

The unity of hallucinations

Fabian Dorsch

© The Author(s) 2010. This article is published with open access at Springerlink.com

Abstract My primary aim in this article is to provide a philosophical account of the unity of hallucinations, which can capture both perceptual hallucinations (which are subjectively indistinguishable from perceptions) and non-perceptual hallucinations (all others). Besides, I also mean to clarify further the division of labour and the nature of the collaboration between philosophy and the cognitive sciences. Assuming that the epistemic conception of hallucinations put forward by M. G. F. Martin and others is largely on the right track, I will focus on two main tasks: (a) to provide a satisfactory phenomenology of the subjective character of perceptions and perceptual hallucinations and (b) to redress the philosophers' neglect of non-perceptual hallucinations. More specifically, I intend to apply one of the central tenets of the epistemic conception—that hallucinations can and should be positively characterised in terms of their phenomenological connections to perceptions—to non-perceptual hallucinations as well. That is, I will try to show that we can positively specify the class of non-perceptual hallucinations by reference to the distinctive ways in which we first-personally experience them and perceptions in consciousness. The task of saying more about their underlying third-personal nature may then be left to the cognitive sciences.

Keywords Phenomenology · Hallucination · Perception · Cognitive sciences · Experience

Introduction

It is common both in philosophy and in the cognitive sciences (broadly understood as ranging from, say, neuroscience to developmental or evolutionary psychology) to distinguish between two kinds of hallucinations.¹ What differentiates them is

¹The expression 'hallucination' is sometimes used, especially in the psychological literature, to refer to what is hallucinated. In my usage, it denotes instead the mental episode of hallucinating.

F. Dorsch (✉)
Department of Philosophy, University of California, 314 Moses Hall # 2390, Berkeley,
CA 94720-2390, USA
e-mail: fabian.dorsch@uclmail.net
URL: <http://www.exre.org>

whether they are subjectively indistinguishable from genuine perceptions and therefore mistaken by us for the latter. While perceptual (or ‘true’) hallucinations cannot, from the subject’s perspective, be told apart from perceptions, non-perceptual (or ‘pseudo’) hallucinations can and usually are. Sometimes, when subjects, say, auditorily hallucinate someone else calling their name or commenting on their behaviour, they are able to realise, on the basis of how they subjectively experience their episode of hallucination, that they are not perceiving real speech: their hallucination is non-perceptual. This happens, for instance, when subjects suffering from schizophrenia or other illnesses hear ‘inner voices’ speaking to them, but in other circumstances, the subjects concerned are—even under conditions of proper mental health and rationality—in no position to recognise the hallucinatory status of their experience without the help of some external evidence: their hallucination is perceptual. Wrongly hearing the phone ringing while taking a shower, say, is a good example of this kind of hallucination.²

When philosophers speak or write about hallucinations, they usually concentrate on perceptual hallucinations. One reason for this is the fact that philosophers tend to address the topic of hallucination, not for its own sake, but only in the context of some wider issues. Thus, when they are discussing hallucinations, they are primarily interested in other topics, such as how—or whether—we are able to acquire knowledge about the external world, in which sense our mental states are directed at objects and properties, how best to account for what our experiences are subjectively like and which features suffice for something to count as a conscious experience. Especially, the epistemic question, but also the connected issues in the philosophy of mind, leads them first of all to the phenomenon of genuine perception, for perceptions are precisely those mental episodes which point us to, and bring us into contact with, the world, and they also constitute the paradigm examples of conscious episodes with a distinctive phenomenal character. Hallucinations, on the other hand, do neither. Instead, they become relevant for the epistemic and related considerations only insofar as they give rise to sceptical scenarios and cast doubt on the common sense (or naive) conception of the nature of perceptual experiences, and in both cases, only those hallucinations matter which are indistinguishable from genuine perceptions with respect to their content and character.³

In the cognitive sciences, by contrast, hallucinations are much more prominent objects of study and, moreover, objects of study in their own right. From the perspective of empirical investigations of the brain and mind—whether they utilise neuroimaging, observe behaviour or examine verbal reports—hallucinations simply form one class of mental phenomena among many. In addition, all these phenomena

² See Bentall and Slade (1988), 222, Bentall (1990), and Massoud et al. (2003). Note that in the latter example, the presence of some auditory stimulus does not undermine the hallucinatory status of the experience of the ringing tone. Not only is this not a case of misperceiving the sound of the running water as the sound of a ringing phone, given that the former is correctly heard but the existing stimulus is also not of the right kind to count as a relevant object of misperception—even if it is actually part of what triggers the hallucinatory experience. Indeed, there are hardly ever situations in which auditory hallucinations are not accompanied by additional auditory perceptions (cf. Bentall and Slade (1988), 23f.), so the absence of the latter cannot be a condition on the presence of the former.

³ Cf., e.g. O’Shaughnessy (2003), Martin (2004, 2006), Siegel (2008), Fish (2009), and Dorsch (2010).

are ultimately in the same need of being scientifically studied and accounted for as part of our attempt to come to a full understanding of how our psychology works and is neurally realised. Of course, scientists, too, are interested in learning how we manage to cognise reality or why consciousness arises in the way that it does, and this may as well focus some of their research more on perceptions and perceptual hallucinations than on non-perceptual hallucinations. However, scientists are equally interested in coming to understand—and to enable the people concerned to cope with—the errors, abnormalities and pathologies of our mental lives, to which all types of hallucination belong as different deviations from the norm of genuine perception. The study of hallucinations does not only help us to better grasp how perception normally functions. It also makes an independent contribution to a comprehensive picture of our minds, especially with respect to the psychologically more problematic or puzzling aspects of our mental lives. It is part of this that non-perceptual hallucinations are as much at the centre of scientific inquiry as are their perceptual counterparts.⁴

This raises the issue of the division of labour between philosophy and the cognitive sciences: what are their specific roles in the investigation of the nature and features of hallucinations? However, it also leads to the question of what unifies the two broad kinds of hallucinations: why do we classify them both as hallucinations and distinguish them from other mental phenomena, such as perceptions, imaginings or memories? This latter issue is especially pressing because of a simple fact about our cognition of the world. When we are trying to get into contact with reality, there is only one way of getting it right—namely, perception. However, there are many ways in which our minds may fail to establish any such perceptual relation to the world.⁵ Hence, it cannot simply be assumed that all those failures—that is, all hallucinations—share a distinctive and unifying feature, over and above their lack of a provision of perceptual access to reality, and any characterisation in terms of the latter threatens to remain largely negative and, therefore, not very illuminating.

One promising answer to this challenge, which has gained prominence in the recent philosophical debate on perceptual hallucinations and their relevance for a theory of perceptual experiences, is the epistemic conception of perceptual hallucinations. According to this view, nothing more can—or need—be said about perceptual hallucinations than that they are subjectively indistinguishable from perceptions, without actually being perceptions.⁶ The epistemic—and phenomenological—element in this conception is the indistinguishability thesis, which concerns the phenomenal characters of the two kinds of episode and corresponds to the specification of perceptual hallucinations offered at the beginning. It is this element which provides the positive characterisation of perceptual hallucinations missing so far: they are precisely those mental episodes which, despite not being perceptions, seem to share their character with perceptions—they are given to us in consciousness as if they were perceptions.

⁴ See, for instance, the references in footnote 7, or the Introduction to Massoud et al. (2003).

⁵ Many different sources of hallucinations are discussed in the works referred to in footnote 7.

