



Disjunctivism, hallucinations, and metacognition

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Perceptual experiences have been construed either as representational mental states—Representationalism—or as direct mental relations to the external world—Disjunctivism. Both conceptions are critical reactions to the so-called ‘Argument from Hallucination’, according to which perceptions cannot be about the external world, since they are subjectively indiscriminable from other, hallucinatory experiences, which are about sense-data or mind-dependent entities. Representationalism agrees that perceptions and hallucinations share their most specific mental kind, but accounts for hallucinations as *misrepresentations* of the external world. According to Disjunctivism, the phenomenal character of perceptions is exhausted by worldly objects and features, and thus must be different from the phenomenal character of hallucinations. Disjunctivism claims that subjective indiscriminability is not the result of a common experiential ground, but is because of our inability to discriminate, from the inside, hallucinations from perceptions. At first sight, Representationalism is more congenial to the way cognitive science deals with perception. However, empirically oriented revisions of Disjunctivism could be developed and tested by giving a metacognitive account of hallucinations. Two versions of this account can be formulated, depending on whether metacognition is understood as explicit metarepresentation or as implicit monitoring of first-order informational states. The first version faces serious objections, but the second is more promising, as it embodies a more realistic view of perceptual phenomenology as having both sensory and affective aspects. Affect-based phenomenology is constituted by various metacognitive feelings, such as the feeling of being perceptually confronted with the world itself, rather than with pictures or mere representations. © 2012 John Wiley & Sons, Ltd.

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INTRODUCTION

In this review, we focus on a crucial debate among present-day philosophers of perception, which hinges upon the question of whether perception should be conceived as a relation to, or as a representation of, the external world.^{1,2} Many philosophers believe that a proper answer to this question is relevant to the truth of a certain form of Direct Realism, according to which what we perceive is a fragment of the world itself. As we shall see, the debate sometimes

takes a rather abstract form, but here we want to relate it to current empirical results and models in the psychological theory of metacognition.

The review is structured as follows. First, we present the so-called ‘Argument from Hallucination’, which tries to show that veridical perceptions have in fact the same kinds of objects as convincing hallucinations, that is, sense-data typically conceived as mind-dependent. Then we discuss two important reactions to the conclusions of the Argument from Hallucination, namely Representationalism and Disjunctivism. While Representationalism construes perceptions as representational mental states, which can be correct (in the veridical cases) but also incorrect (in the hallucinatory cases), Disjunctivism is the claim that perceptions do not share their most specific

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mental kind with hallucinations. As presented here, Disjunctivism is committed to a specific version of Direct Realism, namely Naïve Realism. This is the view that the phenomenal character of perceptions (what it is like to enjoy a conscious veridical experience) is much richer than the phenomenal character of hallucinations (what it is like to enjoy what is in fact a hallucinatory experience), insofar as it is wholly determined by the perceived objects and their sensible features. At first sight, Representationalism is more congenial to the way cognitive science deals with perception.³ However, we shall eventually propose to interpret the claim that hallucinations are indiscriminable from perceptions in terms of the psychological notion of metacognition. In our opinion, this interpretation sheds new light on Disjunctivism, which thereby becomes more amenable to an empirical evaluation. Finally, we formulate two versions of the metacognitive account of hallucinations, depending on whether metacognition is understood as explicit metarepresentation or as implicit monitoring of first-order informational states. We suggest that Disjunctivism should be revised in the light of the distinction between two aspects of perceptual phenomenology, namely sensory and affective phenomenology.

DIRECT REALISM AND THE ARGUMENT FROM HALLUCINATION

While perceiving the world around us, it seems to us that we are directly presented with worldly objects and features. It does not seem to us that we are presented with intermediary representations, even faithful ones. Perception appears, at first glance, to be a form of ‘openness to the world’.⁴ When Vera sees a pigeon, she is ‘en rapport’ with a particular pigeon; no representation or mental sense-datum seems to stand in the way between her and the pigeon. This mundane observation supports a form of *Direct Realism*, and more specifically the view that genuine (or veridical) perceptions are *relational states*, that is, states that constitutively involve mental relations to the perceived objects.^{2,5} However, we can be misled by our perceptual experience.^a Suppose that Hal actually suffers from a perfect hallucination of a pigeon produced, for instance, by some medicine he took earlier in the day.^b From his personal and subjective point of view, the hallucinated pigeon looks exactly like a pigeon, and his hallucinatory experience seems to phenomenally match some veridical perception of a pigeon.

