

Author's manuscript of Comment on Lehar, plus subsequent exchanges

Note on the published and web-mounted texts below

Below are both my comment published in BBS and my riposte to the Author's published Reply to Commentary (text that Lehar kindly mounted on his website, alongside a further response from him and his proposal of an experiment).

From this and further correspondence with Lehar about the history of painters' discoveries about perspective, I have concluded that the original article arose from lack of appreciation of logicomathematical difficulties inherent in constructing two-dimensional representations of three-dimensional views. – DAB

Booth, D.A. (2003). Phenomenology is art, not psychological or neural science.
[Comment on S. Lehar, Gestalt isomorphism and the primacy of subjective
conscious experience: a Gestalt Bubble model]
Behavioral and Brain Sciences 26, 408-409.

Phenomenology is art, not psychological or neural science

To see something is an achievement: the claim to have performed correctly can be tested. Indeed, we can investigate how that task of visual recognition was carried out successfully. We can try to infer the information-transforming (cognitive) processes mediating the performance by varying what is visible and observing changes in response (i.e. doing psychophysics): this is an example of psychological science. The physical "engineering" of these processes of seeing can also be studied by varying the optical input but this time observing what is projected on the retina and what happens in the CNS from the rods and cones to V1 and beyond. Considerable progress has been made in relating cellular neurophysiology to the psychophysics of at least elementary features of the visible world. It is not easy to get psychophysical evidence that distinguishes between a cognitive process being in consciousness and transiently out of consciousness, although it is clear that some visual information processing never enters consciousness. When we can't say what it is the mind, we can't expect to construct a theory of the neural basis of that mental function. Lehar's complaint that neuroscience fails to explain visual consciousness is vacuous.

Furthermore, what we know to be the case through use of our senses is (by definition) a very different kettle of fish from the contents of consciousness, in the sense of how things seem to us while we discount our beliefs about how they actually are. The systematisation of expressions of subjective experience is an art-form. Lehar's diagrams, his field equations and the major part of his verbal exposition are sophisticated elaborations of the sort of thing that I draw when I wake up and try to sketch the visual imagery that I was experiencing as I woke. His and my graphic, algebraic and verbal efforts cannot be wrong or right: they merely express how it appeared to us to be.

He says that his visual experience is holistic. I can empathise with that impression. Yet I also have visual experiences that are not holistic. I bet that he does too but chooses to ignore them. Any artist may do that, on the grounds that it would spoil the picture or detract from the story. However, that's aesthetics, not science.

I'm not being positivistic. On the contrary, it is Lehar who commits the empiricists' and rationalists' epistemological fallacy of trying to build public knowledge on the

basis of impressions or ideas that seem indubitable because they are private and so can't be wrong - but then neither can they be right. Lehar writes: "These phenomena are so immediately manifest in the subjective experience of perception that they need hardly be tested psychophysically" (page 52 of 66). [His polysyllabic description of 'these phenomena' can be put] In words of one or two syllables, "What appears to seem to seem in seeing is so clearly clear that there is no need to test it against success at seeing."

Lehar's paper is built on equivocation in use of the word "perception" between the objective achievement and subjective experience. (The word "conscious" in his title is redundant: experiencing subjectively is the same as being conscious.) Like most philosophers, mathematicians and physicists who expatiate on consciousness, he shows no sign of having considered what was shown and how it was shown by any psychological experiment on the perceiver's achievement in a visual task. He also ignores the philosophical achievements that followed from the later Wittgenstein's debunking more than 60 years ago of the powerful and still pervasive fallacy of supposing that when a patch that is red in the world we all live in is seen *as* red, that lets one into another world of appearances, seemings, subjective experiences, conscious qualia or whatever, sitting inside our mind or even inside our head or brain if we are foolish enough to look for consciousness among the neurons (Booth on Puccetti & Dykes; Disappearance of Introspection book). This is a misunderstanding of the grammar of the verb "to seem." When we see something but have reason to doubt that our perception is correct, then we may retreat to claim that it seems to be so. The patch seems as though it is red.

The grammar of 'seeming as though' or 'seeing as' also shows what subjective experience is isomorphic to. The syntax of 'as' is the figure of speech known as simile. Subjective visual experience is holistic, at least at times, because the visible world in which we operate successfully in fact is 'holistic' in its optics. Black holes are pretty uncommon in everyday life. Lehar actually says this on page 10 of 66, although he has hidden the point from himself by a string of the conceptual mistakes that Wittgenstein (1953) cut through. "The perceptual experience of a triangle cannot be reduced to just three phenomenal values but is observed as a fully reified triangular structure that spans a specific portion of perceived space." Delete reference to the contrary and all the redundancies and we get, "The perceptual experience of a triangle ... is ... as ... triangular ..."

A triangle is not a triangle in any world unless it "emerges" "whole," "real," and "invariant." If a Gestalt is taken to be a subjective experience (rather than a perceptual performance), then it is consciousness simply of "seeing the world as it is."