⁶ Cf. Martin (2004, 2006), Fish (2009), Siegel (2008). The label ‘phenomenological conception’ would be equally adequate, given that the relevant first-personal indistinguishability concerns our awareness of the phenomenal characters of the experiences concerned (cf. Dorsch 2010).

However, the epistemic conception of perceptual hallucination still leaves a lot of work to be done. One reason for this is that it concentrates on the first-personal or subjective side of the hallucinations (i.e. their conscious or experiential nature) but largely ignores its third-personal or objective side (i.e. their physical or neurofunctional nature). This means that, even if philosophical theories of perceptual hallucinations are limited to a phenomenological description of our access to the conscious character of these hallucinations, their underlying structure below the level of consciousness is still open to discovery by the cognitive sciences. This structure includes the various ways in which hallucinations may come to be realised by the brain, which psychological abnormalities they are correlated with (if any), how many different types of hallucinations there are as a result and so on.⁷

In addition, despite the modest (or pessimistic) outlook of the epistemic conception, there are also important tasks left for philosophy. On one hand, there is still the need for a satisfactory phenomenology of the subjective character of perceptions and, relatedly, of the subjectively indistinguishable character of perceptual hallucinations.⁸ The resulting phenomenological descriptions should also be of interest to the cognitive sciences, especially if they manage to be more systematic, rigorous and detailed than those currently used in cognitive psychology and the related disciplines (cf. the discussion of the latter in the fourth section). On the other hand, philosophy needs to reassess its treatment—or rather neglect—of non-perceptual hallucinations. The epistemic conception, in particular, cannot be applied to them since they can be subjectively distinguished from perceptions. The existence of non-perceptual hallucinations thus poses a particular challenge to the formulation of a unified philosophical theory of hallucinations—especially of a theory which manages to hold on to the phenomenological insights of the epistemic conception of perceptual hallucinations, while also being able to capture non-perceptual hallucinations.

My aim in this article is to pursue both tasks. Assuming that the epistemic conception is largely right about perceptual hallucinations (cf. Dorsch 2010), I intend, first of all, to provide a detailed description of the subjective character of perceptions and, relatedly, also of the character of perceptual hallucinations. Then, I aim to use this description to identify the distinctive phenomenal similarities between perceptual and non-perceptual hallucinations in order to show that we can positively characterise the latter in mainly phenomenological terms, too. In this way,

⁷ Cf. Jaspers (1996), part III, Bentall and Slade (1988), especially Chapters 2 and 5, Bentall (1990) and Sims (1995), Chapter 7, for good overviews and Manford and Andermann (1998), Kölmel (1993), Brasic (1998), Collerton et al. (2005) and ffytche (2008, 2009) for more recent investigations of various kinds of visual hallucinations.

⁸ Even if there is nothing more to the character of perception-like hallucinations than their subjective indiscriminability from perceptions (cf. Martin (2004, 2006) and Siegel (2008)), it still has to be described in terms of the character of those perceptions (cf. Dorsch 2010). The term ‘phenomenology’, on the other hand, is ambiguously used in that it is sometimes meant to refer to the specific phenomenal characters of our mental episodes (e.g. when we speak of the ‘phenomenology’ of mental agency) and sometimes instead to the phenomenological study and description of those characters. I will follow the latter, more traditional usage (cf. Husserl 1992). Note also that, although the methods of phenomenology are non-empirical, they should nonetheless be informed by the results of empirical investigations.

I hope to render plausible the view that the resulting account allows us to give a general and unified specification of the class of all hallucinations.⁹

This characterisation will not be entirely phenomenological in nature, since it will also include the negative third-personal specification of hallucinations as not establishing a perceptual relation to the world.¹⁰ However, this aspect stays completely silent about the positive characteristics of hallucinations and, moreover, is shared by other non-perceptual mental episodes (such as thoughts and feelings). So, what is doing the main work in the proposed account of hallucinations are the phenomenological considerations about the distinctive way in which we experience them. Phenomenology therefore turns out to be the key element in the philosophical individuation of hallucinations. The task of saying more about their underlying nature should then fall to the cognitive sciences.

In the second section, I intend to clarify what perceptual hallucinations are and, in particular, what it means for them to possess a character which is subjectively indistinguishable from that of genuine perceptions. To fill in the details of this characterisation of perceptual hallucinations, the third section presents a detailed (though still incomplete) phenomenological description of how perceptions are given to us in consciousness. The resulting list of phenomenal aspects essential to the character of perceptions is then used, in the fourth section, to specify which features non-perceptual hallucinations have in common with perceptual hallucinations, but not with any other kind of mental episode. These features permit, in the final section, the formulation of a unified theory of hallucinations, which keeps the spirit of the epistemic conception alive in that its positive characterisation of hallucinations makes reference solely to how we subjectively experience them in comparison to perceptions.

Perceptual hallucinations

Perceptual hallucinations are minimally characterised by three basic facts. First of all, they are *episodes in the stream of consciousness*. This means, in particular, that they have a duration and possess a conscious or phenomenal character.¹¹ The latter—what the episodes are subjectively like—is notoriously difficult to capture, but it may

⁹ Berrios and Dening (1996) come to the conclusion that historical, conceptual or behavioural analyses do not suffice to delineate a clear notion of non-perceptual (or pseudo) hallucinations, partly because it is difficult to specify what (perceptual) hallucinations are in the first place. My hope is that phenomenology will do better, and even assuming that Berrios (1998) is right in that Jaspers is not engaged in Husserlian phenomenology; the observations and insights to be found in Jaspers (1989, 1996) and similar works may still serve as good starting-points for the formulation of adequate phenomenological descriptions of hallucinations (cf. also Cutting 1997).

¹⁰ Some proponents of the epistemic conception of perceptions hallucinations argue that the perceptual relation is one of acquaintance with, or manifestation of, parts of the world (cf. Martin 2010 and McDowell 1994). This allows them to understand the relationality of perceptions as one aspect or constituent of their phenomenal character (cf. Dorsch 2010) and therefore to insist that their view is completely first-personal. However, it also means that they do not leave much room for science to contribute to an account of the nature of perception.

¹¹ Cf. Macpherson (2010) for approval and for a critical discussion—by reference to Anton's syndrome—of the opposing view to be found in Fish (2009).

here suffice to say that it is the most determinate property of the episodes which is accessible from the inside, that is, by consciously experiencing or introspecting the episodes.¹²

Then, perceptual hallucinations are *distinct from perceptions* in that they do not establish a perceptual relation between the subject and the world. Views on perception differ on when such a perceptual relation obtains. It is not enough that the world appears to be—or is presented as being—a certain way, that it seems to us as if there is a green tree does not imply that there is in fact a green tree before us, which we have perceptual access to and which we are in the position to gain knowledge about. Thus, the relation of perceptual access needs to be spelled out differently. Some philosophers claim that it obtains if an object in the environment has caused an experience in the right way (cf., e.g. Searle 1983). Others require—perhaps in addition—that the object stands in a certain non-causal relation to the subject (e.g. such that the object becomes a constituent of the perception; cf., e.g. Martin 2010). This debate need not be settled here. Instead, it suffices to rely on our general grasp of the notion of a perceptual relation as a specific form of knowledge-enabling access to the world pertaining to sensory experience. Hence, what is important to register is that perceptual hallucinations differ from perceptions in not involving this access relation.¹³

Finally, perceptual hallucinations are—as already mentioned—*subjectively indistinguishable from genuine perceptions*. To understand better what this means, it is worthwhile to consider the two very different (though not always easily separable) ways in which we can acquire knowledge about the episodes in our stream of consciousness.