The so-called *Argument from Hallucination* (AFH) rejects the mundane observation that our perceptual experience constitutively involves a mental relation to the external world. The hallucinating

subject is not in touch with a real thing or event but again, there does not seem to be any experiential difference between her hallucinatory state and some relevantly similar veridical perception. Thus, by parity of reasoning, in the case of veridical perception too, we are not really in touch with worldly objects and features.^{2,6,7} Slightly more formally, we can present the AFH in the following way:

1. There might be perceptual experiences, namely hallucinations, which are subjectively indiscriminable from veridical perceptual experiences.
2. Hallucinations do not have mind-independent objects.
3. Because of their subjective indiscriminability, hallucinations and veridical perceptions belong to the same most specific experiential or mental kind (namely perceptual states).
4. ‘When it seems to one that something has a quality, F, then there is something of which one is aware which does have this quality’ (Robinson’s Phenomenal Principle).⁶
5. Given (4), in both hallucinations and veridical perceptions, there is something which the subject is aware of.
6. Given (2) and (5), hallucinations have mind-dependent objects.
7. *Conclusion 1*: Given (1), (2), and (3), the essence of veridical perceptions cannot depend on the perceived objects, ‘since essentially the same kind of experience can occur in the absence of the objects’.²
8. *Conclusion 2*: Given (1), (2), and (3), and *Conclusion 1*, the first intuitive statement about perception as being a form of openness to the world is false (i.e., Direct Realism is false).
9. *Conclusion 3*: Following (1)–(4), *Conclusions 1* and *2*, we should posit a special kind of object shared by both veridical perceptions and hallucinations. This object is not worldly or public, but is a mental object or sense-datum.

In a nutshell, the AFH states that hallucinations and perceptions share their most specific experiential kind, as well as their intentional objects (according to *Conclusion 3*), and rejects Direct Realism. Now assuming that the AFH is valid, one can either accept (at least some of) its conclusions, or reject them as a whole. Some of the theories of perception which defend the AFH are out of fashion, so we shall not present them here (but see for instance Fish⁸ for an overview). What we shall do instead is to introduce

the current debate between Representationalism and Disjunctivism, and then focus specifically on the latter. Both approaches reject the Phenomenal Principle (premise 4) and consequently reject *Conclusion 3*, that is, the fact that both perceptions and hallucinations have mental or mind-dependent objects. However, while Representationalism accepts *Conclusion 1* and *Conclusion 2* and so denies that perceptions are genuinely relational states, Disjunctivism rejects all the conclusions of the AFH and insists that perceptions involve direct mental relations between the perceiver and the external, mind-independent world.

REPRESENTATIONALISM

Representationalism accepts *Conclusions 1* and *2* of the AFH but rejects *Conclusion 3* on the grounds that perceptual states are essentially representational states.^{1,9–12} Now typically a representational state can be satisfied (for instance, true) but it can also be nonsatisfied (false). The fact that the subject believes that it is raining does not entail that it is raining. Her belief can be true but it can also be false; it is true if it is raining, but false if what she is seeing and hearing in fact results from a garden hose jet. Similarly, a visual experience of a pigeon can be satisfied but can also be non-satisfied. It is satisfied if it represents what is really the case, namely a pigeon. It is not satisfied otherwise. In this sense, hallucinations are *misrepresentations*. We can now see why Representationalism rejects the Phenomenal Principle (premise 4): Hal's visual hallucination of a pigeon only involves an incorrect representation of the world, and does not need to have a pigeon-like mental entity as its object.

Representationalism claims that 'what is in common between perceptions and indistinguishable hallucinations is their intentional (i.e., representational) content: roughly speaking, how the world is represented as being by the experiences'.² In other words, perceptual states essentially are representations of the relevant sensible aspects of the world, and hallucinations share with them this essential representational character.

In addition, some Representationalists argue that the phenomenal character of perceptual states is wholly constituted by their representational contents.^{9,10} The phenomenology of experience (what it is like to enjoy a visual experience of the world) is exhausted by its 'aboutness', that is, the fact that a pigeon is visually represented. As hallucinations share their representational contents with perceptions, Representationalism can explain why they are phenomenally identical with perceptions, that is, they produce the same subjective experience.^c

It should now be clear why Representationalism refuses to consider perceptions as constitutively involving mental relations to the world. If hallucinations and perceptions can be indistinguishable, indeed identical at the level of their representational contents, the phenomenology of perceptions cannot be determined by worldly objects and, consequently, perceptions cannot be relational states, or cases of openness to the world itself.

