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This paper appears alongside replies from Matthew Nudds and Casey O'Callaghan in Richard Brown, ed., Consciousness Inside and Out: Phenomenology, Neuroscience, and the Nature of Experience (Springer, 2014), pp. 321-334.

It is widely assumed (and only rarely argued) that the principal objects of hearing are *sounds*. Thus, Roy Sorensen writes:

In the course of demarcating the senses, Aristotle defined sound in *De Anima* as the proper object of hearing.... Sound cannot be seen, tasted, smelled, or felt. And nothing other than sound can be directly heard. (Objects are heard indirectly by virtue of the sounds they produce.) All subsequent commentators agree, often characterizing the principle as an analytic truth. For instance Geoffrey Warnock (1983: 36) says 'sound' is the tautological accusative of the verb 'hear'. (2010, 126)¹

There are two main claims in this passage:

- (1) Sound is unique in that it cannot be seen, tasted, smelled, or felt, but only heard. That is, sound is the proper object of hearing.
- (2) Nothing other than sound can be directly heard. That is, if S hears E directly, then E is a sound.²

These claims are widely accepted, but I think neither is true. I have only a few remarks to make about (1), which seems to me rather uninteresting, philosophically. But not so (2). It is the principal target of this paper and a point

¹ Sorensen goes on to argue that "there is a single exception" to this view: "We hear silence, which is the absence of sounds" (126). So, more precisely, according to Sorensen, the immediate objects of hearing are sonic objects (sounds and silences), and when we hear an ordinary object, we do so in virtue of hearing a sonic one.

² Note that, even if only sound can be directly heard, it may still be possible to hear sounds indirectly—as in, say, hearing a recording or a radio transmission rather than being present at the live performance.

of departure for a great deal of philosophical and empirical work on hearing and sound. Thus, if it falls, it falls with company.³

³ Four points in passing:

First, it is important that (1) and (2) are mutually independent: that sound can only be heard—(1)—does not impose any restrictions on what else can be heard, whether directly or indirectly; and that only sound can be directly heard—(2)—does not exclude the possibility that sound is perceptually accessible by other means. Therefore, (1) and (2) require independent criticism.

Second, since (1) and (2) are mutually independent, it is unclear exactly what Sorensen has in mind when, in the quoted passage, he refers to "the principle" on which "all subsequent commentators agree."

Third, Sorensen is too hasty in supposing Warnock to agree with either (1) or (2). Since facts about grammar generally don't entail substantive metaphysical or epistemological theses, Warnock's claim that 'sound' is the "tautological accusative" of the verb 'hear' at best *suggests* (2)—that only sound can be directly heard. By contrast, it doesn't even *suggest* (1)—that sound can only be heard—since 'sound' might yet go perfectly well with perception verbs other than 'hear'.

Finally, even if most philosophers accept (2)—that nothing other than sound can be directly heard—a much more extreme view actually seems common among psychologists: not even sounds can be directly heard. Here, for instance, is a passage from a textbook popular in undergraduate psychology courses on "Sensation and Perception":

Smell and taste are...indirect because these experiences occur when chemicals travel through the air to receptor sites in the nose and tongue. Stimulation of these receptor sites causes electrical signals that are processed by the nervous system to create the experiences of smell and taste. Hearing is the same. Air pressure changes transmitted through the air cause vibrations of receptors inside the ear, and these vibrations generate the electrical signals our auditory system uses to create the experience of sound. (Goldstein, 68)

The idea seems to be that, because experiences of smell, taste, and sound lie at the ends of largely intra-cranial causal chains, they cannot be direct experiences of extra-cranial phenomena such as smells, tastes, and sounds. This extreme view of what we directly hear—not sound, but (perhaps?) neural activity—is not only wildly implausible (for one thing, neural activity is, as such, pretty quiet), but it would appear to depend on mistaking the representational content of a neural state for the vehicle of that content. In any case, the arguments of this paper are directed at a less extreme view—claim (2)—that is without question the most common view among philosophers, as the opening quote from Sorensen (2010) attests.

§1. Seeing Sounds?

and Kercel (2003).