On one hand, we may have access to them from the inside, or from our first-personal perspective. This form of access is restricted to our own mental episodes. What we thereby acquire knowledge about is their phenomenal or qualitative character—that is, what they are subjectively like. We consciously experience (i.e. *erleben* in the sense of Husserl 1992) this character during the occurrence of the respective episodes in our stream of consciousness, and we are able, by means of introspection, to notice points of similarity and difference among the phenomenal characters of our various mental episodes. Phenomenology is concerned with the description of these similarities and differences in what our episodes are subjectively like. This involves simply reporting the introspective registration of such similarities and differences (e.g. by just noting that some episodes ‘feel’ differently from others), but it also involves a detailed and reflective specification of the respects in which our episodes are similar to or different from each other—a theoretical reflection which may have to take into account the conclusions of wider philosophical or empirical theories.

¹² Cf. Williamson (1990), Martin (2004) and Dorsch (2010).

¹³ Bentall and Slade (1988), 23 and O’Shaughnessy (2003), 350f. characterise the same difference in terms of the absence of an external stimulus or perceived object. As one referee pointed out to me, their lack of a perceptual relation to the world does not prevent hallucinations to involve other forms of recognition. When hallucinating a friend, for instance, we still correctly identify him or her as our friend and, in this sense, stand in some epistemic relation to him or her—or, perhaps more accurately, to his or her appearance.

On the other hand, we may gain knowledge about mental episodes from the outside, or from a third-personal perspective. We may come to learn something about mental episodes by observing and interpreting their expression in behaviour and language, as well as by studying their realisation in the brain and, more generally, in a naturalistically understood world. Apart from our largely unscientific understanding of other people, which we show in daily life or in art, these investigations happen as part of the cognitive and related sciences and are typically informed by our wider picture of reality—for instance, by metaphysical considerations concerning the relationship between mind and brain or by evolutionary considerations about the development of either. Our resulting knowledge of mental episodes may concern a large variety of their features, among them, their physical or chemical structure, their causal or functional role and their significance and value for our (mental) lives. Our third-personal access to mental episodes is thereby not limited to the episodes of others (just as it is not restricted to conscious mental states). We can come to know something about our own mental episodes (e.g. that they are hallucinatory) by observing our own behaviour, studying images of our own brain or simply relying on the reports of others about their observations and studies concerning our mental lives.

Now, it is always possible—at least in principle—to discover the presence or absence of a perceptual relation to the world from a third-personal point of view. For instance, when in doubt about one of our own visual experiences, we may simply try to grasp the object appearing to be before us or canvass other people whether they can see the same object, or in a more sophisticated setting, we may ask a scientist to study our visual system or the relevant environmental conditions.

From our own subjective perspective, on the other hand, we are not always able to recognise the hallucinatory status of one of our experiences and, as a result, will mistake it for a perception. Sometimes, this happens only because of contingent reasons. We may be too tired or distracted, lack the required sensitivities or concepts, suffer from some relevant impairment or pathological condition and so on. However, this is merely accidental insofar as others in an epistemically better situation—or ourselves in a more suitable moment—would be able to recognise from the inside that the hallucinatory experience in question is not a perception.¹⁴ Because of this fact, these experiences do not count as subjectively indiscriminable from perceptions, and therefore not as perceptual hallucinations (but instead as non-perceptual ones).

In other cases, however, it is simply impossible for us, or anyone else, to come to know from the inside that a certain experience is distinct from a perception. This impossibility consists in the fact that no human being—even the most sensitive, attentive and rational one—could, when enjoying our experience, discover its non-perceptual status solely by introspection of, and reflection on, how it is given in

¹⁴ Good examples are hallucinations suffered due to specific pathological conditions, which impair the subjects concerned also in their ability to recognise their hallucinations as hallucinations—and in such a way that people without these specific conditions would not lack this recognitional ability (cf., say, Victor (1983), 194 on delirium tremens). In the fourth section, I also briefly discuss the related possibility of subjects failing to identify their hallucinations as perceptual ones, but instead taking them to be non-perceptual hallucinations.

consciousness. It is precisely in this sense that perceptual hallucinations are subjectively indistinguishable from genuine perceptions. It is not that we are merely momentarily unable to tell the difference but rather that we could not under any possible circumstances come to know, from the inside, the former to be distinct from the latter.¹⁵

That perceptual hallucinations are subjectively indistinguishable from genuine perceptions in this strong sense entails that the former always have the same motivational and rational impact on our mental lives as the latter. In particular, the hallucinations lead to the same perceptual and introspective judgements and guide us in the same way in action as perceptions do (unless we become third-personally aware of their hallucinatory status). If the perceptual hallucinations were not doing this, we would, after all, be able to recognise this from the inside, and therefore also their distinctness from perceptions (cf. Martin 2004).

Moreover, since what is first-personally accessible constitutes the phenomenal character of the mental episodes concerned, the subjective indiscriminability of perceptual hallucinations from genuine perceptions consists in the fact that the former possesses a character which we cannot first-personally tell apart from that of the latter.¹⁶ Hence, perceptual hallucinations are to be positively characterised in terms of the phenomenal character of perceptions. It is therefore time to consider what is distinctive of this character.

The phenomenal character of perceptions

The phenomenal character of perceptions is complex. It is best described in the light of its similarities and differences with respect to the characters of other mental episodes, notably other kinds of sensory episodes (e.g. of memory or imagining). During my discussion, I will also comment on various specifications of the ‘reality characteristics’ distinctive of perceptions and perceptual hallucinations, which have been proposed or endorsed by psychologists like Jaspers, Aggaemaes, Bentall and Slade, Sims and others.¹⁷

First of all, perceptions are *presentations*. More specifically, they present us with concrete objects and their features. What we are perceiving may differ greatly from occasion to occasion, but that we are always perceiving something when we are perceiving is given. In addition, perceptions present (some of) the objects and their

¹⁵ See Martin (2004, 2006), Siegel (2008) and Dorsch (2010). Note that this conception of subjective indistinguishability does not allow for degrees of insight—contrary, say, to Hare’s characterisation of the difference between the various kinds of hallucinations (cf. Hare 1973). The observation that there are differences in the extent to which subjects are, or can become, aware of the hallucinatory status of their experiences can still be accommodated by the account of hallucinations to be proposed below. The thought is that this awareness is possible only in the case non-perceptual hallucinations, and that its variations in degree can be elucidated in terms of the nature and number of aspects in which they can be distinguished from perceptions and perceptual hallucinations (cf. the fourth section).

¹⁶ However, it stays neutral on whether the two kinds of experience share some or all of their phenomenal aspects. I return to this issue in the final section.

¹⁷ Cf. Jaspers (1989), especially 252ff., Jaspers (1996), especially part I, Chapter 1, section 1, Aggaemaes (1978), Bentall and Slade (1988), especially Chapter 1, Sims (1995), Chapter 7, Qarrett and Silva (2003) and Massoud et al. (2003).

features in a *sensory* manner. This does not mean that perceptions may not in addition involve, or be accompanied by, thoughts or other intellectual representations, but only that they primarily present things in a sensory manner. The phenomenologically salient fact that perceptions are sensory presentations distinguishes them from intellectual and other non-sensory episodes, such as judgemental thoughts or feelings of longing, and it corresponds to the first on Aggernaes' list of reality characteristics, namely, that of showing a quality of 'sensation' rather than 'ideation'.