Representationalism raises many issues.^{2,4,13} For instance, one might be worried by the fact that it does not yield a clear distinction between perceptions and other nonperceptual representational states, such as beliefs. Both beliefs and perceptions involve mental representations of the world, and both are 'thetic' (they have a mind-to-world direction of fit). What Representationalism seems unable to capture is the sensory character of perceptual experience. Another worry is that Representationalism does not give justice to the intuition of perception as openness to the world, namely the fact that perception *presents* rather than *re-presents* the world. Thus, it possibly paves the way to Cartesian skepticism, according to which we are never in a position to know whether we are really perceiving the world or having an indistinguishable hallucination.^{4,14} As Crane² puts it: 'Although many intentionalists [i.e., Representationalists] accept that the objects of experience are all ordinary mind-independent public objects, they do not treat objects as essential to experience, and therefore, the critics argue, they risk putting the mind "out of touch" with reality.' Interestingly, Crane¹ just bites the bullet at this point: 'The essence of perception—perceptual experience itself—does fall short of the world' (p. 141).

DISJUNCTIVISM

Disjunctivism accepts that perfect hallucinations are possible (premise 1).^{15–17} It also accepts that hallucinations do not have mind-independent objects (premise 2). However, it rejects the Phenomenal Principle (premise 4) and denies that perceptions and hallucinations share their most specific experiential or mental kind (premise 3). Disjunctivism may grant that hallucinations and veridical perceptions share some properties, but these properties are not what is essential to and distinctive of veridical perceptions.¹⁸ Consequently, hallucinations and perceptions do not belong to the same most specific experiential kind. What we describe as a perceptual experience involves a disjunction of mental states, whence Disjunctivism's motto: in a given perceptual event, *EITHER* the subject has a veridical perception and so is directly 'en rapport' with a fragment of the world, *OR* she

has a nonveridical perceptual experience (such as a hallucination).

Disjunctivism vindicates a version of Direct Realism known as *Naïve Realism*. This is the view that the phenomenology of veridical perceptions is exhausted and shaped by the layout of the environment the subject is presented with in her experience (perhaps along with additional perspectival properties).^{19,20} The phenomenology of Vera's veridical experience of the pigeon is determined or constituted by the pigeon itself (Nudds²⁰ calls this 'the naïve realism property', or NR property, of veridical experiences). In other words, the relation the perceiver bears to external objects is constitutive of the phenomenology of her experience, which does not represent but *instantiate* the perceived objects and their properties.

Of course, since hallucinations do not have concrete objects as referents, their phenomenology must be essentially different from that of veridical perceptions (i.e., hallucinations do not have the NR property). The phenomenology of Hal's hallucination of a pigeon is not constituted by the pigeon itself because, trivially, there is no pigeon around to do the trick. At this point, the strategy of Disjunctivism is to consider the problem from the side of the subject and not from the side of the experience. Hallucinations are indiscriminable from veridical perceptions because the subject is unable (due to some epistemic limitations) to know, from the inside, that she is not having a veridical perception. In other words, hallucinations do not have any intrinsic mental or experiential qualities, lacking the NR property, but they *seem* to have these qualities because perceivers have limited introspective knowledge which does not enable them to distinguish 'from the inside' the hallucinatory state from the relevant veridical perceptual state.^{18,21} The subject is thereby prone to make a 'metacognitive error', namely to mistake a hallucinatory state for a veridical perception (see below). Indeed, Martin considers that hallucinations have no intrinsic and positive phenomenal properties but only the relational and negative property of being indiscriminable from the relevant veridical perceptions. This is what we shall call *Negative Epistemicism*. As Martin²¹ puts it, 'For certain visual experiences as of a white picket fence, namely, causally matching hallucinations, there is no more to the phenomenal character of such experiences than that of being indiscriminable from corresponding visual perceptions of a white picket fence as what it is' (p. 369).

Like Representationalism, Disjunctivism raises many important issues (some of which will be presented below).² Our aim here is not to provide a full defense of Disjunctivism, but to explore the prospects of grounding it on empirical models and results.

Indeed, the claim that the notion of indiscriminability can be cast in terms of a metacognitive error or confusion inclines us to relate Disjunctivism to the theories of metacognition to be found in cognitive science, in the hope of deepening our understanding of the debate between Representationalism and Disjunctivism.

INDISCRIMINABILITY AND METACOGNITION

The standard gloss on the notion of indiscriminability involves metacognition from the start: hallucinations are not indiscriminable from perceptions tout court, but only 'from the inside', that is, through some kind of introspection or reflection.^{d18,21} In what follows, we shall say, more generally, that hallucinations are metacognitively indiscriminable (henceforth, MC-indiscriminable) from perceptions. More precisely, if hallucinations are MC-indiscriminable from perceptions relative to a given subject, then it will be, for that subject, as if she perceived something. That is, the subject will not be able to know, without the help of extraneous information (e.g., testimony from others), that her experience is not a case of veridical perception. As a result, she will be at least strongly inclined to believe that she really perceives something.