According to (1), sounds are unique in that they cannot be seen, tasted, smelled, or felt, but only heard. I think this is easily shown false.

We often perceive things by perceiving their effects. Consider, for instance, the wind: otherwise invisible, we see it in rippling water and swaying branches. And even if we never see the wind directly, "indirect seeing" is still seeing; seeing the wind on the water, or in the trees, is still seeing the wind. This point is familiar from the philosophy of science: arguably, it is possible to see a subatomic particle by seeing its trail appear in a cloud chamber. Sounds are similarly visible. Get yourself the right speakers and the right music and you'll be able to see the sound—in particular, the bass—by seeing the shaking glassware. And the same holds for other sensory modalities. Imagine an earplugged sleeper who wakes to a vibrating bed and unplugs his ears to discover that what he felt was (the sound of) the party downstairs (cf. Hamilton 2009, 166). Perhaps these are not cases of direct perception, but they're enough to undermine claim (1): for sense modalities other than hearing, sounds are perceivable, even if not directly.

In light of these reflections, (1) should be weakened as follows:

(1')Sound is unique in that it cannot be *directly* seen, tasted, smelled, or felt, but only heard. That is, sound is the proper object of *direct* hearing.

⁴ Further imagine someone whose visual, tactile, and auditory systems regularly fail. We might devise for her a prosthetic that "translates" an auditory stimulus into a gustatory (and/or olfactory) stimulus in a manner that enables simple communication. She might then literally be said to taste (and/or smell) sounds (but perhaps not directly?). Such "sensory substitution devices" are the subject of extensive and ongoing empirical study. For discussion, see Bach-y-Rita

This is more likely to be true.⁵ In any case, so much for claim (1). The rest of this paper targets claim (2).

§2. Berkeley v. Heidegger

The following exchange occurs early in the first of Berkeley's *Three Dialogues*:

PHILONOUS. This point then is agreed between us, that *sensible* things are those only which are immediately perceived by sense. You will farther inform me, whether we immediately perceive by sight any thing beside light, and colours, and figures: or by hearing, any thing but sounds: by the palate, any thing beside tastes: by the smell, beside odours: or by the touch, more than tangible qualities.

HYLAS. We do not. (1992, 138)

In short, we immediately or directly perceive only sensible qualities, which, Philonous goes on to argue, exist only insofar as they are perceived. Such a view receives little support from contemporary philosophers. It is widely agreed that what we immediately perceive are not mind-dependent qualities, but mind-independent objects. In particular, what we immediately *see* and *touch* are supposed to be ordinary objects such as horses and tomatoes. This is not to deny that we see colours and shapes; it is to deny that we see the horse *by* or *in virtue of*

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⁵ For a related discussion, see Roxbee Cox (2011, 104-6). Also, note that (1') remains independent of (2). Claim (1')—that sound can be directly perceived only by hearing—does not impose any restrictions on what else can be directly heard; and claim (2)—that only sound can be directly heard—does not exclude the possibility that sound is directly perceivable by other means.

⁶ This requires qualification. Many contemporary philosophers believe that the immediate objects of visual and tactile perception are not full-blown ordinary objects, but *parts* of them. On this view, what we see or touch, strictly speaking, are not horses, but horse-parts (viz., surfaces). For the purposes of this essay, I will ignore this complication, and I will write as if what we immediately see or touch are ordinary objects, simpliciter. (For considerations in favor of this commonsense view, see Leddington [2009]; for arguments against it, see Bermùdez [2000].)

seeing its color or shape.⁷ Our visual experience of the horse is not "mediated" by the experience of sensible qualities. Similar considerations hold for touch.