Then, perceptions are characterised by what may be called a *sense of reality*. This means, very roughly, that their phenomenal character marks them as perceptions—that is, as sensory presentations which establish a knowledge-enabling relation between us and specific parts of the world. This sense of reality is rather complex and involves at least eight different phenomenal aspects, the first five of which concern the status of the experienced object, and the last three, the relationship between the experiences and their objects.

1. *Particularity*. The experienced objects appear to possess particularity, that is, a determinate numerical identity. This means that each of them appears to be a particular concrete object—namely, *this* object rather than *that* one—and not merely *some* concrete object or another. Without this aspect, perceptions would not enable us to demonstratively refer to specific objects in our environment. In contrast, when we are visualising an apple, it may be impossible to say—or even may make no sense to ask—which particular apple we are imagining (cf. Martin 2001). In analogy to the difference between pictures of particular men (i.e. portraits) and pictures of types or kinds of men (cf. Wollheim 1998, section 7), this difference may perhaps also be described in terms of the distinction between the perceptual presentation of a token object and the imaginative presentation of a type of concrete object.
2. *Locatedness*. The phenomenal aspect of particularity is in part grounded in an appearance of specific spatiotemporal location. When we are perceiving an object, it appears to be at a particular location in time and (if applicable) also in space.¹⁸ This already suffices to fix the numerical identity of the object and allow for demonstrative reference to it. When we are visualising an object, by contrast, we need not visualise it as being at a particular point in time or space, although we are visualising it as being a concrete object and thus as being located somewhere in some—possibly non-real—time and space (cf. Sartre 2004). That is, our image may stay neutral on the specific spatiotemporal relations in which it stands to other imagined or perceived entities. If we are visualising a tree and a house, there may be no answer to the question of which of them is older, or how distant they are from each other.
3. *Existence*. The experienced objects appear to exist as part of the actual or real world. In particular, they do not seem to be merely possible or fictional objects, and we consequently treat them in our interactions with them as parts of reality. Again, visualised objects do not show this quality of existence (cf. Sartre 2004).

¹⁸ Jaspers combines this phenomenal aspect with those of existence and mind independence (cf. below) when taking seen objects to appear as located in objective outer space (cf. Jaspers 1996, 59f.).

4. *Presence*. This appearance of actual or real existence is closely related to the fact that the perceived objects appear to be temporally—and, if applicable, also spatially—present. For one way for a concrete object to appear to exist is for it to appear to be present in our spatiotemporal environment. When we are seeing or touching a table, it seems to be there before us, and when we are hearing a sound, it seems to occur at the same time as our experience of it, and perhaps also as being located or originating in our (close) spatial environment. In contrast, when we are sensorily remembering an event, it appears to be past, and when we are visualising a person, she/he does not appear to be present in our space and time at all (unless we are actually thinking of her/him as existing in the same space and at the same time as us). Jaspers' description of the object appearing to be there substantially (*leibhaftig*) before us picks out this appearance of presence, but it also points to the seeming existence of the object and—at least in one possible reading—to the apparent three-dimensionality and therefore spatial locatedness of the object.
5. *Mind independence*. The perceived objects appear to be mind-independent (or objective)—that is, to exist independently of our current perception of them (cf. McDowell 1985). This is why we are not surprised to find out that the objects continue to be there even after we have turned our eyes away from them, or that others have access to them as well. After-images do not show this feature. When we are having them, the experienced patch of colour appears to be distinct from our experience, but it does not seem to exist independently of our particular experience of it. We cannot return to it and observe it further after our experience has ceased, and we cannot show it to other people. Aggermaes (1978) characterises this appearance of mind independence in terms of an impression of 'existence'. This terminology suggests that he wants to stress the fact that, if an object appears to be independent of being experienced, it in fact appears to exist independently of being experienced, but the two phenomenal aspects involved should nonetheless be kept apart, given that a sense of existence can occur without an impression of mind independence (e.g. when our feeling of love endows a certain person with a special beauty and value).¹⁹
6. *Determination*. The experienced objects appear to be immediately given to us: we seem to be in direct contact with them. Less metaphorically, this means that the objects appear to determine or constitute the phenomenal character of our perceptions of them. In particular, they appear to determine which properties they are perceptually presented as having (cf. Martin 2010). This appearance of determination presupposes the appearances of distinctness, particularity (as well as concreteness) and actual existence, and it explains why we are assuming certain conditions to hold the respective experiences and their objects. In the

¹⁹ Aggermaes also assumes that we take perceived objects to be 'public' in the sense that other people may share our kind of experience of them. Being 'public' in this sense is clearly a consequence of being mind-independent (given that human beings do not differ much in their perceptual capacities), and it is true that 'hallucinating patients may accept that their experiences are not shared by others around them in the same way as a normal sensory experience' (Semple et al. (2005), 51). However, it is doubtful that this awareness of a lack of 'publicness' really pertains to the phenomenal character of our respective sensory experiences, rather than merely part of our 'accepting' thoughts about—or attitudes towards—those experiences.

case of perceptions, the assumed condition is that our perceptual experience would change or cease to exist, if the object were to change or cease to exist, and in the case of an episode of sensory memory, the assumed condition is that our mnemonic experience would have been different or not come into existence, if the object—as well as our past perception of it—would have been different or would not have existed. However, we do not make similar assumptions about our episodes of visualising and their objects.

7. *Relationality*. The four phenomenal aspects of distinctness, particularity, existence and determination ensure that we also experience our perceptions as relating us directly to—or as bringing us into immediate contact with—aspects of the world. That is, they constitute an appearance of relationality which concerns our experience as much as its object. Our perceptions seem to relate us directly to the world insofar as they present us with distinct and particular objects which appear to exist and to determine our experience of them. This appearance of relationality can be further specified. It is part of the appearance of the determination link that we experience our perceptions as dependent for their character on their objects. The appearance of relationality is thus an appearance of *object dependence*, and together with the appearance of mind independence, we get the complex phenomenal fact that we experience our perceptions as establishing a relation to mind-independent aspects of reality.²⁰
8. *Epistemic commitment*. The appearance of being related to a distinct, particular and actually existing mind-independent object is also at the heart of another complex phenomenal aspect, namely, that of being epistemically committed to how things really are. The idea is that, if it seems to us that there is actually a mind-independent object which determines our experience of it and, notably, which perceivable features it appears to have as part of that experience, the experience becomes non-neutral with respect to the real world: it involves a claim about how things really are. The phenomenological salience of such an epistemic commitment regarding the world explains why we take perceptions—as well as episodic memories who share this phenomenal aspect—to provide us with support for respective perceptual or mnemonic beliefs. That is, we rely on them when forming a view on the objects in our present or past environment because they present themselves as being about, as determined by and as relating us to our mind-independent surroundings, whether in the present or the past.²¹

By contrast, instances of visualising lack this appearance of commitment precisely because their objects are not given to us as actually existing and as being of this or that particular identity, and also because they hence do not

²⁰ Cf. Martin (2010) for a similar description, and Dorsch and Soldati (2010) and Dorsch (2010) for an account of the experiential error involved in hallucinations which present themselves to be relational perceptions.