We can see, then, that the Disjunctivist description of the hallucinatory cases presupposes the intelligibility of a more specific notion, namely that of a MC error or *confusion*. If reflection on one's hallucination revealed only the relational property of being indiscriminable from some perception, then it would not be in error; the former *is* indeed indiscriminable from the latter. Now if, in addition, reflection identifies the psychological mode of first-order conscious states, that is, whether the latter are cases of perception, imagination or memory, then it might mistakenly classify a case of hallucination as a case of perception.

Given the intelligibility of the notion of a MC error, there is an important issue to consider, namely the nature of the first-order state that is MC-mistaken for a perception. At the very least, if Disjunctivism is right, such a state does not belong to the veridical perceptual mental kind. But one might ask whether it belongs to any other mental kind. For instance, it has been claimed that in some cases of hallucinations (in schizophrenia), an *imagining* is mistaken for a perception.²² But note that this claim is difficult to reconcile with Negative Epistemicism, according to which the phenomenal character of hallucinations is exhausted by the fact that they are MC-indiscriminable from perceptions. In other words, a hallucination does not have an intrinsic phenomenal

character. In contrast, an imagining has an intrinsic phenomenal character, which presumably it does not lose when it is mistaken for a perception.

Another option, which is more congenial to Negative Epistemicism, is to describe the hallucinating subject as MC-mistaking a nonperceptual state without intrinsic phenomenal character with a veridical perception with intrinsic phenomenal character. The nature of the first-order state which causes the MC error is irrelevant. It need not be an intrinsically conscious state. It need not even be the same in each case of hallucination. On this view, hallucinations are not psychological natural kinds, but mere ‘metacognitive projections’, so to speak.

In what follows, we shall explore the latter option with respect to two important versions of the MC account of hallucinations. While *the reflective version* analyses MC as an explicit metarepresentational activity, *the monitoring version* construes MC as an implicit monitoring process.

THE METACOGNITIVE ACCOUNT OF HALLUCINATIONS (I): THE REFLECTIVE VERSION

According to the reflective version of the MC account of hallucinations, the MC confusion which generates the subject’s hallucination takes the form of a *false higher-order belief*, such as the belief that she is perceptually related to the world. Again, the causal origin of such a belief is irrelevant, since the reflective version tries to promote the intuition that the relevant higher-order belief is *sufficient* to be in a hallucinatory state.^e This intuition is voiced by Fish¹⁹ in the following terms:

‘As long as I sincerely believe that I see that there is a cat on the mat before me, I thereby take myself to be seeing a cat on the mat before me—I take myself to be having a veridical perceptual experience of a cat on the mat—even if I am not. These beliefs can therefore be employed to explain why hallucinating subjects take themselves to be having an experience with phenomenal character. Even though, on this definition, a hallucination lacks phenomenal character altogether, because it produces the same cognitive effects as a veridical perception, a suitably sophisticated subject would still believe that it has phenomenal character, think that there is something it is like for him to hallucinate in such a way, and claim that he is having an experience of a certain kind, despite being mistaken. To paraphrase Armstrong, the phenomenal character of hallucination is simply a ghost generated by my belief that I am seeing something.’ (p. 98)

Indeed, there is no need to answer the question of *what* is MC-mistaken for a perception, since the MC confusion itself already has the same cognitive effects as a perception. As a consequence, the reflective version is congenial to Negative Epistemicism. The phenomenal character of the first-order state which is MC-indiscernible from a perception is exhausted by the fact that it causes an MC confusion at the reflective level.

Despite its initial attractiveness, the reflective version of the MC account of hallucinations faces serious objections. Many of them derive from its intellectualistic flavor, that is, the fact that it demands too much from naïve hallucinating subjects:

1. *The curious asymmetry objection.* In a normal context, when the subject sees a glass of water in front of her, she believes that there is a glass of water in front of her. Of course, if she unknowingly hallucinates a glass of water, she also believes that there is a glass of water in front of her. Yet according to the reflective version, she derives this first-order belief from a higher-order belief, something which she does not have to do in the veridical case.
2. *The false assimilation objection.* The reflective version implausibly assimilates hallucinations to cognitive delusions. Consider Anton’s syndrome. In this case, the patient is cortically blind (following a brain damage, e.g., a stroke) but strongly believes and adamantly affirms that she is seeing something. Anton’s syndrome intuitively involves a delusion rather than a visual hallucination. The reflective version cannot differentiate between such cases of confabulation and genuine cases of sensory hallucination.^{7,23}
3. *The inattentive perceiver objection.* A subject can have a hallucination while thinking about something else, thus without actually forming any higher-order belief about her current experience.¹⁹ Imagine that the subject hallucinates a pigeon but then instantly dies on the spot. Even though the subject did not have the time to form the relevant higher-order belief, about her seeing a pigeon, she was still hallucinating.²⁴
4. *The dog objection.*²⁴ There is some evidence that nonhuman mammals, such as dogs, can have sensory hallucinations. However, dogs lack metarepresentational abilities, and so cannot form any higher-order beliefs.