Yet the priority accorded to ordinary objects in visual and tactile perception is usually not extended to the other sense-modalities. Focusing on the case of hearing, philosophers typically follow Berkeley in taking the only direct or immediate objects of hearing to be sounds. And even if they reject the Berkeleyan view that sounds are mind-dependent qualities, it still follows that if we hear ordinary objects or events, we do so only in virtue of hearing the sounds that they make. In this respect, contemporary reflection on hearing retains a strong empiricist cast. Here, for instance, is Casey O'Callaghan:

What do we hear? Sounds are, in the first instance, what we hear. They are the immediate objects of auditory experience in the following sense: whatever else we might hear, such as ordinary objects (bells, trumpets) and events (collisions, typing), we hear it in virtue of hearing a sound. (2009a, 609)⁸

Call this *the Berkeleyan view*. Despite its overwhelming popularity, there are (contra Sorensen) scattered examples of resistance. Consider Heidegger:

We never really first perceive a throng of sensations, e.g., tones and noises, in the appearance of things...; rather we hear the storm whistling in the chimney, we hear the three-motored plane, we hear the Mercedes in immediate distinction from the Volkswagen. Much closer to us than all sensations are the things themselves. We hear the door shut in the house and never hear acoustical sensations or even mere sounds. In order to hear a bare sound we have to listen away from things, divert our ear from them, i.e., listen abstractly. (1977, 151-2)

Heidegger rejects the idea that the experience of sound mediates between us and the ordinary objects and events that we hear. We do not hear things *in virtue of* hearing the sounds that they make; rather, we hear things *in* hearing their

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⁷ On this use of the phrase 'in virtue of', see Jackson (1977, 15-20) and Bermùdez (2000, 356-7).

⁸ Also see O'Callaghan (2007, 13; 2008b, 318) and Tye (2009, 209 n23).

sounds. The experience of the source is immanent in the experience of the sound. In this case, hearing sound is similar to seeing color. We do not see things *in virtue of* seeing their colors; rather, we see them *in* seeing their colors. The experience of the tomato is immanent in the experience of its redness. The experience of redness does not mediate your visual experience of the tomato. Similarly, if we hear ordinary objects and events *in* hearing the sounds that they make, then hearing a sound involves an unmediated experience of its source. Call this *the Heideggerian view*.

Against the grain of contemporary thinking, this paper presents considerations in favor of the Heideggerian view. In particular, I argue that the Heideggerian view receives support from reflection on what auditory experience is like. This is important because, as the next section illustrates, arguments for the Berkeleyan view typically appeal to just such phenomenological considerations.¹⁰

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⁹ And it's precisely for this reason that "to hear a bare sound we have to listen away from things, divert our ear from them, i.e., listen abstractly." The idea is that we cannot fail to hear sound sources in hearing sounds, but we nevertheless have the ability to take a distinctively intellectual—and so, not merely experiential—attitude toward the sounds that we hear, regarding them apart from their material sources. As O'Callaghan and Nudds desribe it: we have the ability to "attend to sounds as independent from their sources" (2009, 15). Arguably, this sort of *listening-as* is necessary for the appreciation of music (cf. Scruton 1997 and 2009). Note, however, that the ability to perceive abstractly is not restricted to audition. We are able to do the same sort of thing in seeing color and shape, and it is arguably integral to the appreciation of much abstract visual art.

¹⁰ A terminological note: I use the verbs 'to hear', 'to auditorily perceive', and 'to auditorily experience' and their cognates interchangeably throughout this paper. Also, I often use 'to perceive' and 'to experience' as short for 'to auditorily perceive' and 'to auditorily experience'. Context should make this clear. (Mutatis mutandis for other sensory modalities.)

§3. Phenomenological Independence

While I can simply *see* horses, the Berkeleyan view holds that I can *hear* them only in virtue of hearing the sounds that they make. Why think this?

Because it might seem woven into the very fabric of perceptual phenomenology.

Consider seeing color. There is a sense in which colors visually seem to be fused with their bearers. More specifically, colors visually seem to permeate or saturate the things they qualify. In this respect, colors visually seem compresent with their bearers. To say that colors *visually seem* this way is to say that their so seeming is an aspect of visual phenomenology. Reflection on what vision is like therefore suggests that the experience of a color bearer is immanent in every experience of color, and so, that seeing an object is never mediated by seeing its color. Phenomenologically, then, objects themselves appear to be available for direct visual inspection.