²¹ Bentall and Slade describe this aspect as ‘the full force or impact of [...] actual (real) perception’ (Bentall and Slade (1988), 23). This comes also very close to Hume’s characterisation of the vivacity of perceptions, memories and judgements in terms of their sense of reality and epistemic role: their vivacity ‘renders realities more present to us than fictions, causes them to weigh more in the thought, and gives them a superior influence on the passions and imagination. [...] It gives them more force and influence; makes them appear of greater importance; infixes them in the mind; and renders them the governing principles of all our actions’ (Hume (2000), paragraph 1.3.7.7).

appear to bring us into contact with reality. This is why we normally do not trust our episodes of visualising when forming beliefs. The phenomenologically salient relationality of perceptions is therefore not only a matter of object dependence but also of *epistemic access*.

Finally, the phenomenal character of perceptions includes two fairly independent aspects which characterise the *ontological status* of these experiences.

9. *Persistence*. Our perceptions appear to be in no need of sustainment, especially not active sustainment on our own behalf. In Jaspers' terms, they are 'constant' and easily retained (cf. Jaspers 1996, 59f.). As a consequence, these experiences do not have a fleeting or unsteady character, but instead show a certain kind of stability. It is true that non-persistent episodes typically disappear or change rather quickly after their occurrence. Nonetheless, the phenomenal aspect of persistence should not—contrary to what seems to be suggested sometimes (cf., e.g. Semple et al. (2005), 93)—be understood in terms of an extended temporal duration or a lack of alteration, for perceptual experiences can change rapidly or be very short-lived as well. Instead, what matters is the appearance of a continual sustainment during the whole occurrence of the experiences. The images involved in acts of visualising and milder forms of hypnagogic imagery differ in this respect. The phenomenal character of the first reflects the fact that they would disappear if we would stop actively keeping them in existence (cf. Jaspers 1996, 59f.), and that of the second indicates that they are not upheld by a stable causal or psychological force (cf. Mavromatis 1986, Chapter 3).
10. *Involuntariness*. The appearances of existence, mind independence and determination come with an appearance of involuntariness. Our perceptions appear to be determined by their objects, and these objects appear again to exist independently of our experiences of them. Hence, the latter appear to be determined by something which is independent of our respective state of mind, including our will, and such an impression of determination is an impression of involuntary determination. In contrast, acts of visualising lack the appearance of a determination by the experienced object. Instead, they seem to be the product of our concurrent intentions (or similar guiding episodes) and therefore involve an appearance of voluntary occurrence and determination (cf. Dorsch 2009).

Now, this appearance of voluntariness may come in several independent and complimentary guises.²² Basically, it may concern the *origin* of the experiences concerned, or their *sustainment* or their extinction. That these three aspects can go apart is illustrated by spontaneously occurring images, that would disappear soon after their occurrence, if we had not begun to actively sustain and control them, or by unbidden images which we can deliberately alter or banish (cf. Mavromatis 1986, 71ff. for hypnagogic examples of both cases). The resulting sensory experiences involve an impression of an involuntariness (e.g. of origin and/or sustainment) but also a sense of active control (e.g. concerning sustainment and/or extinction). Perceptual experiences, on the other hand, seem to be involuntary through and through.

²² Jaspers (1996) and Aggermaes (1978) also note the phenomenologically salient involuntariness of perceptions and perceptual hallucinations but do not explicitly distinguish its independent aspects.

Not all phenomenal aspects, which perceptions may show, are relevant for the characterisation of their distinctive character. In some cases, the reason for this is that they do not strictly distinguish these experiences from other kinds of sensory presentation. For example, although perceptions are typically clearer, more vivid and more determinate in outline than sensory memories, imaginings, non-perceptual hallucinations, and so on (cf. Jaspers 1996, 59f.), this need not always be so. Perceptions in the dark may be less vivid than instances of the latter.²³ The same is perhaps true of Aggermaes' proposal to treat the behavioural impact of an experience as an indicator of its sense of reality (cf. Aggermaes 1978)—namely, if it is understood as saying that perceptions determine our actions to a larger extent than non-perceptual hallucinations or sensory imaginings, for a very disturbing non-perceptual hallucination may move us much more strongly to act (e.g. to try do something to get rid of it) than the perception of, say, a book lying on the table. Perhaps the proposal is meant to be limited to our interactions with the experienced objects: while perceptions guide us when, say, picking up objects, non-perceptual hallucinations do not. However, in this case, the proposal simply reduces to a postulation of a difference in epistemic commitment and its practical consequences.

Other aspects are irrelevant because they do not pertain to the phenomenal character of perceptions or similar episodes, but rather to our additional thoughts about—or attitudes towards—them (cf. Jaspers 1989, 198ff. and Bentall 1990). Aggermaes (1978) provides again two good examples. One is what he calls 'independence'—namely, that it is a mark of their link to reality that we do not take perceptions and perception-like states to be the product of unusual states of mind, while we tend to take non-perceptual hallucinations to be induced by such abnormal states, such as drugs or some psychosis. However, this difference is a matter of our beliefs about the respective experiences and their context (e.g. our awareness of having taken a drug or suffering from a psychosis), rather than a matter of our subjective experience of the sensory episode concerned. Similarly, Aggermaes claims that it is a sign of reality if an object appears to be experienceable in more than one sense modality (i.e. if it appears to be 'objective' in his terminology). However, perceived sounds and colours do not appear to us to be less objective or real than shapes. It is true that features of objects, which are perceivable in more than one sense modality, can be characterised independently of our experiences of them (e.g. roundness consists in the equal distance of all parts of the surface from a given point), but that we take such features to be specifiable without reference to our experiences of them is not as part of the latter, but instead of our beliefs about these features and our experiences of them (cf. McDowell 1985).

Non-perceptual hallucinations

According to the epistemic conception of perceptual hallucinations, they are positively characterised by their subjective indistinguishability from genuine perceptions.

²³ Good examples are the hallucinations involved in Charles Bonnet syndrome, as noted by Teunisse et al. (1996) and Macpherson (2010), 13 or the visual hallucination linked to histrionic personality disorder and described in Sims (1995), 110.

This means, in the light of the preceding considerations, that it is distinctive of them that they possess a phenomenal character which is, from the inside, indiscriminable from a character that shows the various aspects listed in the previous section (plus any other aspects essential to perceptions)—notably, the sensory presentation of objects and features, the sense of reality and the impression of persistence and involuntariness.²⁴ This subjective likeness is reflected in the fact that we treat our perceptual hallucinations in the same way in which we treat our perceptions. In particular, we rely on them in our interaction with the world, unless we acquire evidence about their hallucinatory status.

Nonetheless, it is also part of the epistemic conception that perceptual hallucinations still differ from perceptions in their third-personally accessible lack of perceptual relationality. In fact, this lack of relationality, together with their subjective indistinguishability from perceptions, suffices to distinguish perceptual hallucinations from all other mental phenomena. Episodes of sensory memory, for instance, lack the appearance of presence involved in perceptions and instead show an impression of pastness, while episodes of sensory imagining lack the appearances of particularity, existence (as well as presence), determination and involuntariness, and hence also the appearance of relationality and the phenomenologically salient epistemic commitment. As a result, sensory memories and imaginings do not possess the property of being subjectively indistinguishable from perceptions and differ in this respect from perceptual hallucinations.

