



McGill
University

Foundations & Philosophy of Science Unit

F

CULTURE

11.10.1976

Dear Professor Pribram,

I was delighted with your letter of September 27th concerning my paper on "Emergence and the mind".

You are quite right: the structure of a computer program and that of a Beethoven symphony are not material entities and cannot be accounted for in purely physical terms. In general, no structure (in the strict sense of the term) is material. Only things with all their properties are material, and even so only physical things are accountable in physical terms only. And when we say that our thoughts are material processes, we do not speak very accurately. We should say that the functioning (perceiving, feeling, thinking) brain is material. And this won't commit us to the reductionist thesis that the functioning brain can be described and explained in purely physical terms. As we climb up the level structure we must add new categories (properties and laws) to cope with the emergent properties that characterize the new levels.

Consider for a moment your example of a Beethoven symphony. The sounds are purely physical events, hence can be studied by acoustics. But the perception of every sound is a neurophysiological event, and the enjoyment of it is a very particular neurophysiological process. Again, the musical score is just a piece of printed paper: it becomes music only in some brain capable of reading the musical notation. Separate from people capable of reading a musical score, or listening to music, or performing it, there is no symphony--not even cacophony. Should a musical score get lost--as it happened with Beethoven's ~~zeroth~~ Zeroth Symphony for a while--the symphony gets lost. And if the last person capable of enjoying music were to die, there would be no music left, not even if records, tapes and musical scores were to be kept after a rock-and-roll holocaust.

An emergentist materialist won't deny that a symphony is more than a sequence of sounds and even more than a brain process. He will admit that, in addition to being both, a symphony is a cultural object--at least while there are people capable of performing or listening to it. But he will emphasize that a symphony has got to be a brain process and a sequence of sounds in order for it to become a cultural object. Moreover he will insist that a private symphony, i.e. one that only its composer can read or listen to, or perform, is not a cultural object because, by definition, a cultural object is accessible to society.

In a nutshell: it seems to me that your objection to the word 'materialism' rests only on the usual (but not universal) association of materialism with reductionism. Emergentist materialism should be free from this blame.

Postal address: 3479 Peel Street, Montreal, PQ, Canada H3A 1W7

Cordially

Mario Bunge

Inv 82732
Co 374