By contrast, hearing sound is generally taken to have a very different character. To begin with, sounds are said *not* to be heard as in any way fused with or dependent on the material particulars that make them; in this case, sounds do *not* auditorily seem compresent with their sources. Note that this is a merely negative claim about auditory phenomenology: it tells us only that the sort of phenomenological compresence evident in vision is absent from audition. Call this merely negative claim *Weak Phenomenological Independence*, or (WPI). A related but stronger claim is that sounds are heard as independent of their material sources. This is a positive claim about auditory phenomenology: it tells us that hearing presents sounds in a certain way—namely, as source-independent. Call this positive claim *Strong Phenomenological Independence*, or (SPI). (SPI) is stronger than (WPI) in that (SPI) entails (WPI) but (WPI) does not

entail (SPI). If hearing presents sounds as independent of their sources, then sounds do not auditorily seem compresent with their sources. But that sounds do not auditorily seem compresent with their sources does not guarantee that they auditorily seem independent of them.¹¹

Both (SPI) and (WPI) find expression in the philosophical literature. For instance, O'Callaghan writes:

Sounds are unlike ordinary tables and chairs—you cannot grasp or trace a sound—and sounds are not heard to be properties or qualities of tables and chairs, since sounds do not seem bound to ordinary objects in the way that their colors, shapes, and textures do.... Auditory experience presents sounds as independent from ordinary material things, in a way that visual and tactual features are not. (2008a, 804)

In the first sentence, O'Callaghan seems to express a commitment to (WPI) only, while in the second he seems to endorse (SPI). Similarly, here is Matthew Nudds:

[T]he idea that our experience of sounds is of things which are distinct from the world of material objects can seem compelling. All you have to do to confirm it is close your eyes and reflect on the character of your auditory experience. (2001, 210)

And a few pages later: "[W]hilst sounds appear not to be part of the material world, the same is not true of the objects of sight and touch" (215). Both of these

¹¹ Thanks to Matthew Nudds for drawing my attention to the distinction between stronger and weaker forms of Phenomenological Independence in his commentary during the 3rd Online Consciousness Conference (2011, 1). At the time, I didn't fully appreciate its importance.

¹² Elsewhere, O'Callaghan writes that "a sound seems like such a different sort of thing from a commonplace material object or occurrence" (O'Callaghan 2008b, 319). This superficially resembles (SPI), but it actually doesn't speak to phenomenological independence at all. After all, a color, too, perceptually seems like such a different sort of thing from a commonplace material object or occurrence, but colors don't exhibit phenomenological independence to any degree.

excerpts seem to express a commitment to SPI, not merely to WPI. ¹³ But perhaps this is unwitting, for Nudds more recently claims that "those writers who have defended phenomenological independence defend the latter claim" (2011, 1). Perhaps so. In any case, that Nudds himself actually had (WPI) in mind in his 2001 paper is at least suggested by one of its central goals—namely, to defend P. F. Strawson's well-known claim that the experience of sound is, as such, non-spatial. According to Strawson, purely auditory experience does not provide any spatial information. Sounds, as we hear them, "have no intrinsic spatial characteristics"; for this reason, a "purely auditory concept of space...is an impossibility" (1959, 65-6). So, Strawson's claim is strictly negative: it is not that sounds auditorily seem *independent* of spatial—and so, material—reality, which amounts to (SPI), but simply that they *don't* auditorily seem spatial, and so, *can't* auditorily seem compresent with their spatial/material sources. In other words, Strawson is committed to (WPI), but not to (SPI).

Despite their differences, however, both (SPI) and (WPI) encourage the Berkeleyan view that we hear sound sources only in virtue of hearing sounds. Suppose, plausibly, that the following principle is true:

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¹³ Note that, in saying that our experience of sounds is as of "things which are distinct from the world of material objects," Nudds cannot mean simply that sounds auditorily appear *non-identical* to the world of material objects. After all, *any material particular* is non-identical to the *world* of material objects, and Nudds presumably means to capture the way in which auditory experience suggests that sounds are unusual among the furniture of world. For this reason, he presumably also cannot mean that sounds auditorily appear non-identical to or different from material objects, since this wouldn't distinguish the perceptual appearance of sound from the perceptual appearance of color or any other property-type (cf. the previous note). The only plausible reading seems to be that our experience of sounds is as of things which somehow hang apart from material reality, which is SPI.

