Experience of the world in time

Alva Noë

Look at a tomato. It is present to you, as a whole, now, even though parts of it are hidden in space. Notice, in particular, that you now have a perceptual sense of the presence of the tomato’s back even though you do not now see it. Objects – even tomatoes – are, in a sense, timeless – they exist, all at once, whole and integrated. Indeed, it is just this fact about objects – their timelessness – that makes it puzzling how we can experience them as we do. In the language of traditional philosophy, objects are transcendent; they outstrip our experience; they have hidden parts, always. When you perceive an object, you never take it in from all sides at once. And yet you have a sense of the presence of the object as a whole at a moment in time. In what does this perceptual sense of the object’s presence consist?

Perceptual presence is the problem for the theory of perception (Noë 2004: ch. 2; 2006). We don’t advance toward a solution by observing that we judge, or infer, or guess that the back of the tomato is present, that we don’t really see it. First, that we don’t actually see the back of the tomato is our starting point. The problem is to understand in what our perceptual sense of the thing’s hidden presence could consist if it does not consist in the fact that we see it. Second, as a phenomenological matter, there is a difference between thinking that something out of view is present (e.g. that there is money in the purse), and its looking as if something out of view is present (e.g. that the tomato is not a mere tomato-façade). What we want is an account of the perceptual presence of that which is not perceived.

The solution to the problem of perceptual presence is achieved by noticing that the way the unseen portion of the tomato is visually present is not, as it were, as somehow mysteriously seen without being seen, or as represented visually without being seen. Rather, the back of the tomato is present, now, in that it is available now. We have access now to it. And not just any old access. We experience the presence of what is out of view by understanding, implicitly, that our relation to what is out of view is such that movement of the eyes, or the body, brings it into view, and such that movements of the thing itself make a sensory difference to what we experience. The hidden portions of the object are present in experience now, even though we don’t now see them, because we are now coupled to them in a special, immediate, familiar, sensori-motor manner. Sensori-
motor coupling is an achievement of contact. It is the achievement of contact in which perceptual awareness consists.

Andy Clark (2006) has recently questioned whether this sort of presence-as-skill-based-access view can be right. He begins by adducing an example of Sean Kelly’s (ms: 1):

There you are at the opera house. The soprano has just hit her high note – a glass shattering high C that fills the hall – and she holds it. She holds it. She holds it. She holds it. She holds it. She holds the note for such a long time that after a while a funny thing happens: you no longer seem only to hear it, the note as it is currently sounding ... in addition, you also seem to hear something more ... the note now sounds like it has been going on for a very long time ... what you hear no longer seems to be limited to the pitch, timbre, loudness and other strictly audible qualities of the note. You seem in addition to experience, even to hear, something about its temporal extent.

Clark and Kelly are right to think this is a genuine phenomenon; I agree with Clark moreover that Kelly’s description of the phenomenon is phenomenologically true to the facts. He gets it right. When you hear the singer’s sustained note, you not only hear the way it sounds now, but you also hear it as having temporal extent. The note you hear sounds as if it has been going on for a while; it has that quality. This sets the stage for Clark’s challenge. He writes:

[The case poses a prima facie challenge [to the ‘presence-as-skill-based-access’ approach]. If the perceptual experience depicts the sound as, in some real sense, right now (this instant) sounding ‘as if it has been going on for a long time’, then this is one case where we cannot, even in principle, unpack that aspect of the phenomenology by invoking capacities of access or exploration. For that which makes the note long is all in the past (we can assume it is ending right now) and simply cannot be ‘present to perception as accessible’. (2006: 63)

The argument is pointed. One cannot explain the perceptual sense of the presence now of musical episodes that have elapsed in time by means of access to those episodes (sensori-motor or otherwise), for the episodes are over, past, done with, inaccessible. But then, Clark can be read as asking, what is left of the idea that sensori-motor skills play a constitutive role in making the world present in experience?

Clark is right that we can’t understand the way in which the past is present in our current experience in terms of skill-based access, but this is no skin off the enactive, sensori-motor approach. For the enactive approach is not committed to any such account. To see why, consider that
what motivates the skill-based access account of the perceptual presence of hidden parts of things we see is the phenomenology itself. That’s what it feels like. It certainly doesn’t feel as if you can see the back of the tomato, or that you merely think it is there. It feels as if you can almost see it, as if it is there to be seen, as if you know how to bring it into view. These are all things you can be wrong about, of course. But fallibility is not what’s at issue. What’s at issue is the character of the perceptual presence of the partially hidden parts of the things you see.

