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Hallucinations occur in a wide range of organic and psychological disorders, as well as in a small percentage of the normal population (Bentall 1990). According to usual definitions in psychology and psychiatry, hallucinations are sensory experiences which present things that are not there, but are nonetheless accompanied by a powerful sense of reality. As Richard Bentall puts it, "the illusion of reality ... is the sine qua non of all hallucinatory experiences" (Bentall 1990: 82). The aim of this paper is to find out what lends an experience 'a sense of reality': what features are required for an experience to feel 'real', in the relevant sense? I will investigate the claim that phenomenological features are largely responsible for a sense of reality, and will find this claim wanting. My suggestion is that a sense of reality is created and sustained by the larger nexus of the subject's beliefs.

# I. Real hallucinations and philosophers' perfect hallucinations

The notion of hallucination most commonly discussed in philosophy is somewhat different from the notion used in psychology or psychiatry. One source of philosophical interest in hallucinations is a concern with scepticism about the external world. Some familiar sceptical scenarios – that I am deceived by a demon, or kept in the Matrix by machines – involve the possibility of a hallucination that is *subjectively indistinguishable* from a veridical perception. The possibility that we might be in one of these scenarios is claimed to undermine our knowledge of the external world.

The 'subjective indistinguishability' of hallucinations from perceptions needs further explanation. First, 'subjective indistinguishability' can mean that a hallucinatory experience presents exactly the *same appearance* as a veridical perception. If I were now hallucinating because I were in one of the sceptical scenarios, still, everything would *seem* (look, smell, sound etc.) *exactly the same*. One commonly used apparatus to further elucidate this concept refers to the phenomenal properties of the experience. The phenomenal properties of an experience are the properties that determine how things feel or seem in an experience: for example, if two experiences both involve feeling cold, they share a phenomenal property; if they both involve something appearing blue, they share another phenomenal property. The hallucinations invoked in the sceptical scenarios have exactly the *same phenomenal properties* as some or another veridical perception. We may say that these hallucinations are 'perfect' hallucinations.

An alternative understanding of 'subjective indistinguishability' requires that the hallucinating subject is *unable to tell*, just by reflection or introspection, that she is not having a veridical perception. This is a deficiency in the knowledge the subject can activate: she is not in the position to learn (by reflection) that her experience is not veridical. If we accept the previous understanding of hallucination – an experience with the same phenomenal properties as a veridical perception – the inability to introspectively discriminate hallucinations from veridical perceptions follows: one cannot tell them apart by reflection, because they appear exactly the same. So sameness of phenomenal properties entails that the experiences cannot be told apart, but the implication doesn't hold in the other direction: just because a subject cannot activate reflective knowledge that her experience is distinct from another one, this doesn't in itself imply that the experiences agree in their phenomenal character.<sup>1</sup>

There is often a further qualification. There are cases where the subject is unable to activate reflective knowledge that her experience is not veridical, because of some general impediment to exercising her reflective capacities: say, she is too drunk to do any such thing. Philosophers usually want to exclude such cases, so they require something like an idealised or perfect state of the knower (see e.g. Martin 2002; an exception is Fish 2008). The idea is that one couldn't discriminate a hallucination from a perception even if one exercised introspection in its best possible from.

So philosophers' idea of hallucination is typically that of a *perfect* hallucination – something that presents perfectly the same appearance as, or cannot be introspectively distinguished by a perfect knower from, a veridical perception. The reason why it is commonly thought that such hallucinations are possible is that the following scenario seems to be at least a metaphysical possibility: one could 'freeze' (that is, keep exactly the same) the total brain-state of a veridical perceiver, and remove the object that they perceive. The assumption is that the resulting experience would be a perfect hallucination – perfect also in the sense that its realisation or proximate cause in the brain would perfectly match that of a veridical perception (see Robinson 1994 and Martin 2002).

A philosophical hallucination would have a sense of reality because it appears the same as, or cannot be told apart from, a veridical perception, and (most) veridical perceptions themselves have a sense of reality. A sense of reality is something that is shared both by perceptions and hallucinations. But this isn't very helpful for our present project. If we asked what gives the sense of ripeness about a melon, someone could suggest that it has the appearance of, or is indiscriminable

<sup>&</sup>lt;sup>1</sup> The implication in this direction is questioned because of an independent reason: the possibility of a so-called *phenomenal sorites* series. More on this see Farkas (2006). In that paper, I also argue that 'epistemic' theories of hallucinations – theories that try to account for the phenomenon of hallucination entirely in terms of the subject's knowledge – are deficient, and the fundamental understanding of philosophers' hallucinations is in terms of the sameness of phenomenal properties. Accordingly, throughout this paper, I assume that there are phenomenal properties.

from, a ripe melon. But that doesn't help much – what we want to know is something like the following: near the stalk, it's giving a sweet smell, but isn't too soft to touch. When I'm asking for the criteria for a sense of reality, this is the kind of thing I have in mind. If we can say what gives a sense of reality to a hallucinatory experience, the full answer will reveal what gives the sense of reality to a veridical experience as well.