Sonicism:

We hear non-sounds either *in* or *in virtue of* hearing sounds. ¹⁴
Sonicism is based on the idea that auditory experience is through and through a matter of hearing sound. If we hear a non-sound, this is somehow an aspect of hearing a sound. There seem to be two ways in which this might occur: (1) the experience of the non-sound could be immanent in the experience of the sound (the non-sound heard *in* hearing the sound—the Heideggerian view); or (2) the experience of the non-sound could be mediated by the experience of the sound (the non-sound heard only *in virtue of* hearing the sound—the Berkeleyan view). So, if Sonicism is true, the Heideggerian and Berkeleyan views exhaust the range of possibilities for how we hear sound sources. And with Sonicism in the background, it's easy to see how (SPI) and (WPI) encourage the Berkeleyan view.

If the Heideggerian view were true—if the experience of sound sources were immanent in the experience of sounds, and we heard sound sources *in* hearing sounds—then one might reasonably expect that auditory phenomenology would reflect this. In particular, one might reasonably expect that the experience of sound would be such that it seemed to make sound sources available for direct auditory inspection, just as the experience of color is such that it seems to make color-bearers available for direct visual inspection. However, according to (WPI), sound sources do not auditorily seem to be compresent with sounds; therefore, the experience of sound is not such that it seems to make sound sources available for direct auditory inspection. (WPI) thus discourages the Heideggerian view and, against the background of Sonicism,

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¹⁴ I ignore the complication introduced by the possibility of hearing silences, but Sonicism is easily generalized to accommodate it: we hear non-sonic phenomena either *in* or *in virtue of* hearing sonic phenomena (sounds or silences).

encourages the Berkeleyan view. The same result, of course, holds for (SPI), since it entails (WPI).

Therefore, if either (SPI) or (WPI) is true, then reflection on perceptual phenomenology provides support for the Berkeleyan view of hearing. However, I believe that Phenomenological Independence is false in both of its forms. To demonstrate this it will be sufficient to target (WPI), since (SPI) entails it. My argument is in two stages. First, in §4, I argue for a phenomenological principle that is in deep tension with (WPI). Finally, in §5, I argue against (WPI) directly.

§4. Phenomenological Intimacy

On perceiving something that you do not recognize, it is fitting to ask, "What is that?" Sid hears a sound and asks, "What is that?" Pia answers: "That's my neighbor breaking bottles." Sid and Pia both refer demonstratively to whatever is making the noise; and Pia's claim is true just in case it is, in fact, her neighbor breaking bottles.

Adherents of the Berkeleyan view will typically explain this as follows: Sid and Pia refer to the sound source by "deferred ostension." After all, the only immediate object of perception—and so, possible object of primitive demonstrative reference—is the sound. Michael Martin writes:

In the case of audition, the primary objects of demonstrative identification are sounds, associated with phrases such as 'that barking' or 'that noise'. One may pick out the source of the sound via picking out the sound itself—we might then understand the demonstrative expression, 'that dog' as involving deferred ostension, perhaps as the descriptive phrase, 'the dog which is actually the source of this sound'. There is a clear contrast between the case of auditory perception of sounds and their sources with the case of colour or shape detection in the case of vision. We do

not think of visual demonstrations of objects as proceeding via a demonstration, 'the object which possesses that colour'. (1997, 93)¹⁵

Martin suggests that auditory experience alone does not enable us to make primitive demonstrative reference to sound sources. Yet his support for this

seems to be that we typically *think* of purely auditory demonstrations of sound sources as instances of deferred ostension. But is this true?

Consider a paradigm case of deferred ostension. Jonas points at a cloud of smoke rising over distant treetops and says, "That's a big fire!" and so refers demonstratively to the fire. But note that Jonas isn't pointing at the fire, he's pointing at the smoke. He can't point at the fire, since it's not in view (though he can point toward it). His demonstrative reference to the fire is a case of deferred ostension: it proceeds by means of a descriptive phrase such as 'the fire that is the source of that smoke.' Consequently, his ability to refer to the fire, and our ability to understand him as doing so, is essentially underwritten by knowledge of the causal relationship between fire and smoke. In virtue of this knowledge, we experience the smoke as a sign of the fire. But is this model plausibly applied to auditory experience?