The phenomenology of the would-be presence-in-absence of the already elapsed portions of the sustained note is altogether different. Simply stated, there is not even a first-blush sense in which the elapsed sounds seem to be going on now. There is a sense that you can now hear the temporal extent of the sustained note. But it rides roughshod over the phenomenology of this phenomenon to say that the past sounds are now present or that they are now accessible. What is present to you now is the note you now hear. It mischaracterizes this phenomenon to say that it now sounds to you as if the past-portions of the note are audibly present, to say that you now have access to them. What needs to be explained is not the apparent presence of genuinely absent sounds. Rather, what needs to be explained is that the note you now hear sounds as if it has been going on for a long time. That is, what we need is a way of accounting for the perceptible quality of temporal extent without supposing, incoherently, that the past is present now, or that we now have access to what has already happened. It begs the issue and distorts the phenomenology to think that this is a matter of the qualitative presence of now elapsed sounds.

A clue to the needed account: the difference between objects and events. Objects, as already noted, are timeless in the sense that they exist whole and complete at a moment of time. Objects have no temporal extent. Events, in contrast, are creatures of time. They are temporally extended in nature. They are never whole. At the beginning, they have not yet achieved a conclusion. At the end, their beginning is done with. To suppose that the beginning of an event would be available, and so present, at its conclusion, in the way that the rear of the tomato is present, would be to suppose, confusedly, that events were in fact object-like structures. This would be to obscure the basic difference between objects and events.

Now back to the sustained note: Crucially, to perceive the note as sustained for a period of time is to experience something happening, it is to experience an event. It is not to experience something whose hidden parts are present but out of view. It is to experience something whose past and future parts are precisely not present. So it turns out that Kelly’s question – In what does our perception of the temporal extent of the sound consist? – is in fact a special instance of the more general question,
How it is possible, at a moment in time, to experience an event, something which has no existence at a moment in time? Or more pointedly: In what sense can an event, which is fleeting and partial, be present to experience at a moment in time?

Fortunately, there is an answer ready to hand. You don’t need access to past sounds to experience the sound event (the temporal extent of the sustained note). What you hear when you experience the temporal extent of the note is not the sounds that have already passed out of existence (any more than you hear the sounds that are yet to come). What you experience, rather, is, to a first approximation, the rising of the current sounds out of the past; you hear the current sounds as surging forth from the past. You hear them as a continuation. This is to say, moving on to a better approximation, you hear them as having a certain trajectory or arc, as unfolding in accordance with a definite law or pattern. It is not the past that is present in the current experience; rather, it is the trajectory or arc that is present now, and of course the arc describes the relation of what is now to what has already happened (and to what may still happen). In this way, what is present, strictly speaking, refers to or is directed toward what has happened and what will happen. Just as in a way the front of the tomato is directed toward the back – indicates the space where the back is to be found – so the present sound implicates a temporal structure by referring backwards and forwards in time.

Consider that there is no sensation or physical magnitude corresponding to the experienced presence of the back of the tomato. In the same way there is no sensation or physical magnitude corresponding to the presence of temporal extent. Kelly emphasized this in his original formulation. ‘What you hear no longer seems to be limited to the pitch, timbre, loudness and other strictly audible qualities of the note’ (ms: 1). The temporal extent of the sound is not a feature of the acoustic signal. The arc of the sound, or of the event, is an arc of meaning. It is an intentional arc (to use Merleau-Ponty’s term). When you hear the singer’s sustained note, you do not experience the acoustical properties of the sound, anymore than you experience the acoustical properties of the words you hear when you understand speech. In the linguistic case, you hear meanings themselves, you hear what is said. In the case of the singer, what you actually hear is the singer herself, her voice, her vocal action – what she is doing. It is the fact that the singer is doing something, performing an action, that fixes the relevant temporal horizon and intentional arc. Not any old sequence of occurrences is an event in this sense; events are sequences with a sense; they unfold in a direction according to a rule. A dancer’s movements, a baseball player’s throw, a singer’s song, a speaker’s utterance – these are meaningful events; the past and future are not present in them,
but they are implicated by them. The able perceiver appreciates this implication.

For mere sensory stimulation to rise to the level of experience of something happening, you must understand the significance of that stimulation. Your perceptual achievement depends on background knowledge. The enactive, sensori-motor approach emphasizes sensori-motor knowledge. This knowledge is fundamental, I think. But there is no sharp line to be drawn between implicit understanding of the sensory effects of movement (sensori-motor knowledge) and other forms of knowledge that get drawn on in experience, as I argue in Action in Perception (Noë 2004). Consider the case of language. In so far as we hear language, or see it, then linguistic perception depends on our possession of auditory and visual sensori-motor skills. It is the distinctive character of these skills that in part explains the difference between seeing and hearing (O’Regan and Noë 2001; Noë 2004). But the deployment of these skills is not alone sufficient for linguistic comprehension. Linguistic understanding is also required, as is a wealth of relevant cultural and contextual knowledge.