We believe that these objections (or at least some of them) are fatal to the reflective version of

the MC account of hallucinations. However, the notion of MC need not be understood in explicitly metarepresentational terms. There is another version of the MC account, according to which MC should be understood in terms of implicit monitoring processes. As we shall see, the monitoring version seems to escape many of the difficulties which threaten the reflective version.

THE METACOGNITIVE ACCOUNT OF HALLUCINATIONS (II): THE MONITORING VERSION

In general, MC beliefs can be either theory-based or experience-based.²⁵ For instance, the belief that one knows what the capital of Peru is can be based on explicit reasoning from independent premises, such as the premise that one has learnt in school the names of the main capital cities. However, this belief can also be based on a kind of affective experience, namely the gut feeling that one knows what the capital of Peru is. Feelings of knowing involve implicit inferences from various internal cues (such as fluency or availability of partial information). The mechanisms which monitor these cues are MC, but they do not involve the manipulation of metarepresentations.²⁶ As Koriat²⁵ puts it, feelings of knowing 'rely on *contentless* mnemonic cues that pertain to the quality of processing, in particular, the fluency with which information is encoded and retrieved' (pp. 19–20; *our italics*). In other words, feelings of knowing result from the operations of implicit MC mechanisms which are quality- or process-based rather than content-based.

The distinction between theory-based and experience-based can also be applied to MC beliefs about one's own perceptual experience.²⁷ For instance, the belief that one has seen the person at the bar before can be based on one's feeling of familiarity. The belief that one is unsure about whether the perceived sample is orange rather than red can be based on one's feeling of uncertainty. Now Husserl and other classical phenomenologists have emphasized that ordinary perception is accompanied by the feeling that what is perceived is actual, or more precisely the feeling of being perceptually confronted with a real thing or event, what they called in German 'Leibhaftigkeit'.²⁸ Thus, the belief that one is perceptually related to a real pigeon can be based on one's background knowledge that hallucinations are rare, but it can also be based on one's feeling of reality.

Feelings of reality are not parts of the sensory contents of perception, but contribute to distinguishing perception from imagination and memory.^{29,30} When one imagines or even remembers that *p*, one

does not have the feeling of actual presence which one has when one perceives that *p*. We can then speculate that, just as feelings of knowing result from implicit MC mechanisms that monitor the quality of first-order memory processes, feelings of reality result from implicit MC mechanisms that monitor the quality of first-order *perceptual* processes. More specifically, one can conceive of these mechanisms as a form of on-line *reality monitoring*. Reality monitoring is a cognitive system's ability to 'know' whether an informational state has been generated internally or externally. In the same way, the system must be able to 'know' which cognitive mode it was or it is in (e.g., perception, imagination, memory, etc.), referred to as *source-monitoring*.^{31,32} On this view, the feeling of reality with respect to what is perceived is the conscious result of low-level MC mechanisms whose function is to 'tag' first-order informational processes as being genuinely perceptual, or more specifically generated from the external world.^f

On the reflective version of the MC account of hallucinations, the formation of a false higher-order belief to the effect that the subject is perceiving the world produces cognitive effects similar to those produced by a genuine perception. As a consequence, this belief is sufficient to generate a hallucinatory experience. Now the monitoring version of the MC account has the same structure, but eschews reference to higher-order beliefs. The hallucinating subject feels like she is perceptually open to the world itself. However, her feeling of reality results from a kind of MC confusion, more precisely from the fact that low-level mechanisms have mistakenly tagged nonperceptual first-order processes as genuinely perceptual processes. Again, the nature of the first-order processes does not matter. What produces cognitive effects similar to the cognitive effects produced by a perception is the subject's feeling of reality, not the first-order processes themselves. Hallucinations are indiscriminable from perception from the point of view of MC monitoring and the metaperceptual (henceforth MP) feelings that such monitoring generates.