As we have seen, philosophical hallucinations are usually understood as perfect hallucinations. Real hallucinations are not perfect at all, in any of the above senses. Hallucinations don't appear perfectly the same as veridical perceptions; less than perfect knowledge is often enough to tell them apart from perceptions; and presumably, the brain state corresponding to a hallucination doesn't perfectly match the brain state corresponding to any veridical perception. But they still have a sense of reality. This makes the question of what features are responsible for this sense even more interesting.

A similar question was posed by the Danish psychiatrist Anton Aggernaes. Aggernaes and his colleagues studied hallucinations in both psychotic and non-psychotic subjects, and for these purposes, he put together a list of features that could serve as a basis of comparing the experienced reality of hallucinations in subjects with different histories (Aggernaes 1972). Since he used the criteria in interviews, one of his requirements was that the concepts used in the test should be 'operational', in the sense that the majority of psychiatric patients, as well as other experimental subjects, should be able to understand these concepts and answer questions about their applicability to a certain experience. All his criteria entailed questions about the quality of hallucinations; questions which ordinary subjects could easily answer directly or with a bit of reflection. In the 1972 paper, he also gives the result of asking 41 patients diagnosed with chronic schizophrenia about the reality qualities of their hallucinations. My interest in the question is more broadly philosophical, but discussing his criteria will be a good way of structuring the discussion.

### II. Independent existence

Before asking what makes an experience feel real, we may want to ask what makes it real. Properly speaking, reality attaches not to the experience itself, but rather to the object of experience. The term 'object of experience' is often used in a broad sense, to denote whatever is experienced, including not only particulars or individuals, but also their properties. The object is real if it could exist independently of being experienced. This suggests that we could have a criterion for the sense of reality if we focus on the subject's attitude towards the reality of objects. For the first approximation, I'm going to use one of Aggernaes's criteria:

A quality of existence versus a quality of non-existence. ... An experienced something is said to have a quality of "existence" if the experiencer is aware, or upon simple questioning becomes aware, that he feels certain that this something also exists when nobody experiences it at all. A quality of "non-existence" is a feeling of certainty that the experienced something only exists in intervals of time where it is experienced by somebody. (1972, p. 226)

This – or something like this – I regard as fundamental. Notice that when people describe their hallucinations, they don't always use 'real' in this sense. In a study on schizophrenic patients' belief that the voices they hear are 'real', Garrett and Silva report the case of a patient who "... heard the sound of buses and derogatory voices. He said he knew the buses could not be in his head and therefore they could not be real, and so maybe the voices were not real either. But he in the end reaffirmed his belief: 'They are pretty real to me'" (Garrett and Silva 2003, p. 450). As the notion of reality is understood here, this statement would have to be reformulated, because 'real to me' on this notion is a contradiction: if something is real, it must be real in itself, and not only for someone.

It's worth reflecting on what the patient could mean in this case. Though obviously I can only speculate, at least three possibilities come to mind. One is that though the voices felt real enough when they were heard, this feeling was overridden by other beliefs; I will come back to this phenomenon in a moment. The second is that we have a case of 'split decision': the patient has inconsistent beliefs (see Garrett and Silva 2003, p. 454). The third possible meaning is that the *experience* itself really happened – with possibly serious disturbing consequences – and wasn't just made up by the subject. This last point can of course be granted, and it is important. But for a sense of reality, it's not enough to have a sense that an *experience* is happening; the subject needs to have a sense that what the experience *depicts* is also happening.

This point needs to be made more specific. First, the awareness has to concern the then-and-there concrete existence of the object, and the mental episode in question must play a crucial role in creating this awareness. Aggernaes doesn't make this specification, perhaps because it would be difficult to operationalise. However, without the specification, the criterion is much less illuminating. Aggernaes says that when I close my eyes and simply think of a pencil that I just saw in front of me, the episode does have a quality of existence, because I am convinced that the pencil would be there even if I weren't thinking about it, and it would go on to exist even if I went to sleep. But in this case, my conviction of the experience-independent existence of the pencil arises from my *previous perceptions*, and probably from some background assumptions that pencils don't just cease to exist. So the conviction is not based particularly on this mental episode of thinking of the pencil, unlike in the case of hallucinations and perceptions.