There is no space in this comment to dissect out the multitudinous errors built on this fundamental misorientation. Suffice to deal with the absurdity of Figure 2. Lehar shows phenomenological slapdash, if not downright dishonesty. You know and I know that he has never ever looked one way down a road at the same time as looking the other way. So it is rank self-deception to write that "the two sides of the road must in some sense be [subjectively] perceived as being bowed" (page 21 of 66) as in the diagram. His Bubble bursts.

Booth, D.A. (1978). Mind-brain puzzle versus mind-physical world identity. Commentary on R. Puccetti & R.W. Dykes: Sensory cortex and the mind-brain problem. Behavioral and Brain Sciences 3, 348-349.

Booth, D.A., & Freeman, R.P.J. (1993). Discriminative measurement of feature integration in object recognition. Acta Psychologica 84, 1-16.

Lyons, W. (1986). The disappearance of introspection. MIT Press, Cambridge MA

Wittgenstein, L. (1953). Philosophical investigations. Blackwell, Oxford.

Booth's riposte to Lehar's reply to his comment in *BBS*

Booth's Response to Author's Response to Open Peer Commentary on Gestalt Isomorphism and the Primacy of the Subjective Conscious Experience: A Gestalt Bubble Model

Steven Lehar

Behavioral & Brain Sciences 26(4) 375-444.

Lehar is so profoundly misoriented epistemologically that he imposes wording on me that I did not use. I precisely did not say that his account was "wrong": I wrote that he is self-deceived or dishonest in expressing in this way how things seem. The bad art continues in his reply: he paints the sides of the road as seeming "straight" each way and having curvature "in between", whereas the straight sides seem straight wherever I look at any moment - Lehar is back at pretending that his bubble diagram expresses his or my or anybody's experience.

Booth's riposte (above) to Lehar's specific response to his comment fully addresses also the general claim on which Lehar bases his Response to all commentators: Lehar's "paradigm" assumes an epistemology that was first refuted by Wittgenstein and Popper in the 1930s, by means of considerations that I and some of the other commentators summarised and have not been overturned since among professional philosophers of epistemology, science or mind. Lehar also refers to Booth's comment early in his Response but in terms that equally fail to appreciate his own basic misorientation epistemologically. Consequently Lehar makes further remarks *ad hominem* to my comment that are erroneous, as I point out after the relevant extracts from the start of Lehar's Response to commentators.

With respect to **Lehar's** general complaint (**R1** in the published version of the paper) that

"Unfortunately, many of the commentators failed to grasp the paradigmatic nature of the proposal and restated their own paradigmatic assumptions as if they were plain fact, thus committing the error of *petitio principii*, assuming from the outset that which is to be proven."

Booth ripostes further: Others may have argued that Lehar's view is "incredible," but not I. My comment was that it is a terrible mistake to claim that the Bubble model is

neuroscience. My argument was that this model is not any sort of science; it is art, and bad art at that.

My comment specifically stated that the later Wittgenstein had refuted the epistemological assumptions of Lehar's "paradigm." I cited several examples of the fallacy permeating the target article, that introspection gives new knowledge. I explicitly stated that Lehar's treatment was so riddled with such errors that there were far too many to spell out within the word limit. Lehar plainly does not understand this fundamental critique of his "paradigmatic proposal" or that the only assumption made by Wittgenstein and subsequent philosophers, in exposing the fallacy in such foundationalist epistemologies, is that ordinary language succeeds. If Lehar and others profess not to share that "initial assumption," they deny themselves the right to expect anybody to attend to the marks that they make on the pages in BBS or anywhere else.

So Lehar shows his incomprehension of the basic criticism of his modelling by his claim in Reply that "Booth says not a word about the epistemological difficulties ... of the view he defends." The rest of this page that I've given myself to extend my riposte has space to disentangle some more knots in Lehar's position - namely, those in this first part of his reply to my comment.

First, of course visual consciousness has "information content" and the brain "registers" that information. The question that Lehar refuses to pose to himself is what the information is about which is represented by physical processes in the brain that are causally integrated through the eyes to physical processes in the environment (Booth, 1978). If the subjective experience is of a red surface, then the spatial structure (and the colour: where's that in a merely spatial "model" of visual perception?) is of the red surface "known to science" (and to art, and indeed also to "religion"), unless the experience is illusory.

Next, the foolishness in looking for consciousness among the brain cells is not just in looking inside the head. The foolishness is in looking anywhere for an "it", or for a "seeming", as though being conscious of straight (or red) were a thing with extension or location (or colour) anywhere other than in the public world of space (and colourings) that is normally seen correctly. So we have to ask if Lehar is attending to the plain meaning of his words when he writes in his Reply that "what we are seeing really is in our brain." This is a paradigm case of the distressed buzzing of "the fly in the bottle" that Wittgenstein worked so hard to set free.

The *petitio principii* is Lehar's. The paradigm he proposes was shown to be utterly incoherent long ago by critical examination of its presuppositions without assuming any other particular paradigm. Lehar is free to show his mathematical literature and drawings to anyone who wants to look at them but he has no sound basis for claiming that they are science of the brain, of visual perception or of the awareness of sights.