it" (Wittgenstein 1993, §114, modified trans.). There is thus an intrinsic opacity in all images that nevertheless only allows for images to become spaces of operation. In recent studies, creative inroads have been opened into how "operative iconicity" works (Krämer 2017). Beyond the traditional attention to artistic pictures, these studies insist on the epistemic function of practical tools of visualization, whether through sketches, outlines, plans, notes, or diagrams.

It would be equally misleading though to oppose aesthetic pictures, which are looked at for their own sake, to operative pictures, which would be purely instrumental, meant for one-way and one-time use only. If images play a major role today in sciences and medicine, generating an entire new domain of "imagineering", it is certainly not because they could be used interchangeably
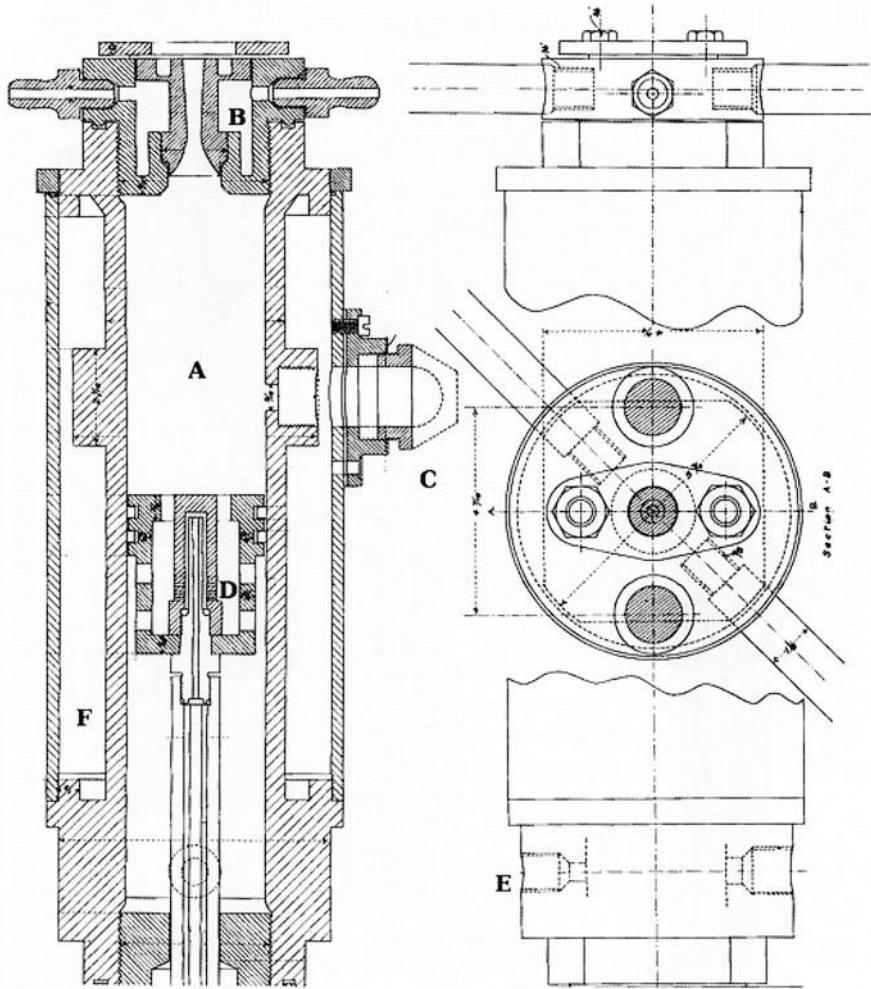
Fig. 4 Ludwig Wittgenstein, *A blueprint for a combustion chamber for aero-engine*, Manchester University, 1908–1911 (in public domain)

with other communicational devices such as texts. Images may become arguments in science not despite, but rather because of, their relative intransitivity: the showing image becomes a demonstration because it shows what it, in fact, means. "A picture tells me itself", says Wittgenstein, insofar as it communicates through "its own structure, its own colors and forms" (Wittgenstein 1993, 57, §523).