Let us see how the monitoring version of the MC account of hallucinations deals with the objections raised above against the reflective version. First, the curious asymmetry objection does not hold because the relevant MC abilities actually operate in the case of perception. Thus, feelings of reality are not specific to hallucinations, but are experienced also while perceiving the world. Second, the false assimilation objection is answered by the fact that feelings of reality are belief-independent experiences. In a case of resisted hallucination (see note *e*), one

can have a feeling of reality but form the theory-based judgment that one is hallucinating. Third, the inattentive perceiver objection is irrelevant because feelings of reality are typically diffuse experiences.³³ One can have a feeling of reality without noticing it. So a subject can hallucinate even if she does not pay attention to her experience, which in this case may have no doxastic or metadoxastic effects.

Fourth, the dog objection seems easy to answer, at least in principle, because metacognition is not restricted to creatures possessing metarepresentational abilities. So even if a dog cannot form higher-order beliefs, it may have MP feelings, such as the feelings of familiarity, certainty, reality and their variations. At least it appears that some species of monkeys can exploit feelings of knowing³⁴ and feelings of perceptual uncertainty³⁵ without being able to know that they know (or still remember) some relevant piece of information, or that they are uncertain about what they are seeing. In general one can exploit metacognitive feelings in order to enhance one's reasoning without deploying concepts of knowledge, memory, or perception.

However, as Siegel²⁴ observes, the dog objection has a tendency to reiterate. Some nonhuman species possess, while others lack, MC abilities. For instance, not all species of monkeys are able to exploit feelings of perceptual uncertainty.³⁶ So the relevant reiterated form of the dog objection is that creatures lacking MC abilities can still hallucinate, in contrast to what the monitoring version of the MC account prescribes.

One might bite the bullet and insist that creatures lacking MP abilities cannot have conscious perceptual experiences. On this view, conscious perception constitutively involves the MC monitoring of first-order informational processes and the generation of MP feelings. What makes a mental state a conscious perceptual relation to the world is partly the fact that first-order perceptual processes are implicitly monitored as such at the relevant MC level, resulting in a characteristic affective experience. One might argue for this view on the grounds that MP feelings contribute to regulating the rational transitions from perception to judgment. For instance, feelings of reality and certainty tend to encourage the transition from perceiving that *p* to judging that *p*, while feelings of unreality and uncertainty tend to inhibit such a transition, or at least to produce perceptual beliefs with lower degrees of subjective probability. So without MP feelings, the rational role of perceptual experience would be barely recognizable. Now Disjunctivism is a thesis about the phenomenal character of conscious perceptual experiences. At the very least, creatures lacking the

relevant MC abilities cannot have experiences with the same phenomenal character as our perceptual experiences. As a consequence, Disjunctivism cannot be touched by considerations about very different kinds of experiences, and *a fortiori* about mere informational states.

TWO ASPECTS OF PERCEPTUAL PHENOMENOLOGY

We have presented MP feelings, such as the feeling of reality, as the conscious results of implicit monitoring of the perception-like quality of first-order processes. Moreover, we have assumed that this type of MC monitoring is constitutive of conscious perceptual experience. It follows that MP feelings, including the feeling that one is genuinely related to the world, are constitutive aspects of the phenomenology of ordinary perception. What it is like to perceive the world around us would be essentially different if our experience were not accompanied by MP feelings.

As an illustration of this point, imagine a man, say Phil, who suffers from a pathology which specifically inhibits his MP feelings. Phil does not have any feelings of reality, certainty or familiarity, nor their polar opposites. Still, his perceptual systems are otherwise intact. However, Phil's perceptual phenomenology is deeply modified by the absence of MP feelings. Perhaps he will be able to form judgments of the form 'This table is rectangular', or 'That wall is painted red'. However, he won't really be affected by things around him. He will very likely experience a kind of detachment from the world, which he feels 'disconnected' from. As a consequence of this detachment, the objects about which he forms judgments do not feel as actual or real as they were before the advent of his pathology.

Phil's experience is an exaggerated form of what some patients with Derealization syndrome seem to experience. They often report that it is as if they were watching a picture or a movie instead of the external world around them: 'Through the eyes I look out at a world that might be a picture of the world'.³⁷ These descriptions strongly suggest that what Phil and (to a lesser extent) these patients lack is the relational phenomenology that is inherent to ordinary perception. They have the feeling that they are not directly *presented* with the world around them. On the contrary, they are confronted with something like mere *representations* (like films or pictures). If we are right, MP feelings, such as the feeling of reality, or more precisely the feeling of being directly related to the world, are *necessary* in order for a conscious experience to instantiate a relational character.