No: we do not typically think of or experience sounds as mere signs of their sources. When Pia enters the house and calls out, "Sid, I'm home!" Sid does not think of or experience this as a *sign* of Pia's presence; rather, it seems to him that he simply *hears Pia call*. In the example above, Jonas doesn't experience the fire as being in view; but Sid *does* experience Pia's calling out as being in auditory view. In particular, it auditorily seems to Sid that he can make primitive demonstrative reference to Pia (and to her calling). Contrary to what Martin says,

¹⁵ Also see Nudds (2001, 222) and Campbell (1997, 65-6).

we do not typically think of purely auditory demonstrations of sound sources as instances of deferred ostension. This is because it auditorily seems that sound sources are available for primitive demonstrative reference, a point recently emphasized by O'Callaghan (2008, 319).

This view of auditory phenomenology can be summed up in the following principle:

Phenomenological Intimacy:

Hearing presents sound sources as available for primitive demonstrative reference.

The question is: is this compatible with Phenomenological Independence, in particular, with (WPI)? Strictly speaking, yes. But there's a catch.

To begin with, let's consider more closely what it means to hear sound sources as available for primitive demonstrative reference. Intuitively, something is available for perceptually-based primitive demonstrative reference only if it is perceptually *given*. This is the point of Russell's notion of *acquaintance* as a demonstrative-thought-enabling relation to an object. ¹⁶ So, if Phenomenological Intimacy is correct, then it auditorily seems as though sound sources are things with which we are auditorily acquainted. That is, to use the language of the previous section, it auditorily seems as though sound sources are available for direct auditory inspection. But how could this be compatible with (WPI)?

According to (WPI), sounds never auditorily seem compresent with their sources: it never seems that an experience of a sound source is simply immanent in hearing the sound that it makes. So, (WPI) requires only that, if sound sources

¹⁶ For Russell's view of acquaintance and its relationship to demonstrative thought, see Russell (1992). For more recent discussion, see, for instance, Campbell (2002). Thanks to Matthew Nudds for encouraging me to introduce the topic of acquaintance into this discussion of Phenomenological Intimacy (2011, 2-3).

do seem to be auditorily given (Phenomenological Intimacy), then they can't auditorily seem to be given in hearing sounds; instead, they must auditorily seem to be given alongside sounds. So, we can maintain both (WPI) and Phenomenological Intimacy provided that we're willing to adopt a bipartite view of auditory phenomenology. The problem is that doing so would require that we either reject Sonicism—since it is based on the idea that audition is through and through a matter of hearing sound—or accept that auditory phenomenology is illusory. 17 But not only is Sonicism highly plausible, it gains its plausibility primarily from reflection on auditory phenomenology. Therefore, neither option for reconciling (WPI) with Phenomenological Intimacy seems viable. Arguably, then, retaining a plausible view of auditory phenomenology requires choosing between (WPI) and Phenomenological Intimacy. In my view, this is sufficient to make (WPI) deeply unappealing. Nevertheless, adherents of the Berkeleyan view will choose instead to reject Phenomenological Intimacy. Fortunately, however, there are additional reasons to reject (WPI), and so, Phenomenological Independence *tout court*. To these I now turn.

§5. Phenomenological Binding

Here's how I see it—or rather, *hear* it. Phenomenological Independence is false in both of its forms. For starters, sounds do not auditorily seem to be independent of ordinary objects and events, as (SPI) requires. Furthermore, contrary to (WPI), sounds auditorily seem compresent with their sources just as much as colors visually seem compresent with their bearers. That is:

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¹⁷ Note that Sonicism rules out the possibility of hearing non-sounds *without* hearing any sound as well as the possibility of hearing non-sounds *alongside* sounds.

Phenomenological Binding:

Hearing presents sounds as bound to, or fused with, their sources.