However, as already mentioned in the beginning, the epistemic conception of perceptual hallucinations cannot be extended to non-perceptual hallucinations. For although the latter satisfy the condition of third-personal non-relationality, they do not fulfil the requirement of first-personal indiscriminability from perceptions: they are precisely those hallucinations which can be subjectively differentiated from perceptions. Non-perceptual hallucinations therefore pose a challenge to the attempt to account for the unity of hallucinations exclusively in terms of the absence of relationality and the presence of a certain kind of phenomenal character, but this challenge can be met if it is possible to identify aspects which are shared by the characters of the two kinds of hallucination, but not by the characters of memories, thoughts, imaginings and all other non-relational episodes, for it should then be possible to characterise hallucinations in terms of those phenomenal aspects, as well as the absence of a perceptual relation to the world.

It might be asked, however, whether it is possible to simply deny that there can be any non-perceptual hallucinations. It is not implausible to argue that many—or even all—mental illnesses or pathologies, which give rise to hallucinations, also undermine our ability to correctly recognise them (as well as other mental episodes) from the inside for what they are. However, this may open up the possibility of an

²⁴ Alternatively, it may be claimed by proponents of the epistemic conception that it is distinctive of perceptual hallucinations that their phenomenal character is constituted by their subjective indistinguishability from experiences which possess a character with the aspects described above (cf. Martin (2004, 2006) for this claim, and Siegel (2008) for discussion). In Dorsch (2010), I argue that the reading chosen in the text provides a more natural interpretation of subjective indiscriminability, given that mental episodes are indistinguishable from the inside *in*—or *relative to*—their character (just as two objects are visually indistinguishable *in*—or *relative to*—their visual appearance), but nothing much in what follows depends on this choice.

alternative explanation of why subjects seem to notice a subjective difference between some of their hallucinations and perceptions. The idea is to say that this appearance is due, not to a difference in character, but instead to the subjects' inability to recognise a sameness in character. Accordingly, there is no need any more to assume in these cases the presence of non-perceptual hallucinations in order to explain why these subjects have the impression of having some, and perhaps, the reasoning goes, this explanation may be generalised such as to cover all situations in which someone seems to suffer a non-perceptual hallucination.²⁵

While there may very well be cases in which subjects mistake perceptual hallucinations for non-perceptual ones, the more general proposal faces the difficulty to completely rule out the possibility of non-perceptual hallucinations. This problem becomes particularly pressing with respect to mentally healthy and rational subjects who are capable of correctly individuating their mental episodes by attending to the subjective character of the latter. What needs to be shown is that such subjects cannot, for some systematic reason, enjoy experiences that subjectively seem to them to be non-perceptual hallucinations, rather than episodes of perception, memory or imagination. It appears that the only plausible way of arguing to this effect would be to back up the claim that none of our individual capacities to subjectively distinguish episodes in respect of one of the phenomenal aspects essential to perceptions could occur without the others, but there is no reason to assume that this claim can be properly supported. For instance, the sensory presentation of a particular object does not require its presentation as determinately located or as existing mind-independently.²⁶ Hence, some of the phenomenal aspects of perceptions are independent of each other and, therefore, need not all be present or absent in how we experience a persistent and involuntary episode of sensory presentation, but this means, precisely, that non-perceptual hallucinations may occur.

So what are the subjective aspects which are distinctive of both perceptual and non-perceptual hallucinations? They have in common that they are given to us as sensory presentations of concrete objects and their features, but non-perceptual hallucinations differ first-personally from perceptions—at least to some considerable extent—in respect of the latter's appearance of relationality and phenomenologically salient epistemic commitment. This means that we do not experience the former as bringing us into contact with reality in the same direct and epistemically non-neutral way as perceptions. The qualification is needed to deal with cases in which the sense of reality seems to be diminished—such as to give rise to doubts about the actual presence or mind independence of what we are experiencing—but not completely

²⁵ I am grateful to one of the referees for drawing my attention to this possibility of a metacognitive account of all non-perceptual hallucinations. Note that the following objection to this idea does not undermine its satisfactory application to some sub-set of the class of non-perceptual hallucinations, notably pathological ones (cf. Bentall 1990 for further discussion).

²⁶ Episodes of visualising, which remain vague about the exact location and dimension of a spatially extended object are not the only good examples. In the already mentioned case of histrionic personal disorder, the patient hallucinated, in a rather vivid manner, a person as seemingly standing at her bed but was unable to spatially locate that person in a determinate fashion in relation to her perceived real environment: 'when she tried to relate the figure in space to the background of her field of vision, in this case the walls and curtains of the room, she realized that she could not do so, it had no definite location in outer space, that is outside of her' (Sims (1995), 110).

lacking (cf. Jaspers 1996, 60 and Fish 1967, 19). It is characteristic of such cases that the subjects concerned are not sure to which extent their experience relates them to reality and commits them epistemically, although they have the impression that neither aspect is completely missing from their experience. Non-perceptual hallucinations may show a diminished sense of reality, say, if they differ from perceptions by appearing to lack some, but not all, of the phenomenal aspects involved in the complex impression of being in direct epistemic contact with the mind-independent world.²⁷ In particular, while some of their phenomenal aspects may contribute to the establishment of an appearance of access to reality, others may again help to undermine this impression—possibly resulting in uncertainty about the relationality and the epistemic significance of the experience.

To the extent to which non-perceptual hallucinations are subjectively discriminable from perceptions, they can also be first-personally distinguished from perceptual hallucinations. These subjective differentiations may concern all or only some of the eight (or more) aspects that constitute the sense of reality involved in perceiving something, and which aspects are relevant may differ from case to case—with the limitation that some aspects presuppose others (e.g. locatedness comes with particularity). One consequence of these considerations is that none of these aspects can figure in an account of the phenomenal commonalities between the two kinds of hallucination. For there can be non-perceptual hallucinations which subjectively seem to lack all of them. Another consequence is that non-perceptual hallucinations may differ from perceptual ones in various ways, and to a smaller or a larger extent. This allows for a categorisation of non-perceptual hallucinations into different groups. Some may seem, for instance, as if they present us with particular, but not determinately located objects; others may instead appear to relate us to existing, but mind-dependent entities and so on (cf. the possibility of a diminished sense of reality discussed above). In addition to perceptual hallucinations, we may thus distinguish several types of non-perceptual ones.

These considerations do not suffice yet to distinguish non-perceptual hallucinations from all other kinds of mental episodes, for there are some non-hallucinatory sensory episodes which present us with concrete objects, without thereby purporting to relate us to aspects of reality. Acts of visualising and other instances of sensory imagining are good examples, but they are examples of conscious mental agency and, as such, involve an experience of voluntariness (cf. Dorsch 2009). That is, visualised objects appear to be determined by and responsive to what we want them to be like as part of visualising them. It is in this respect that acts of visualising differ first-personally from perceptions—and from non-perceptual hallucinations (cf. Bentall and Slade 1988, 19).

However, there are also many sensory presentations that both lack a sense of reality and are completely involuntary—for instance, hypnagogic and other spontaneously occurring images. Some theorists show the tendency to treat most, if not all, of them as hallucinatory (cf., e.g. Cheyne 2009), but many of these images are merely transitional and unstable in character—that is, they lack the impression of persistence. This has moved other theorists to take solely the more steady and stable

²⁷ See, again, the example in footnote 26.

involuntary images to be hallucinations (cf. Mavromatis 1986, 77ff.). My proposal is to follow the second line and to understand non-perceptual hallucinations as precisely those sensory presentations which do not relate us to the world, and the phenomenal character of which is subjectively indistinguishable from a character that marks its bearers as unbidden, persistent and partly or fully lacking a sense of reality. One motivation for this choice is simply that it gives more unity to the class of hallucinations, since all its perception-like members involve an impression of persistence as well, but it also pays more justice to the basicness of the division between persistent and non-persistent mental episodes.