At this very point, and if we follow the idea that Wittgenstein developed two separate image theories—one in the *Tractatus* and one later on in the *Philosophical Investigations* (Gebauer 2010)—it seems that the latter comes

closer to the former. Due to their finite character that forces the gaze to look on its very surface for what it gestures at, images have the character of "synopticity" (*Übersichtlichkeit*) which, according to Wittgenstein, is so essential to understanding. Due to their capacity of condensation, images become "catchy" (*einprägsam*), as Wittgenstein formulates it (Richtmeyer 2019, ch. 8). We must thus acknowledge that there is a paradoxical link between intransitivity and operativity that renders these two not mutually exclusive, but rather interdependent. In a general theory of use, which has often chosen Wittgenstein as its key reference, this intransitivity has been underestimated. Rather than deducing pictorial uses from a general theory of use, the contrary may prove to be productive (see also Mersch 2006).

Describing images as bringing about a certain kind of seeing that can be characterized as *seeing-with* means taking into account this resistance to transparency: it is because we cannot eliminate the picture's materiality that we have to see it along its own lines, use it according to its figural organization of the surface. Husserl, for instance, who spends much effort describing processes of *seeing-in*, which he also calls "perceptive imagination" (*perzeptive Imagination*), has to admit that we cannot have the appearing image-object without the medial support which, rather than being a purely neutral projective surface, sometimes "excites" (*erregt*) an image which the spectator hadn't imagined himself beforehand. And yet, even in the "excited" image, the medial ground shines through, contrasts with the presented image and sometimes openly conflicts with it: "the rough surface of the paper (China paper) of this copperplate engraving belongs to the physical image. This determination conflicts with the female form appearing on the surface" (Husserl 1980, 137; 2005, 153).

Stating that we see *with* images means that, rather than being neutral surfaces of the beholder's projection, images *generate* gazes that, although never ultimately fixed, are by no means arbitrary. The form of the image, its figural organization, its material ridges, dales and crests, open up a space for potential vision. Between the unambiguousness of a communicational message or an artist's intention inscribed into the object and the image as a space of free variation of consciousness, it appears that the density of images, their material stratification, and their phenomenological overdetermination demand a specific attention.

Seeing with images then means that the evidence they provide the spectator resists generalization without further ado: iconic evidence is not a ladder that could be thrown away after we have climbed it, but remains inherently situation-dependent, case-sensitive, and thus, ultimately, precarious. Images help drawing distinctions, but these distinctions do not exist beyond the material medium which they organize from inside. Images thus yield a potential, but neither in the sense of a mere indetermination (the *pura potentia* of matter) nor in the sense of a preexistent form or meaning which the gaze would have to reveal, akin to the understanding of the sculptor's practice as releasing the inherent form from within the marble. Rather, seeing with images entails following those veins in the marble of which Leibniz said that they signify a propensity inherent to matter toward certain unfoldings and individuations.

4   CONCLUDING REMARKS: OPERATING THROUGH IMAGES

This walk through some older and newer attempts at better circumscribing how image-dependent vision functions—with a special attention to Wittgenstein's theoretical legacy on this specific point—hopefully led to a sharper understanding for the capacities but also for the inherent limitations of the respective conceptual approaches. Besides, the different approaches also often betray the theoretical backgrounds they are steeped in, which might explain some blind spots when it comes to considering what are non-standard cases in the respective contexts. In the meantime, the results can be summarized as follows: First and foremost, a theory of the gaze cannot become a theory of images without further ado. Secondly, a difference should be made between propositional *seeing-as* (where the picture is tantamount to the utterance "this *x* is a representation of *y*"), projecting *seeing-in* (where the picture requires "seeing *y* in *x*"), and medial *seeing-with* (where a kind of seeing is generated with the help of visual artifacts, and thus "through *x*, a *y* becomes visible"). Thirdly, evidence suggests that there are many images that don't exactly match the standard cases analyzed by philosophical theories of depiction—representational images—and whose operative mode should be addressed by a comprehensive theory of visualizing devices.

The late Harun Farocki suggested calling these images "operative images". Operative images, the filmmaker asserted, are images "that do not represent an object, but rather are part of an operation" (Farocki 2004, 17). Most operative images were never meant to be released separately, or to be looked at for their own sake, but are moments in a wider technical process. While challenging traditional criteria such as distinctness and discreteness, today, these operative images carve out an ever-growing share in the large domain of images. Whether for military purposes (drone tracking, target detection), surveillance (CCTV installations in public space), virtual orientation (street view functions), satellite forensics, visualization of scientific data, astronomy, medical imagineering, MRT scans, real-time distant surgery, or recreational activities through VR headsets, these operative images aren't strictly speaking depictions, and ask for an enlarged approach to their uses and practices. Meanwhile, they clearly belie the kind of normative implications as well as ideals of correct spectatorship which is found in many theories of depiction: What would be the correct intentional standard for looking at images taken by surveillance cameras?