Prima facie, another qualification is needed: that the conviction has to be based on the expe-

rience, and on nothing but the experience – as much as isolation is possible. Other mental states can override one's inclination to believe the object of an experience to be real. Past experiences, the reports of others, general considerations of coherence and so on, can subsequently convince one that certain experiences are hallucinatory. This happens in the case of most people with Charles Bonnet syndrome, or people suffering from severe migraine (Manford and Anderman 1998). In these conditions, insight into the deceptive nature of the experiences is preserved, often because it would be completely unlikely that the events depicted by the experience would occur: people seem to see figures in bizarre costumes, distorted faces without bodies, very small people. On some occasions, the objects appear real on first experiencing them, but are subsequently discovered to be unreal, simply because the subject knows from independent sources that they don't exist (such an example will be considered in more detail in section V). Sometimes hallucinations with insight are called 'pseudohallucinations', but this term is also employed in another sense to denote vivid imagery, so I'm not going to use it (see ffytche 2004, Zwaard and Polak 2001). Still, many people regard the hallucinations experienced for example in the Charles Bonnet syndrome as bona fide hallucinations, even though they don't mislead. This may be explained by pointing out that if we considered these experiences in isolation from other mental states – as much as this is possible – the subject would take their objects to be real. I shall return to this point in the last section.

An experience carries a sense of reality if the subject takes the object of experience to be real, that is, to exist independently of the particular experience. This is more of a definition than an answer to our initial question. The initial question will be answered if the following further questions are addressed: which further features of an experience – phenomenological or other – are necessary or sufficient for a sense of reality to arise? What sort of attitude is the attitude of 'taking' the object to be real? How does this attitude arise from the features of experience that lend an experience a sense of reality?

### III. The qualities of 'independence', 'objectivity', 'publicness'

Let me list all of Aggernaes's seven qualities that contribute to the experienced reality of a mental episode. First a summary list, then I shall expound on the qualities.

- (1) The quality of "sensation" (perceived in one of the external sensory modalities).
- (2) The quality of "behavioral relevance" (relevance for the subject's emotions and/or needs, and/or actions).
- (3) The quality of "publicness" (can be experienced by others).
- (4) The quality of "objectivity" (perceptible in more than one sense modality).

- (5) The quality of "existence" (exists even when no one is experiencing it).
- (6) The quality of "involuntarity" (existence of the object is outside the person's control).
- (7) The quality of "independence" (the experience is not dependent upon an unusual, transient state of mind).

I have already discussed (5). Criteria (3), (4) and (7) seem to be best understood as further tests of the subject's conviction that the object of the experience exists even if no-one perceives it. For example, an experience has the "quality of independence" if the subject doesn't believe that she has the experience only because she is in an unusual mental state such as "psychosis, 'bad nerves', very intense emotional states, intoxicated states and drug-withdrawal states" (Aggernaes 1972, p. 227). In a veridical perceptual experience, one has the experience *because* the perceived object affects the subject; if no object is present, we may want an alternative explanation of why the subject is having the experience. And the explanation is plausibly an unusual mental state. The question here is supposed to rule out that alternative explanation, and give further support to the subject's belief that the experienced object is real.

That this is indeed the point here gets further support once we note that the fact that one has a certain experience only because one, say, took a drug, need not *in itself* imply that what one experiences is not real. Though admittedly the following case is a bit far-fetched, it has been suggested that certain drugs make us sensitive to real features of reality that couldn't be experienced in a normal state. Something like seems to have been claimed by Aldous Huxley in "The Doors of Perception". "Mescalin", he reported, "raises all colors to a higher power and makes the percipient aware of innumerable fine shades of difference, to which, at ordinary times, he is completely blind" (Huxley 1954, p. 27). Or even more dramatically: "I was seeing what Adam had seen on the morning of his creation – the miracle, moment by moment, of naked existence" (ibid. 17).

I turn now to criterion (4). In Aggernaes's scheme, objects of sensory experiences have the "quality of objectivity" (versus the quality of subjectivity) "if the experiencer feels that under favourable circumstances, he would be able to experience the same something with another modality of sensation than the one giving the quality of sensation." (Aggernaes 1972, p. 224) As Aggernaes makes it clear, the experienced 'something' in this case must be some material object: for example, in the case of an auditory hallucination, the source of the sound, rather than the sound itself. It is a sign of experienced reality if the subject is convinced that she could also see or touch the source of the sound under favourable circumstances. This criterion is probably a good further test of the strength of the conviction that the perceived object is real, that is, it exists independent of the subject's particular experience. For normally, mind-independent material objects can be perceived

by more than one sense.