Mental episodes involve an impression of persistence either because they are forced upon us by the world (including our body) or the epistemic or practical reasons available to us, or because we actively sustain them by means of imagining. In both cases, their occurrence is in line with their functional role in our mental lives. Only in unusual or pathological cases do they deviate from this role and stay in existence due to other, merely causal factors.²⁸ By contrast, fleeting or unsteady episodes do not seem to have any specific function in our minds or to involve any comparable distinction between ‘good’ and ‘bad’ instances. This difference is reflected by the fact that we do not pay very much attention to them, while taking our persisting episodes very seriously. We rely on the latter in belief and action when everything seems to work fine, and start to question or worry about them when something seems to have gone wrong. Neither is typically true in the case of the former.²⁹

Since hallucinations are conceived of as unsuccessful counterparts to successful perceptions, this line of thought is reason enough to maintain that hallucinations occur only at the level of persistent episodes. Below that level, there is simply no comparable contrast to be drawn. It is in accordance with this that we do take our hallucinations seriously. For instance, we do rely on them if we mistake them for perceptions, and we are concerned about their occurrence if not. The aspects of involuntariness and persistence, which hallucinations seem to share with each other and with perceptions, are therefore sufficient to distinguish the former from other non-perceptual sensory presentations. Perhaps, this means that hallucinations always involve at least a minimal sense of reality. For it might turn out that an impression of persistence is possible only in connection with the seeming presence of some of the aspects constitutive of the full appearance of a link and commitment to reality, and this might already suffice for a minimal sense of reality, but this conjecture requires further phenomenological investigations.

The unity of hallucinations

In the light of the preceding considerations, it is now possible to delineate the class of hallucinations. A mental episode is a hallucination just in case it satisfies three

²⁸ See the respective discussion of the different ways in which judgemental thoughts may come into existence in (cf. Dorsch 2009).

²⁹ It is interesting to ask whether episodes play an important role in our lives because they are persisting, or whether they instead are persisting because they are significant for us.

conditions: (a) it subjectively seems to be a sensory presentation of one or more concrete objects as being a certain way, (b) it involves a phenomenal impression both of persistence and of involuntariness in origin and sustainment and (c) it does not perceptually relate us to parts of the world, even if it may seem so (i.e. even if it may involve a sense of reality).³⁰ The resulting characterisation of hallucinations is largely phenomenological insofar as the conditions (a), concerning the phenomenal character of hallucinations (b) and the non-phenomenological condition (c) are purely negative, that is, does not say anything positive about what hallucinations in fact are.

Similarly, the sub-divisions among hallucinations can also be spelled out in primarily phenomenological terms. Perceptual hallucinations differ from non-perceptual ones in their involvement of a full sense of reality, which makes them first-personally indistinguishable from perceptions. Perceptual hallucinations concerning the present state of reality differ from hallucinatory episodes of sensory memory in their impression of presence rather than pastness, and there may be various types of non-perceptual hallucinations, depending on the identity and number of the aspects in which they are subjectively like perceptions and perceptual hallucinations. It is interesting to note that perceptual hallucinations are phenomenologically closer to perceptions than to non-perceptual hallucinations (e.g. the latter do not belong to the class of perceptual experiences made up by the former). However, that it is distinctive of perceptual hallucinations that they possess a character which is subjectively indistinguishable from a perceptual character does not undermine their hallucinatory status. They still count as hallucinations because of their lack of third-personal relationality and their subjective similarities with non-perceptual hallucinations.

The suggestion has been that the character of hallucinations is subjectively indistinguishable from the character of perceptions in at least some respects—namely, sensory presentation, involuntariness, persistence and possibly also sense of reality. Does this mean that the character of the former shares the respective phenomenal aspects with the latter? This is not necessary. In particular, the subjective indistinguishability of perceptual hallucinations need not be due to a sameness in character but may instead stem from certain non-pathological limitations to our first-personal discriminatory abilities.³¹ However, the respective debate has been silent on the aspects of involuntariness and persistence, and it seems difficult to deny that the fact that hallucinations subjectively seem to be involuntary and persistent—that is, are first-personally indistinguishable in this respect from perceptions—originates in the subjectively accessible fact that they are involuntary and persistent. After all, we cannot influence our hallucinations in the same deliberate way in which we can alter what we are imagining (cf. Dorsch 2009), and our hallucinations enjoy continual

³⁰ What about mental episodes which satisfy all three conditions, but which—despite appearances—are not really persistent sensory presentations, or not really involuntary in their occurrence or their continuing existence? My suggestion is that they should still count as hallucinations, given that the first-personal character matters more for our categorisation of sensory episodes than their third-personal structure.

³¹ The constraints on our ability to individuate our own mental episodes from the inside may be due to simple factors—such as the temporal distance between the experiences concerned, our unfamiliarity with them or other contextual reasons (cf. Williamson 1990).

sustainment without the need for active help on our behalf. So that we take hallucinations to be involuntary and persistent should be understood in terms of the phenomenological salience of the respective aspects of their nature.

The situation is less clear with respect to the other phenomenal aspects in relation to which hallucinations may be subjectively indistinguishable from perceptions. Perhaps hallucinations are not really subjective presentations of mind-independent objects or of any objects at all, despite first-personally seeming to be so. However, on the other hand, perhaps they are subjectively similar to perceptions in the relevant respects precisely because their character does show the presentational aspects essential to the character of perceptions. What seems ultimately at issue here is whether the first-personal presentation of objects should be understood in relational or in intentional terms, and also whether two subjectively indistinguishable characters of distinct episodes can, under certain circumstances, be assumed to be the same, or at least to share all their first-personally discriminable aspects. These questions cannot be properly addressed here.³² However, two things are worthwhile to note in relation to them.

First, the argument above for the possibility of non-perceptual hallucinations in terms of the independence of some of the phenomenal aspects characteristic of perceptions may also be understood as an argument for their possession by non-perceptual hallucinations. After all, we have not yet found any reason to doubt that there can be experiences with only some of these aspects, and also that we can correctly recognise their character when attending to it from the inside. Second, the assumption that hallucinations may share some or even all of their phenomenal aspects with perceptions does not go against the central tenet of the epistemic approach to hallucinations. It is true that this assumption has the consequence that the subjective indistinguishability is to be further elucidated in terms of the possession of a certain phenomenal character, but it is also still the case that, once it is so spelled out how hallucinations are given in consciousness in comparison to perceptions, philosophy has nothing more to contribute to the issue of what defines and unifies hallucinations.

I have not explicitly argued here for the idea that philosophy's contribution to the study of hallucinations is limited mainly to the discussed and similar phenomenological considerations.³³ However, it has hopefully become clear that the latter provide at least the ground for our first-personal categorisations of sensory episodes into perceptions, hallucinations and so on, and bring us much closer to the discovery

³² Martin (2004, 2006) and McDowell (1994) argue that there is no good reason to assume sameness in character, but good reasons against it. Hence, according to their views, perceptual hallucinations merely seem to sensorily present us with objects and to merely seem to provide us with access to reality, while in reality doing neither. In Dorsch (2010), I argue in favour of the sameness of character between perceptions and perceptual hallucinations and, on this basis, put forward an account of perceptual hallucinations that promises to avoid many of the objections by distinguishing two kinds of first-personal access and by incorporating the disjunctivist idea that the two kinds of experience still differ in their third-personal natures.