The excessive focus on either the referential object or the intentional stance of the viewers should be enlarged, so as to take into account the ways in which images work by drawing on their own intrinsic features. What Gombrich calls the method of "guided projection" (Gombrich 1984, 162) is by far not only initiated by the artist's intention. The "aboutness" of images is not representational alone, but generates a new kind of visibility. Quite often, when seeing "through" images, things come to the fore that could never be seen otherwise.

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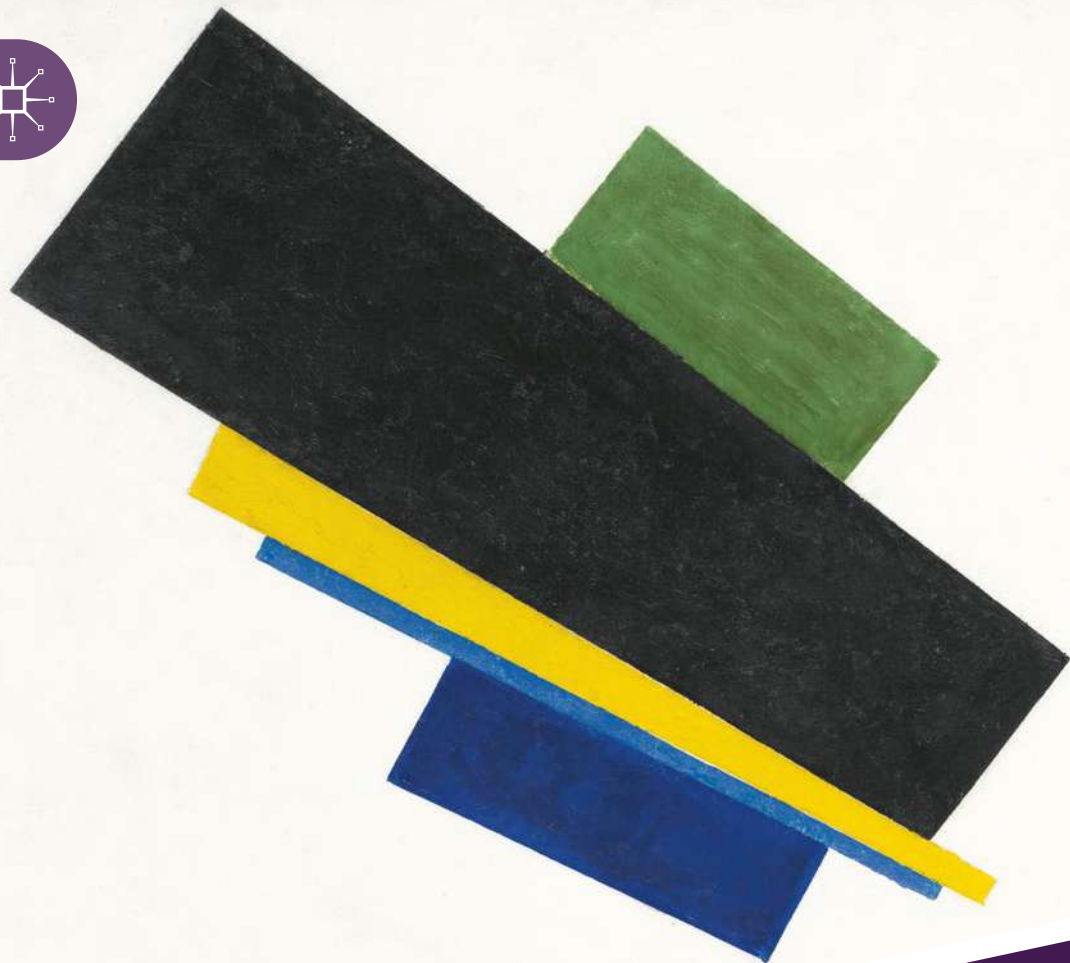
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