It seems that the situation is similar with criterion (3), the "quality of publicness" (versus a quality of privateness). The object of an experience has this quality if the subject believes "that anybody else possessing normal sensory faculties would be able to perceive this something with his senses if he were within reach of it" (Aggernaes 1972, p. 223). This belief, again, could be reasonably regarded as a conviction that the perceived object exists not only *for* the subject, but also independently of her experience, and hence open for observation by others.

It is an interesting fact that in Aggernaes's study, as well as in various similar studies, publicness is attributed to auditory hallucinations in a strikingly lower percentage than the other criteria of experienced reality (29% in Aggernaes's case, 24% in the study by Garrett and Silva (2003) on auditory hallucinations concerning also largely schizophrenic patients). Leudar and Thomas also state that the majority of people who 'hear voices' don't think that others can also hear the voices (2000, p. 201). This feature may be related to another common feature of auditory hallucinations experienced by schizophrenic patients: that the voices often seem to come from inside the head, rather than from a source external to the subject's body (see references below, in section III).

If the object of an experience is real, that is, exists independently of being the object of that particular experience, then we may reasonably expect that it can be observed by others, by more than one sense, and that the experience is not brought out by some abnormal state of mind. So it seems that these features are *consequences* of taking the object to be real. But our previous question is still there: how is the sense of reality *created in the first place*? Which further features of an experience are necessary or sufficient for a sense of reality to arise? The answer may be sought in the following direction. A sense of reality is something that both veridical perceptions and hallucinations have, and a natural thought is that we should look among the *phenomenological features* of experiences.<sup>2</sup> Veridical perceptions, we may think, convey a sense of reality because the way they present their objects. An obvious contrast is imagery: when we recall something in our mind's eye or ear, they experience has no sense of reality, and that's presumably because of its phenomenal characteristics. I explore this idea in the next section.

### III. Imagery and the criterion of appearing in external space

I shall use the term 'perceptions' and 'perceivings' to denote veridical, successful perceptual experiences: when we actually see, hear, smell etc. something. Hallucinations are not perceptions, but subjectively, they feel like perceptions, at least as far as the sense of reality is concerned. What

<sup>&</sup>lt;sup>2</sup> Throughout the paper, when I talk of 'phenomenological' features, I mean sensory phenomenology. If we included also cognitive phenomenology, the conclusions of the paper would be different.

is it like to feel as a perception? Perception of real objects is often contrasted with imagination, when someone says something like the following: 'it really did happen, I didn't just imagine it'. This is partly reflected in Aggearnaes's first criterion for the experienced reality of a psychological phenomenon; what he calls the "quality of sensation versus a quality of ideation" (1972, p. 222). The intended contrast is between sensory experiences felt as coming through the external sense organs on the one hand, and the experience of "only thinking of or imagining" something on the other hand. Patients were asked questions like "Is this something you hear, or is it something you think or imagine?" or "Is it sound which you hear, but not coming in through your ears?" (ibid.)

This way of drawing the contrast is not helpful. A hallucination indeed has to be (at least partly) in one of the five sensory modalities associated with the external senses: it has to have a visual, auditory, olfactory, gustatory or tactile quality.<sup>3</sup> The object of a hallucinatory experience is something that a subject seems to see, hear, smell etc., as opposed to simply conceive. However, this isn't a feature that puts perception-like experiences on one side, and imagining and thinking on the other. Having a sensory modality is *shared* by perceptions and sensory imagery, in contrast to pure thought. If one is simply thinking of, say, a regular octagon or of the Marseillaise, these episodes need not have any accompanying visual or auditory quality. Contrast this with the experience of visualising a regular octagon, or recalling the tune of the Marseillaise in one's head. These experiences are characterised by sensory qualities: shapes and colours, or pitch and tone. Yet these imaginings don't convey a sense of reality. Being in a sensory modality is necessary for a sense of reality, but certainly not sufficient in itself.

Now we have at least one phenomenological feature that is necessary for the sense of reality to arise for an experience: it has to be in an external sensory modality. The next step is to find more specific phenomenological features that would distinguish sensory experiences which – like perceptions – do provide a sense of reality, from those – like images – that don't.