If auditory phenomenology is non-illusory, then Phenomenological Binding entails that, in hearing sounds, we hear their sources, which is the Heideggerian view of hearing. So, if Phenomenological Binding is true, it provides strong prima facie support for the Heideggerian view.

Understanding how Phenomenological Binding could be true requires appreciating that, strictly speaking, objects do not make sounds—events do. The static bell is silent; striking it elicits sound. While you may say, "That's the bell," in identifying a sound source, such a claim is implicitly understood as elliptically picking out an event by picking out an object involved in it. The idea that only events can make sounds is part of our ordinary, untutored conception of sound, and ignoring it can lead to confusion. Thinking of the bell as what makes the sound easily leads to thinking of the sound as independent of its source, since, after all, they have very different persistence conditions. On the other hand, if we think of sound sources as events, then we don't have this problem. When the event ends, the sound ceases. Moreover, as the sound changes, the event does, too. And you seem to hear the change in the event, but not merely *in virtue of* hearing a change in the sound; rather, you seem to experience the change in the event *in* experiencing the change in the sound. (This is true even if you don't know in what way the event has changed.)

Suppose that Phenomenological Binding is correct. The question remains: *in what sense exactly* do sounds auditorily seem bound to their sources? There are two main possibilities: (1) like colors, sounds auditorily seem bound to their sources *qualitatively*, as properties; and (2) unlike colors, sounds auditorily seem

bound to their sources *mereologically*, as parts to wholes. According to O'Callaghan, sounds are individuals, and they are heard this way, too (2008a). In this case, acknowledging Phenomenological Binding requires adopting (2). However, this seems to me an implausible view of what hearing is like. The sound does not auditorily seem to be *part* of what happens when the hammer strikes the bell; rather, the event auditorily seems to have a certain feature: *it's noisy*. On this view, sounds auditorily seem to permeate or saturate the events that cause them, just as colors visually seem to permeate or saturate their bearers. And just as we seem to see *colored objects* rather than objects and their colors, we seem to hear *noisy events* rather than events and their constituent noises. But whatever way we decide this issue, the critical point is that sound sources auditorily seem to be given *in* hearing sounds. Phenomenological Binding is, in any form, incompatible with Phenomenological Independence.

Note, too, that Phenomenological Independence seems to have some seriously undesirable consequences. According to (SPI), hearing presents sounds as independent of their material sources. What exactly would it be to hear sounds in this way? It would be to hear them as only contingently related to their causes—as if they might not have been caused by material events at all. But this is incoherent. Sounds are not merely contingently caused by material events. To be caused by an appropriate sort of material event is part of what it is to be a sound. So, to hear sounds in the way that (SPI) requires would be to hear sounds as if they weren't sounds at all, but something else entirely. Surely this is an

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¹⁸ Thanks to Casey O'Callaghan for helpfully introducing the distinction between two different ways of hearing sounds as bound to their sources (2011, 2-3). A third but, I think, implausible possibility is: (3) sounds auditorily seem bound to their sources, but the manner of apparent binding is non-specific.

undesirable result. In any case, it entails that auditory phenomenology is illusory: sounds are heard as if they were something other than they are.

But perhaps (WPI) can do better. According to (WPI), sounds are not heard as independent of their material sources; instead, auditory experience simply fails to comment on the relationship between sounds and material reality. Sounds are heard neither as connected with nor disconnected from ordinary objects and events. But then where do we so much as get the idea that things make sounds? As Nudds argues, if this Strawsonian view of auditory phenomenology is correct, it can only be in virtue of *multimodal* experience that we experience sounds as related to the ordinary events that we see or feel (Nudds 2001). We see the hands come together, and we hear the clapping sound. At best, then, sounds "appear to be, as Strawson says, correlated with the material world, but they do not appear to be part of it" (Nudds 2001, 215). But correlation is of course a *contingent* relationship. Thus, Nudds continues:

We can imagine a world of sounds which is dissociated from the world of material objects; we can imagine, too, the sounds we actually hear apart from the things that we see and touch. There appears to be nothing intrinsic to the sounds that we actually hear to connect them with the world of sight and touch. (215)

Consequently, this view faces the same problem as (SPI): in claiming that we perceive sounds as only contingently related to their sources, it commits itself to treating the experience of sound as illusory.