One consequence of this to which Clark (2006) draws attention is that, to a first approximation, there are no new experiences (a claim explicitly defended in Noë 2004). Clark writes:

there is a general puzzle, for [sensori-motor] accounts, concerning first time or genuinely novel experiences. In such cases there seems to be no background of sensori-motor understanding available to support (to constitute, on these accounts) the perceptual experience. But there seems to be no reason (apart from prior acceptance of the very model that the examples aim to call into question) to assume that we cannot experience a totally novel sound stream as structured, or a novel shape as shaped, or a novel taste as tasting thus-and-so, and so on. (00)

The impossibility of genuinely novel experiences is not a dogmatic consequence of the theory, but a discovery for which there is independent support. A strong case is that of language. Unless you know a language, it is difficult, maybe impossible, even to hear the relevant speech sounds. A truly foreign language is very noisy. Not so noisy as to prevent one from identifying it as language, but far too noisy to enable one to hear where one word stops and another begins, say. It is only against the background of familiarity that it is possible to experience language properly. Another strong case, consider the long-term blind who have undergone cataract surgery to restore sight (Noë 2004). It is well known that the surgery restores normal patterns of visual stimulation but does not yet enable normal visual experience, for the latter depends on further understanding of sensory stimulation.
We can bring out the way in which experience is possible only in a setting of familiarity, by the everyday example of listening to music for the first time, even music in a genre with which you are familiar. You play a record through. The music is unfamiliar, strange; the album exhibits a kind of opacity. As you become familiar with the music, you begin more fully to experience it. Your experience becomes richer. Where the songs were thin and meaningless before, they are now structured, complex and motivated. Without acquaintance with the music itself, you were, in effect, unable to hear it. We can see this same phenomenon at work, but in a more extreme form, when what are at stake are radically unfamiliar musical styles. Many people find the music of other cultures barely counts as music; and it is common for people to describe experimental, ‘new music’ as mere noise.

Schubert is said to have claimed: ‘It is easy to write a good song. You choose a melody that everybody recognizes but that no one has ever heard before.’ He understands the basic fact that we can only expand our experiential repertoire piecemeal, by nudging forward holding hands with what is familiar. For the most part, we are simply incapable of new sights, new sounds, new experiences. What we can perceive is limited to what we understand. This is not to deny Clark’s claim that he experienced the train’s lonesome whistle the first time he heard it, but it is to remind us that that experience took place in a setting of background understanding (sensori-motor and otherwise). What he heard, after all, was not just a sound, but a whistle, that is, the sound of the train as it whooshed by in the night.

This brings us to a question that lingers unanswered. Does the account sketched here of the perceptual presence of events conform to a skill-based access account? That is, can we say, in this sort of case, that one’s sense of the presence of the event is a sense of one’s skill-based access to the event? Yes. But we need to be very careful in our formulation of what we thus gain access to. When you experience the singer’s song, it is the singer herself, as we have noticed, that you hear. Likewise, when you hear the train’s lonesome whistle sound, it is the speeding train to which you thus gain access. Perception is an activity of sensori-motor coupling with the environment. It is not a type of engagement with mere appearances or qualia. When you attend to the sustained note, what you are thus able to establish contact with is the singer’s continuous action of holding the note. The singer and what she’s doing are available to you thanks to your situation and your skilful access. (This may be related to a more fundamental fact: that objects are primary in our experience; that experience of events depends on a more basic sensitivity to the presence of objects.)

For philosophers there may be a temptation to think of experiences as a kind of logical act, comparable to an act of judgement or to assertion.
We find it natural to think of experiences as representations. But experiences are not acts, in this sense; they are not representations; they are activities, events themselves; they are temporally extended patterns of skilful engagement. When you perceive an event unfolding, it is not as if you occupy a dimensionless point of observation. You live through an event by coupling with it. What you experience is the event, as it plays out in time. You experience the singer’s song, and the ball player’s play, and the dancer’s dance, by tracking what they do over time. The very experience is a world-involving achievement of control and attention.

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References
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A note on the irrelevance of probabilistic irrelevance

Neil Tennant

In his book Bayes or Bust?, John Earman (1992: 63–65) seeks to set out the Bayesian reasoning that would vindicate the pre-theoretic intuition that a theory receives confirmation from having its observational predictions borne out by experience.

Here is the intuition, spelled out formally, where $H$ is the scientific hypothesis in question, $K$ is the background knowledge, and $E$ is the observational prediction that in due course becomes evidence:

(a) $H, K \vdash E$ (whence $\Pr(E|H \land K) = 1$)
(b) $0 < \Pr(H|K) < 1$ (whence $K \nvdash H$ and $K, H \nvdash \bot$)
(c) $0 < \Pr(E|K) < 1$ (whence $K \nvdash E$ and $K, E \nvdash \bot$).

By Bayes’s Theorem,

$$\Pr(H|E \land K).\Pr(E|K) = \Pr(E|H \land K).\Pr(H|K).$$