Karl Jaspers, in his *General Psychopathology*, provides the following list (Jaspers 1959/1997, p. 69):

- (a) perceptions are of concrete reality, have a character of objectivity, whereas images are figurative, they have a character of subjectivity;
- (b) perceptions appear in external, objective space, images in inner subjective space;
- (c) perceptions are clearly delineated and detailed, images are not;
- (d) in perceptions, the sensory elements are full and fresh, in imaginations, they aren't;
- (e) perceptions are constant and can be retained, images dissipate and have to be recreated;

<sup>&</sup>lt;sup>3</sup> Perhaps some sort of proprioceptory sensory modality should be added to this, if we wanted to account for example for phantom limb experiences among hallucinations.

(f) perceptions are independent of our will, images are not

These features apply mainly to the visual mode, but (a), (b), (d) and (f) are also applicable to the auditory mode<sup>4</sup>. The first point, (a), brings no new information; this is just the repetition of the point that perceptions have a sense of reality. The other points are, on the other hand, very promising: they are just the kind of phenomenal features that we may plausibly regard as creating a sense of reality. Let me start with an investigation of (b): the claim that (the objects of) perceptions appear in external space.

Aggernaes's description of the quality of sensation has an element that is possibly related to this point. In drawing the contrast between perceiving and imagining, Aggernaes says that perceptions feel as coming through an external sensory organ.<sup>5</sup> However, Aggernaes notes that some schizophrenic patients answer the questions about sensation versus ideation by saying that "there is no doubt that it is a sound, but that he does not hear it coming through the ears" (Aggernaes 1972, p. 222). Aggernaes classifies these answers as neither negative nor positive, but simply doubtful.

Of course it's difficult to know exactly what sort of experience these people try to describe, but here is one hypothesis that seems to be consistent with a number of reports. The feeling of hearing something through the ears has partly to do with a feeling of the *direction* of the sound.<sup>6</sup> If the sound is heard as having a direction, it seems to be localised in space somewhere around the subject (see O'Callaghan 2007, ch 3). When people have hallucinatory experiences hearing voices, the voices apparently often sound as if they were inside their head, or coming from no place in particular. In a review on auditory hallucinations, David (1999) quotes studies showing that "patients with established diagnoses of schizophrenia often find it difficult to say whether the 'voice' is inside or outside the head" (p. 95), and Hoffman et al. found that in their sample, of schizophrenia patients with auditory verbal hallucinations, "only 26.5% reported that the voices seem to emanate exclusively from outside the head" (2008, p. 1171).

<sup>&</sup>lt;sup>4</sup> (b) also applies, to some extent, to other modes. Arguably, olfactory experiences provide a sense of a distance, though they don't provide a sense of direction; hence objects of olfaction appear in external space. Taste and touch locate the objects of experience right next to the body part that feels them.

<sup>&</sup>lt;sup>5</sup> Aggernaes discusses Jaspers's criteria, but he rejects the criterion of appearing in external space – for the wrong reasons, it seems to me. In Aggernaes's classification, perceptions are in one group, and sensory images, as well as non-sensory thoughts of both existing and non-existing objects are in the other. He notes that although the objects of perceptions are localised in external space, this doesn't distinguish the two groups, because if we think of the piano in the next room – a 'mere idea' – the object is conceived as localised in external space. That's why Aggernaes doesn't think that perceptions are apparently located in external space, as opposed to 'ideas'. But if, unlike Aggernaes, we try to contrast sensory perceptions and sensory images, and exclude pure thoughts, this problem doesn't arise. If I try to visualise the piano in the next room, although conceptually I know it is in the next room, the visual image won't be located in external space.

<sup>&</sup>lt;sup>6</sup> The fact that we hear sounds as having direction is of course explained by the fact that we hear through the two ears and the sound-waves reach the two ears at a slightly different time. This actually supports the claim that I make here: namely that the *feeling* of hearing through the ear is connected to the feeling of the sound coming from a certain direction.

For ordinary cases of visual and auditory experiences, the requirement of apparently being located in external space does seem to be a feature that gives a sense of reality. However, a qualification is needed, because there is a further question of whether we believe that we can see or hear only what is located in space. For example, if it were possible to hear the voice of God, saints, or the voice of spirits, we would not necessarily expect the sounds to come from any particular direction; they could well be heard inside the head (the same is true for vision). This isn't a contrived example; throughout history people had often had experiences that they claimed to be visions or auditions of supernatural beings. Our fundamental requirement for a sense of reality was that the object of experience is taken to exist independently of the occurrence of the experience. And this is certainly met in the case of experiences of God or of spirits. We may add that in such cases we have an explanation of the subject's belief that others cannot observe the experienced object; as we saw above, this belief is apparently quite common among schizophrenics who experience auditory hallucinations.