³³ See Dorsch (2010) for a defense of this idea. Martin (2004, 2006) goes even further in arguing that non-philosophical forms of inquiry cannot disclose anything (more) about the nature of perceptual hallucinations, but his underlying assumption is that the nature of experiences is exhausted by what they are subjectively like. That is, he does not allow for a distinction between their first-personal (or mental) and their third-personal (or physical) natures (cf. above and the discussion in Dorsch 2010).

of their respective subjective (or phenomenal) natures. By contrast, it is the task of the cognitive sciences to distinguish the various third-personally individuated kinds of perceptual and non-perceptual hallucinations and to discover their different objective (or physical) natures.

Acknowledgements I would like to thank two anonymous referees for their very good and constructive comments, and the editors of this volume for their help and support. Part of this material has been presented at a McDowell workshop at the University of Fribourg, and I am very grateful to the members of the audience - notably John McDowell and Gianfranco Soldati - for an encouraging and insightful discussion.

Open Access This article is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

References

- Aggermaes, A. (1978). The experienced reality of hallucinations and other psychological phenomena. *Acta Psychiatrica Scandinavica*, 42, 220–238.
- Bentall, R. (1990). The illusion of reality: a review and integration of psychological research on hallucinations. *Psychological Bulletin*, 107(1), 82–95.
- Bentall, R., & Slade, P. (1988). *Sensory deception: a scientific analysis of hallucination*. Baltimore: Johns Hopkins University Press.
- Berrios, G. E. (1998). Phenomenology, psychopathology and jaspers: a conceptual history. *History of Psychiatry*, iii, 303–327.
- Berrios, G. E., & Dening, T. R. (1996). Pseudohallucinations: a conceptual history. *Psychological Medicine*, 26(4), 753–764. OvidNews.
- Brasic, R. B. (1998). Hallucinations. *Perceptual & Motor Skills*, 86, 851–877.
- Cheyne, J. A. (2009). Hypnagogic and hypnopompic hallucinations. In T. Bayne, A. Cleeremans, & P. Wilken (Eds.), *Oxford companion to consciousness*. Oxford: Oxford University Press.
- Collerton, D., Perry, E., & McKeith, I. (2005). Why people see things that are not there: a novel perception and attention deficit model for recurrent complex visual hallucinations. *Behavioral and Brain Sciences*, 28(6), 737–757.
- Cutting, J. (1997). *Principles of psychopathology: two worlds—two minds—two hemispheres*. Oxford: Oxford University Press.
- Dorsch, F. (2009). Judging and the scope of mental agency. In L. O'Brien & M. Soteriou (Eds.), *Mental actions*. Oxford: Oxford University Press.
- Dorsch, F. (2010). Experience and introspection. In F. Macpherson & D. Platchias (Eds.), *Hallucination*. Cambridge (Mass.): The MIT Press.
- Dorsch, F., & Soldati, G. (2010). Intentionalism, experiential and phenomenal error. In C. Calabi (Ed.), *The crooked oar: The illusions of inner and outer perception*. Cambridge (Mass.): The MIT Press.
- ffytche, D. (2008). The hodology of hallucinations. *Cortex*, 44(8), 1067–1083.
- ffytche, D. (2009). Visual hallucinations in eye diseases. *Current Opinion in Neurology*, 22(1), 28–35.
- Fish, F. J. (1967). *Clinical psychopathology*. Bristol: John Wright & Sons Ltd.
- Fish, W. (2009). *Perception, hallucination, and illusion*. Oxford: Oxford University Press.
- Hare, E. H. (1973). A short note on pseudo-hallucinations. *British Journal of Psychiatry*, 122, 469–476.
- Hume, D. (2000). A treatise of human nature. In F. Norton & M. J. Norton (Eds.). Oxford: Oxford University Press.
- Husserl, E. (1992). *Logische Untersuchungen, volumes 2–4 of Gesammelte Schriften*. Hamburg: Felix Meiner Verlag.
- Jaspers, K. (1989). *Gesammelte Schriften zur Psychopathologie*. Berlin: Springer.
- Jaspers, K. (1996). *Allgemeine Psychopathologie*. Berlin: Springer.
- Kölmeel, H. W. (1993). Visual illusions and hallucinations. *Baillieres Clinical Neurology*, 2, 243–264.
- Manford, M., & Andermann, F. (1998). Complex visual hallucinations: clinical and neurobiological insights. *Brain*, 121(10), 1819–1840.

- Martin, M. G. F. (2001). Out of the past: episodic recall as retained acquaintance. In C. Hoerl & T. McCormack (Eds.), *Time and memory* (pp. 257–284). Oxford: Oxford University Press.
- Martin, M. G. F. (2004). The limits of self-awareness. *Philosophical Studies*, 120, 37–89.
- Martin, M. G. F. (2006). On being alienated. In T. S. Gendler & J. Hawthorne (Eds.), *Perceptual experience* (pp. 354–410). Oxford: Oxford University Press.
- Martin, M. G. F. (2010). *Uncovering appearances*. Oxford: Oxford University Press (forthcoming).
- Massoud, S., Thurasa, P., Nasrallah, H., & Georgopoulos, A. P. (2003). The internal structure of the phenomenology of auditory verbal hallucinations. *Schizophrenia Research*, 61(2–3), 185–193.
- Mavromatis, A. (1986). *Hypnagogia: unique state of consciousness between wakefulness and sleep*. London: Routledge.
- McDowell, J. (1985). Values and secondary qualities. In T. Honderich (Ed.), *Morality and objectivity* (pp. 110–129). London: Routledge.
- McDowell, J. (1994). *Mind and worlds*. Cambridge: Harvard University Press.
- O’Shaughnessy, B. (2003). *Consciousness and the world*. Oxford: Oxford University Press.
- Qarrett, M., & Silva, R. (2003). Auditory hallucinations, source monitoring, and the belief that “voices” are real. *Schizophrenia Bulletin*, 29(3), 445–457.
- Sartre, J.-P. (2004). *The imaginary: a phenomenological psychology of the imagination*. London: Routledge.
- Searle, J. (1983). *Intentionality*. Cambridge: Cambridge University Press.
- Semple, D., Smyth, R., Burns, J., Darjee, R., & Mcintosh, A. (2005). *Oxford handbook of psychiatry*. Oxford: Oxford University Press.
- Siegel, S. (2008). The epistemic conception of hallucination. In A. Haddock & F. Macpherson (Eds.), *Disjunctivism: perception, action and knowledge*. Oxford: Oxford University Press.
- Sims, A. (1995). *Symptoms in the mind*. Philadelphia: Saunders.
- Teunisse, R. J., Craysberg, J. R., Hoefugels, W. H., Verboek, A. I., & Zitman, F. G. (1996). Visual hallucinations in psychologically normal people: Charles bonnet syndrome. *Lancet*, 347, 794–797.
- Victor, M. (1983). Mental disorders due to alcoholism. In M. H. Lader (Ed.), *Handbook of psychiatry 2: mental disorders and somatic illness* (pp. 189–211). Cambridge: Cambridge University Press.
- Williamson, T. (1990). *Identity and discrimination*. Oxford: Blackwell.
- Wollheim, R. (1998). On pictorial representation. *The Journal of Aesthetics and Art Criticism*, 56(3), 217–226.