

## THE CAUSAL EFFICACY OF CONSCIOUSNESS

Biologically, consciousness is not a passive spectator; an organism's consciousness controls the actions of its body. It is the efficacy of consciousness in guiding such actions that explains the selection-pressure that favored its evolutionary development.

The contrary position, the claim that consciousness has no causal efficacy, holds that consciousness is an "epiphenomenon": an effect produced by the brain that does not itself have any effects, does not *do* anything. The standard analogy given by epiphenomenalists is that awareness is like the smoke that comes out of a locomotive: the smoke is an effect, a by-product, which does not act on the locomotive. In the same way, the actions of your consciousness — your pleasures, pains, fears, hopes, thoughts, plans — are supposed to be mere by-products of the brain's action, by-products that are causal dead ends, impotent to affect anything.

Epiphenomenalists are so opposed to consciousness that they exempt it from the causality that governs the rest of the universe: consciousness allegedly has causes but no effects. Note that their own illustrative analogy fails: the smoke leaving a locomotive does have an effect, however small, on the locomotive — as it does on the lungs of anyone who breathes it in. Nothing in the universe acts without having effects, and only a mystical view of consciousness would allow for making it an exception.

Epiphenomenalism is another case of a self-refuting idea. Anyone who asserts epiphenomenalism is contradicting himself: in asserting his view, he assumes that his *thoughts* are the cause of the sounds coming out of his mouth. Even asserting epiphenomenalism internally, as an unspoken thought, contains a contradiction: to think requires memory, and memory requires retrieving what consciousness has stored physically in the brain. The conscious storage and retrieval of memories evidences the mind's ability to interact with the physical brain.

Epiphenomenalism is actually a form of materialism. Whether one maintains that consciousness does not exist or that it does exist but cannot affect anything, including oneself, the significance is the same.

From a biological perspective, epiphenomenalism represents a denial of the adaptive value of consciousness. If consciousness has no bodily effects, then it confers no survival advantage for organisms possessing it. But if so, how are we to account for the observed facts? How are we to explain the evolutionary fine-tuning of conscious experiences to fit survival needs? An epiphenomenalist must assume that it is just a cosmic coincidence that

the conditions that fulfill bodily needs — eating nutritious food, gaining shelter and warmth, drinking when dehydrated — happen to produce *pleasure*, while damaging physical conditions — a wound, starvation, breaking a limb — happen to bring *pain*. If the conscious experiences of pleasure and pain have no motivational power for the conscious animals, if the actions of the conscious animals are not affected by their experience of pleasure or pain, why are pleasure and pain correlated in this fashion with survival needs?

Clearly, there has been a selection-pressure acting in evolution to align pleasure and pain with actions that promote or impair survival, respectively. But that selection can occur only if pleasure and pain have effects on the animal's (or man's) behavior. Were pleasure and pain epiphenomena, there could be no selection operating to prevent animals and men from being so constituted as to feel excruciating pain when eating and ecstasy upon breaking a limb.

(People unschooled in evolutionary biology sometimes point to the rare cases in which pleasure and pain do not correlate with survival. E.g., some people like the taste of alcohol, which is unhealthy if over-used. But alcohol is not part of the environment to which man became adapted. And finding a few exceptions, would not help the epiphenomenalist explain the general correlation of these allegedly impotent conscious experiences with survival.)

This evolutionary explanation of pleasure and pain in terms of their effects on survival is merely an illustration from science of what we know by direct introspection: consciousness *does* something; it has causal efficacy.

Since your consciousness causes your voluntary action, and since the physiological cause of your action is a process in the brain, it follows that your consciousness has the power to change the physical state of your brain.

This conclusion may appear to contradict the primacy of existence, since it means that consciousness alters the state of something in the physical world — the brain. But that worry is unfounded. The primacy of existence holds that a state of awareness neither creates nor alters its *object*. A pencil, for instance, is not affected by being seen or thought about. But the causal efficacy of consciousness does not imply otherwise.

When you raise your arm, you don't do it by somehow making your brain into the object of your awareness. When you reach for a pencil, the object of your awareness is the pencil, not your brain. And, of course, seeing and desiring the pencil does not alter it in the least. Awareness affects not the *object* but the *subject* — i.e., you.