This is our first hint that the sense of reality (at least on some occasions) isn't produced entirely by phenomenological features on their own, but also depends on the context of the subject's beliefs. If someone believes in the possibility of being contacted by supernatural beings as a matter of course, a voice or an apparition could be directly taken as real. What if someone doesn't believe in the supernatural? Could it still be suggested that these experiences are phenomenologically similar to hallucinations with insight, in the following respect: that they carry an immediate sense of reality which, however, is overridden by other beliefs? This is a moot point, and I shall not try to resolve it. But we should keep in mind the possibility of such cases.

#### IV. Further phenomenological marks of the real, voluntary control

Apart from the object's appearing in external space, Jaspers lists further phenomenological marks of perceptions: they are clearly delineated and detailed, the sensory elements are full and fresh, the features are constant and can be retained. This seems certainly right, especially for visual perceptions. There is no image that matches my present visual experience in detail, vividness, completeness, and constancy. I am therefore inclined to agree that if all these features are present together in a perception, this is sufficient to create a sense of reality. But the next question that's worth exploring is this: are these features also *necessary* for creating a sense of reality? And are these the same features that give rise to a sense of reality in *hallucinations*?

I would like to argue that the answer to both these questions is negative. The features are not necessary even in the case of perceptions. If we have a sensory experience which is vivid, complete,

<sup>&</sup>lt;sup>7</sup> Subject to a certain qualification; see section V. below

rich in detail, stable, amenable to perceptual exploration (possibly in several sensory modalities), and in the case of the visual and auditory mode, it is located in external space – these features together are sufficient for a sense of reality. But none of these features is really necessary. One could get a fleeting glimpse of something, and yet be convinced of its reality; one could see things in the dusk, or in a fog, or with severe myopia; one could catch shreds of a conversation through a loud background noise, without the possibility of further exploration, and the experiences could still feel fully real. Thus there are perceptions with a sense of reality that don't exhibit these phenomenological features, and yet feel real.<sup>8</sup>

Further, there is evidence that actual hallucinations are not always vivid, fresh, or complete. For example, Slade and Bentall note that some hallucinations are not vivid, in fact, they are reported as being hard to discern (1988, p. 121). It seems very much possible that hallucinations of especially psychotic subjects who lack insight actually look or sound considerably different from real perceptions. If a non-psychotic subject had an experience with the same phenomenal features, they could probably identify it as not real. It is generally thought that many delusions of schizophrenic patients are results of a combination of abnormal experiences and a tendency to interpret these experiences in an unusual way (Frith and Johnstone 2003, p. 138ff).

There is only one more item on Jaspers's list that we haven't discussed so far and which seems crucial for a sense of reality: that perceptions are not subject to the will. The criterion also figures on Aggernaes's list as the "quality of involuntariness". As Aggernaes notes, something like this feature figures in virtually all accounts of hallucination. It is certainly a necessary component of a sense of reality. Slade and Bentall actually make it part of their working definition of a hallucination:

Any percept-like experience which (a) occurs in the absence of appropriate stimuli (b) has the full force or impact of corresponding actual (real) perception, and (c) is not amenable to direct and voluntary control by the experiencer. (Slade and Bentall 1990, p. 23)

Condition (c), they explain, "serves to distinguish between hallucinations and other kinds of vivid mental imagery" (p. 24). This sounds as if other kinds of vivid mental imagery were all under voluntary control. To see whether this is right, we need to distinguish various elements involved in the voluntary control of experiences.

Jaspers mentions dependence on our will as a distinguishing mark between perceptions and

<sup>&</sup>lt;sup>8</sup> There is evidence that the phenomenal features of images and perceptions can be closer than we would initially think. In Perky's famous experiments, subjects mistakenly judged perceptions to be imaginations (Perky 1910). What happens in the case of hallucinations is probably the opposite: images are occasionally judged to be perceptions. But if perceptions can be mistaken for images, then this is at least indirect evidence for the possibility of a mistake in the other direction

normal imagery. Images are dependent on our will in the sense that they are (i) produced with a feeling of activity and (ii) they can be deliberately altered. The second element is emphasised by Aggernaes, who defines a quality of 'voluntarity' as the feeling that it is easy to alter or dismiss the experience.

