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What's the difference: some riddles. Once upon a time there were two radios, as alike as two radios could be, right down to the location of the needle on the dial, and yet one was playing a Beethoven symphony and the other was playing a weather forecast [VI]. How could this be? Answer: one was in Tokyo and the other was in New York. Spatial location does not always make a big difference, but it always makes a difference [III].

Puccetti & Dyke's Figure 5 does not represent a puzzle at all. Take any three things, however similar, and ask yourself: in *how many ways* do they differ? The answer will always be: in as many ways as you have patience to list – infinitely many, in fact. So there is no "logical" way to be made from *similarities* in brain tissue. To determine whether the authors have a genuine problem here, we must know what similarities and differences are "important" and why [VII]. For this we need an empirical theory, or at least a theory-sketch, but the authors focus their argument on theories that make a most dubious assumption: that experiences or sensations (or other mental events) are events that owe their identity to their *intrinsic* properties, not their functional or causal or otherwise relational properties. I am not sure that any other philosopher of mind has ever taken the intrinsicalist position seriously, either to defend it or, like Puccetti, to use it as a premise in an argument for dualism. For those of us who have always supposed that nothing could be a visual experience of a red circle, say, without being a highly interrelated part of an immense system of other things, the arguments advanced by P & D are idle.

It all comes down to this: "Suppose in some future age of Utopian neurosurgery we were able to *transpose* the tissue from area 17 to area 41 and vice versa. What would happen then? Would the animal experience flashes of light when we ring a bell in a darkened room, and hear bells ringing when we flash lights in a sound-proofed room?" Certainly not. Lord only knows what else might happen, but one thing I am confident of: *if* the tissues in these two areas are as structurally similar as the authors maintain, and if all the tedious details of preserving the proper connectivity [III] could be solved (a practically impossible condition, one would suppose), then the animal would go right on seeing shapes and colors and hearing sounds, though perhaps with some distortions, loss of fidelity, etc. The authors find this possibility vertiginous: "since this would suggest, rather mystically, that *just being* in area 41 endows the tissue with hearing functions, as just being in area 17 gives it visual functions." Of course there is nothing mystical about this. Just being in these locations means just being richly interconnected not only with the relevant sense organs [IV], but – *just as important* – with the relevant belief-modification machinery, behavior-controlling machinery, introspective-report-inducing machinery [V]. Being located in area 41 lets something contribute to reports of things *heard*, and being located in area 17 lets something furnish input to whatever up to now has stored *visual beliefs*.

Here's another riddle: two identical "FREE BEER" signs are placed in identically clean and well-lit saloon windows; one draws throngs and the other doesn't. Why? Same answer as the first riddle. Spatial location can as radically alter the effects emanating from a thing as the causes impinging on it [III]. The crucial effects – the effects that contribute to the very identity of the thing – are not nonphysical (as the authors have it in their conclusion) but cognitive, dispositional, *ultimately* behavioral.

What would happen, the authors wonder, if we hooked up the optic nerve to the auditory cortex and the auditory nerve to the visual cortex (but left the *output* connections of these cortical areas unchanged, presumably). Lord only knows, again, but this experiment, unlike the previous one, would be a test of plasticity (more than of anything else). If the thing could be done at all, results with inverting lenses (which show how dramatically plastic our visual system is) suggest that after an initial period of reporting (and experiencing) sounds when presented with flashes, etc., one would adapt to

roughly normal sight and hearing, now subserved by different cortical areas [cf. Gyr, Willey, & Henry: "Motor-sensory feedback and geometry of visual space: an attempted replication." *BBS* 2(1) 1979]. But whether or not the brain was this plastic, the occurrence of visual sensations under auditory stimulation, if it did in fact occur, would not be due to marvelous and heretofore undiscovered intrinsic differences in the cortical tissue, but to the connectedness of that cortical tissue with the subsequent cognitive machinery of the brain.

It is not that there could be no important relation between empirical facts about neural structure and philosophical theories of the mind, but just that the authors have not hit upon an important one, *even if their empirical premises were all true*. Here is a better argument for dualism from a premise about neural structure: Our brains have no more structure on any level of analysis than a pail of water; therefore, the brain could not possibly subserve the intricate dependencies of human cognition (and no other organ of our bodies could either); therefore, since cognition occurs, dualism must be true. – Fortunately for us materialists, the premise is false.