Moreover, (SPI) and (WPI) are incompatible with what seems to be a basic datum of auditory phenomenology: the apparent locatedness of sounds. As O'Callaghan has discussed at length, sounds *auditorily* seem to be located (2007, ch. 3; 2009b, §3). However, this could not be true if, as on (SPI), sounds auditorily seemed to be independent of their material sources (and so, of material things

generally), or if, as on (WPI), auditory experience simply failed to comment on the relationship between sounds and their material sources. If sounds are heard as located, then they are heard as *part* of the physical world. (Again, however, the question remains: what sort of part? Are they heard as properties of events? Or as constituents of them? Properties, I think.) In any case, the appropriate response to these difficulties is to reject Phenomenological Independence *tout court*, and to embrace Phenomenological Binding.

If Phenomenological Independence is false, then why have so many philosophers believed it true? I think that they have been misled by the relative epistemological poverty of hearing. It happens that we see things that we do not recognize, but it is far more common that we do not know exactly what we hear. You turn around on hearing a sound behind you to know better what you have heard. The sheer difficulty of identifying many events by their sounds is what leads us to investigate by other means. And it is easy to understand how this might lead us to think of hearing as presenting sounds absent their sources: after all, it seems that I know all about the sound, but I know so little about its source! Another way to put the point is that the relative epistemological poverty of hearing encourages us to adopt the sort of intellectualized or "abstract" attitude toward sounds that Heidegger describes as "listen[ing] away from things" (1977, 152). Having taken this attitude, we will hear the sound as a purely qualitative something with no apparent connection to material reality. But

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¹⁹ Note that the analogy with color experience holds here, too. Imagine trying to identify objects solely on the basis of their colors, without much, if any, information about their shapes or locations. The difficulty is obvious. As in the case of hearing, you would often wish to employ other means, especially touch, and, if this sort of thing occurred often enough, you might be led to think of vision as presenting colors as separate from their bearers; but this, of course, would be a mistake.

when we're interested in what hearing is like, we're interested first and foremost in the experience of the "engaged" listener, not in the different attitudes that a "disengaged" listener can take toward what he hears. And I think that the more we reflect on the phenomenology of engaged hearing, the more we come to see that Phenomenological Binding is correct.

Along these lines, Phenomenological Binding is encouraged by a simple imaginative exercise. Imagine striking a bell. Now try to imaginatively subtract or peel away the sound. I think that this is just as difficult as picturing a tomato and trying to imaginatively subtract or peel away its color. Only if we "listen away" from the hammer-strike and the vibrating bell does it seem as though we can perform this imaginative feat. From the engaged perspective, sounds auditorily seem no less bound to the events that cause them than colors visually seem bound to their bearers.²⁰

A final, powerful point in favor of Phenomenological Binding is that it is a natural corollary of Phenomenological Intimacy. Indeed, Phenomenological Binding *explains* Phenomenological Intimacy: we hear sound sources as available for primitive demonstrative reference *because* the experience of a sound source seems immanent in the experience of a sound. By contrast, as discussed in the previous section, the advocate of Phenomenological Independence must reject Phenomenological Intimacy (on pain of rejecting Sonicism). To do so while maintaining that auditory phenomenology is illusory (as argued above) and in the face of a plausible explanation of why we should have been tempted to

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²⁰ This is consistent with the idea that we can think of a sound without thinking of it as having any particular cause. After all, we can think of a color without thinking of it as having any particular bearer. For, just as qualitatively the same color may be borne by very different objects, qualitatively the same sound may be caused by very different events.

endorse Phenomenological Independence in the first place—this is surely a pill too bitter. The lesson to draw is that reflection on the phenomenology of auditory experience provides prima facie support for the Heideggerian view of hearing: we hear sound sources directly, *in* hearing the sounds that they make—not, à la Berkeley, merely *in virtue of* hearing those sounds.²¹

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