As for the first element, being *produced* with a feeling of activity, that is clearly not true of many normal imagistic experiences. It is true some of the experiences I described above: when we deliberately try to visualise or 'auditorise' something. But many images just 'pop' into our head without any feeling of activity on our part: for example, you hear a song on the radio in the morning, and it keeps repeating itself in your head. Visual images can similarly spontaneously arise in the mind, for example through an association, or because of some preoccupation.<sup>9</sup>

One might think that even though these images arise spontaneously, they are still under voluntary control insofar as it is easy *dismiss* of them. However, this isn't a very clear categorical difference between perceptions and images. Some images are not that easy to dismiss: we speak of images haunting people, of people's inability to escape from an image. On the other hand, one can get rid of perceptions. To make a simple point, it's easy to dismiss perceptions by closing one's eye or covering one's ear. But maybe this will be judged to be beside the point. Still, it is possible to dismiss especially an auditory experience by focusing one's attention on something else. This is what we do when we try to read in a cafe where several conversations are going on: we shut out the voices by concentrating on the book. An essentially similar strategy is used when we try to get rid of the tune repeating in our head: one has to deliberately focus on something else to stop the tune from recurring again.

If this is right, then some images are not more obviously under voluntary control than some perceptions. Even though these experiences are very common, this point is often curiously overlooked. Of course, one could *define* 'images' as the products of imagination, understood as a voluntary activity. But then we would still need a name for the class of experiences which are clearly in the sensory mode, phenomenologically much more similar to images than to perceptions – apart from the voluntary/involuntary character – and do not carry a sense of reality.

#### V. Form and content

Let us take stock of how far we've got. Take a normal visual perceptual experience: it has phenomenological features – detail, vividness, completeness, constancy, etc. – that are sufficient to produce a sense of reality. Philosophers' hallucinations would share the same phenomenological

<sup>&</sup>lt;sup>9</sup> Hypnagogic visual imagery is typically involuntary, yet it has an imagistic character and carries no sense of reality. I mention this in a footnote because on some classifications, hypnagogic imagery may be put in a separate category.

features, and hence they would also give rise to a sense of reality. However, there is every reason to think that real-life hallucinations don't look or sound exactly the same as perceptions, so we asked which phenomenological features *have* to be retained for a sense of reality to be still sustainable. The somewhat surprising result is that there are only two such necessary features: that the experience is in a sensory modality, and that it isn't under voluntary control. However, these necessary features are together not sufficient, because some images – for example, images that 'haunt us' – have the same features, and yet do not carry a sense of reality. <sup>10</sup> Therefore it seems that we have to look for the factors responsible for a sense of reality – at least in some cases – elsewhere.

In the proposals we have seen so far, the focus has been on the formal features of the experience, rather than on their content; it is now time to consider the suggestion that the *content* of mental episodes – that is, what they present as happening – may also be crucial for the sense of reality. One thing that may contribute to the sense of reality is the likelihood of the event, given our general beliefs about the world. For example, if someone saw a face floating in mid-air, or very small people – as it happens in the case of people with the Charles Bonnet syndrome – one might be inclined to judge the objects not to be real. This idea has very little plausibility in the context of a philosophical investigation into the nature of hallucinations, especially as it is related to sceptical arguments. It would hardly constitute an answer to the sceptic to say that as long as the experienced events are normal, we can trust them to be real. One reason for this is that our ability to judge the 'normality' of events can be severely compromised, for example, when we are dreaming. We are all familiar with dreams where completely surreal events struck us as perfectly natural. This is a useful reminder of the very real possibility of endowing almost any kind of involuntary sensory experience with a sense of reality, if one's reality discriminating abilities are compromised.

However, when the issues is not a response to the philosophical sceptic, but the features of real hallucinations, the content of an experience can become very important. In a study on experiential features used by patients with schizophrenia to differentiate 'voices' – that is, auditory verbal hallucinations – from ordinary verbal thought, Hoffman et al. found that the verbal content of the voices was one of the most important factors, together with an experienced lack of control (Hoffman et al. 2008). At the same time, only a small percentage of patients reported that the loudness and the clarity of the voices they hear is an important factor in differentiating hallucinations from verbal thoughts. Hoffman et al. didn't investigate (or in any case, don't report) in what way the contents were different. Nonetheless, the study suggests that general

<sup>&</sup>lt;sup>10</sup> Remember that for an experience to have a sense of reality, the there has to be a belief of the then-and-there independent existence of the object. If someone is bothered by images of a disturbing memory, she may of course be convinced that what the memory depicts really existed, but this concerns the past and not the object's presence.

phenomenological – or 'formal' – features of the experience may play a smaller role in attributing the experience to an independent source than the content of the experience.