We can then distinguish two sub-kinds of phenomenology associated with ordinary perception.³³ On the one hand, there is sensory phenomenology, which is strictly related to the sensory contents of our perceptions, constituted by the perceived objects and their features. On the other hand, there is affective phenomenology, which is related to MP feelings, and generates the relational phenomenology of perception.

In principle, the phenomenology of perception can then show a double dissociation. First, one can have sensory phenomenology in the absence of the relational phenomenology normally accompanying it. This is what happens in syndromes such as Capgras or the Derealization syndrome. The Capgras patient recognizes the face of the relative but the latter does not feel present (because of hypoactivity of the patient's visuo-affective system).³⁸ In the case of the Derealization syndrome, nothing feels perceptually present.³⁹ Second, one can experience an instance of relational phenomenology in tension with the sensory contents of experience. This is what happens in Frégoli syndrome, where the patient feels as if one of her relatives is perceptually present (because of hyperactivity of the patient's visuo-affective system) even though the person in front of her does not look at all like her relative.⁴⁰ This example shows that MP feelings are at least sometimes *sufficient* to instantiate relational phenomenology.

In our opinion, this dual view of the phenomenology of perception, which suggests that its relational character is the result of MP feelings, is difficult to reconcile with Disjunctivism as presented above. Let us briefly explain why before we end this review.

First, Disjunctivism is associated with Naïve Realism, that is, the claim that the phenomenology of perception is exhausted by the sensory contents of experience, namely the perceived objects themselves. However, although this phenomenology is indeed constituted by the perceived objects and their features (the NR property of experience), it is also constituted by the relevant MP feelings (the affective property of experience). In other words, it is determined by both sensory and affect-based phenomenology. Now we have just argued that the presence of MP feelings is both necessary and sufficient for the relational phenomenology of perception to be instantiated. Consequently, Naïve Realism must be revised. The sensory contents of experience cannot exhaust the phenomenology of ordinary perception because they do not determine what it is like to be perceptually related to the world.

Second, Disjunctivism is committed to Negative Epistemicism, that is, the claim that the phenomenal

character of hallucinations is exhausted by the negative property of being indiscriminable from some veridical perceptions. However, it is arguable that hallucinations and perceptions share their relational phenomenology. They are both accompanied by MP feelings, such as the feeling of reality. Even in the case of a perfect hallucination, the subject has the feeling of being connected or presented with specific worldly objects. Now as we have seen, MP feelings result from the operations of MP processes whose function is to monitor the *quality* of first-order processes, whatever contents are implicitly or explicitly processed. In this sense, MP feelings are independent of *what* is perceived. They do not reflect distal stimuli but internal cues. One can then argue that the feeling of reality experienced in a case of hallucination is no different from the feeling of reality experienced in the case of the corresponding veridical perception. Consequently, *pace* Negative Epistemicism, hallucinations have an intrinsic phenomenology after all, at least as far as their affective dimension is concerned.

One might go further and object that hallucinations must also have some intrinsic *sensory* phenomenology. After all, MP feelings do not by themselves have very specific contents. They acquire specific contents by being associated or bound with sensory contents. For instance, we have the feeling that a particular person, who is just there in front of us, is familiar. We have the feeling that we are uncertain about whether a particular sample is red or orange. We have the feeling that a particular table is actually there in front of us. In all these cases, our feelings get associated with specific sensory contents. It is true that in some cases, we can experience 'free-floating' MP feelings, that is, feelings disconnected from specific aspects of what is perceived. For instance, we can have the feeling that something has changed in the visual field, while being at least temporarily unable to identify *what* has changed.⁴¹ The point is that the content of our feeling in such a case is rather poor. It has the generic form 'Something has changed around here' rather than the more specific form 'This chair has changed its position' or 'This wall has changed its color'.

This objection highlights a potential drawback of the monitoring version of the MC account of hallucinations, in comparison with the alternative, reflective version. For unlike the contents of MP feelings, the contents of higher-order beliefs can be as rich as one wants. So the idea that an MP confusion can yield the same cognitive effects as a veridical perception might seem less plausible if one assumes that the resulting feelings are not bound to sensory contents with an intrinsic phenomenology.

However, the objection is hostage to empirical checking. It might well be that the contents of MP feelings are not so unspecific after all, especially if they can be enriched *from above*, that is, cognitively penetrated by downstream beliefs and imaginings. There is some evidence that feelings of presence can have relatively specific contents. For instance, some patients with Parkinson disease undergo illusory feelings of presence.⁴² Even if these feelings are not bound to any actual sensory experience, their contents may be relatively specific; for instance, they may concern a familiar person standing at a precise location in egocentric space. Moreover, in some cases, these feelings can even transitionally lead to the appearance of vague visual sensations, which suggests that mere feelings can, at least sometimes, produce the illusion of sensory contents. Of course, much more (conceptual and empirical) work is needed at this point, but the idea that MP feelings can generate the illusion of specific sensory phenomenology (against an appropriate cognitive background) is still up for grabs.