When the content of experience matters in taking the objects of experience as real, there is an interaction between the context of the subject's background beliefs and what the experience presents. We have already seen an example of such an interaction: in the case where belief in the reality of a voice depended on the subject's background beliefs concerning the existence of supernatural beings. Let me now consider a somewhat different example, borrowing Oliver Sacks's words from his introduction to Hungarian writer Frigyes Karinthy's book, *A Journey Round My Skull*:

Frigyes Karinthy (born in 1887 in Budapest) was a well-known Hungarian poet, playwright, novelist, and humorist when he developed, at the age of forty-eight, what in retrospect were the first symptoms of a growing brain tumor. He was having tea at his favorite café in Budapest one evening when he heard "a distinct rumbling noise, followed by a slow, increasing reverberation . . . a louder and louder roar. . . only to fade gradually into silence." He looked up and was surprised to see that nothing was happening. There was no train; nor, indeed, was he near a train station. "What were they playing at?" Karinthy wondered. "Trains running outside? . . . Some new means of locomotion?" It was only after the fourth "train" that he realized he was having a hallucination. In his memoir, *A Journey Round My Skull*, Karinthy reflects on how he has occasionally heard his own name whispered softly—we have all had such experiences. But this was something quite different. "The roaring of a train [was] loud, continuous, and insistent. It was powerful enough to drown real sounds. . . . After a while I realized to my astonishment that the outer world was not responsible . . . the noise must be coming from inside my head." "I

Karinthy reports that the next day – same time, same cafe – the 'trains' started to come again, but, unlike on the first occasion, he didn't even look up: he knew it was something happening inside. The experience repeated itself every day, and, together with the other developing symptoms of his tumour, became part of his daily routine. This process, it seems to me, illustrates how the experience lost its initial sense of reality. This can hardly be explained by a change in the sensory phenomenological features of the experience. What changed was Karinthy's knowledge that the event was not happening.

This is further evidence that the sense of reality carried by an experience is determined not only by phenomenological features, but also by the background context of the subject's belief. Earlier, we said that some phenomenological features are sufficient to create a sense of reality, but even this has to be qualified to a certain extent. The phenomenological features of the experience of the 'trains' was sufficient to create a sense of reality, but only in the absence of an undermining

<sup>&</sup>lt;sup>11</sup> The book records the history of Karinthy's subsequent diagnosis and a successful operation where they removed the tumour.

belief; once this changed, the experience ceased to feel real.

## VI. How reality is given

In section II, when defining what it is for an experience to have a sense of reality, we considered the requirement that the awareness of the independent existence of the object has to be based crucially on the experience, and only on the experience, as much as isolation is possible. The reason why this had to be stated in this guarded form – 'as much as isolation is possible ' – is precisely because sometimes, isolation can only be partial. Usually, the study of hallucinations extends to hallucinations with insight. When Slade and Bentall explain their definition of hallucination, and in particular the criterion that a hallucination has the full force and impact of an actual perception, they note that hallucinations with insight present a problem for this definition: can we say an experience has the full force of an actual perception, if the subject knows fully well, from many previous occasions, that she is hallucinating? Slade and Bentall suggest to overcome this problem in the following way: "[I]t is reasonable to require only that the experience resembles in all respects the corresponding actual perception and not that the individual necessarily believes it to be real" (1990, p. 24).

Of course, we can group mental phenomena in many different ways, and studying together hallucinations that have or lack insight may lead to interesting conclusions. However, for the project of this paper, the move by Slade and Bentall is not helpful. First, as I have indicated above, there is evidence that many hallucinations in psychotic patients do not in fact resemble actual perceptions and still carry a strong sense of reality (with strong behavioural consequences). At the same time, my contention is that an experience may resemble an actual perception in its phenomenological features, and still lack a sense of reality.

Contrast the different views expressed in the following quotes:

What the *experience of reality* is in itself can hardly be deduced nor can we compare it as a phenomenon to any other related phenomena. We have to regard it as a primary phenomenon which can be conveyed only indirectly. ... In contrast with our imaginings, perception has a quality not determined by the particular sense-organ ... which is something absolutely primary and constitutes sensory reality ... We can talk about this primary event, name it and rename it, but cannot reduce it any further. (Jaspers 1959/1997, p. 94)

Reality is not given by experience, but by judgement processes. The characteristics of mental experience that provide it with the quality of reality are similar for perception, event memories, and beliefs ... Reality testing of ongoing perception and reality monitoring of memories and beliefs are complex judgement processes that are subject to error and more difficult in some situations than others. (Johnson 1988, p. 57)

If what has been said so far is right, then the picture suggested by the second quote is along the right lines. If we want to understand how a sense of reality is created and sustained by our experiences of the world, it isn't enough to refer to the sensory phenomenology associated with perceptual experiences: the sense of reality depends on the whole nexus of the subject's beliefs.<sup>12</sup>

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