To sum up, we have distinguished two possible MC accounts of hallucinations, namely the reflective and the monitoring accounts. As we have seen, the reflective account faces insuperable objections, mainly because of its intellectualist flavor. It is not plausible that naïve hallucinating subjects form higher-order beliefs about their experiences. In contrast, it is much more plausible that even naïve subjects have implicit monitoring abilities, which sometimes produce MC confusions. The only *prima facie* advantage of the reflective account is that the relevant higher-order beliefs can have rich contents, but we have suggested that MP feelings are better suited to give rise to illusory sensory contents, by way of some kind of top-down enrichment.

CONCLUSION

Disjunctivism and Representationalism are two critical reactions to the Argument From Hallucination. Disjunctivism is more radical than Representationalism in rejecting all the conclusions of the Argument, including the claim that perceptions and hallucinations belong to the same most specific kind of mental state. However, unlike Representationalism, Disjunctivism is often considered as a purely theoretical stance with no empirical bite. It is fair to say that most cognitively oriented philosophers have a preference for some version of Representationalism. We have tried to go some way toward restoring the balance between these two conceptions of perception. In particular, we have indicated how to develop and test more empirically informed versions of Disjunctivism.

Disjunctivism involves the claim that although hallucinations and perceptions are specifically different, the former are indiscriminable ‘from the inside’ from the latter. We have argued that the relevant notion of indiscriminability is best understood within the metacognitive framework developed in current cognitive science, where metacognitive monitoring need not involve metarepresentations such as higher-order beliefs.

According to the monitoring version of the metacognitive account of hallucination, perceptions and hallucinations can share their affective phenomenology. It does not entail, though, that they share their sensory phenomenology. First, the main insight of Naïve Realism can be preserved, that is, the claim that the sensory phenomenology of perception is fully determined by worldly objects and features. Second, hallucinations have only *apparent* sensory phenomenology. In particular, hallucinations do not involve any first-order mental states that would by themselves have the same cognitive effects as some perceptions. Hallucinations are mere metacognitive projections, or phenomenal ghosts generated by ‘confused’ monitoring processes.

In a nutshell, it is our hope that Disjunctivism will appear as a much more interesting conception to cognitively oriented philosophers, who have been attracted by Representationalism mainly because of the rather abstract character of current versions of Disjunctivism to be found in the literature.

NOTES

^aIn this review, we use the noun ‘perception’ in the veridical or factive sense (any perception that *p* requires the truth of *p*), in contrast to the phrases ‘perceptual experience’ and ‘perceptual state’ (having a perceptual experience that *p*/being in a perceptual state with content *p* does not require the truth of *p*).

^bA perfect hallucination is a perceptual experience of the world which cannot be discriminated, from the subject’s own internal point of view, from some relevantly similar veridical perception (see premise 1 of the AFH below). In this paper, we use the term ‘hallucination’ to refer to perfect hallucinations, unless stated otherwise.

^cThere is a debate among Representationalists over whether the phenomenology of perceptual states is wholly or only partly determined by their representational contents. If the phenomenology of experience is only partly determined by its aboutness, then other things, such as nonrepresentational *qualia*, contribute to shape it.⁴³ Here we are not concerned with this debate.

^dMartin²¹ himself defends an *impersonal* reading of indiscriminability, in order to deal with the hallucinations of nonreflective creatures (p. 381). We share Siegel's opinion that such a reading is deeply problematic.²⁴

^eSee Armstrong,⁴⁴ although Armstrong himself argues that even *dispositions* or *inclinations* to form the relevant higher-order beliefs are sufficient to generate hallucinations. Indeed, in the case of *resisted* hallucinations, that is, hallucinations recognized as such by the subject, the latter is inclined to form the belief that she is perceiving the world but resists this inclination

and actually forms more cautious beliefs, such as the belief that she has a *visual experience* that *p*, or even that she is *hallucinating* that *p*.

^fOn Matthen's account,^{29,30} the feeling of presence is the conscious result of the operations of the visuo-motor system, which is distinct from the visuo-semantic system which generates the sensory contents of experience. This account is compatible with the one sketched here, since the operations of the visuo-motor system might provide some of the cues that are used to monitor the fact that the subject's conscious experience originates from the external world.

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