

Walking the line between science and philosophy, the debate between the materialistic brain as the sole center of human functions simple and complex, and the ethereal mind as the seat of self has waxed and waned in discussion. As such it remains as a thread running from our deep past through our current discoveries in neuroscience and genetics and on into our future of mastery over the mysteries of our bodies. This debate, however, can never be resolved satisfactorily. Science deals only with the material world, measuring what we can perceive, and incapable of quantifying or describing any object or force beyond the capabilities of our instruments. Since the mind as the seat of self is in essence a soul, an intangible impossible to confine with material tools measuring a material world, it slips beyond the parameters of scientific pursuit. The individual theories of mind cannot be adequately tested and so, as scientists, we must retreat to respectful agnosticism.

The primacy of measurement is the idea that we as scientists should confine our studies to subjects that can be measured rather than arbitrarily bestowing objects with unknowable properties. Since the mind, as a summation of self, cannot be measured, we should not confer "mind" on any being. It is egotistical to argue that we as humans alone of all life on the planet have some "other property", unknown and unknowable that sets us apart from all other life, tantamount to supremacy over all life sometimes even other human lives. Because of this egotism we have descended into folly, without respect for the diversity and beauty of life regardless of its supposed or apparent self-awareness. It is further vainglory to argue that those concepts unmeasurable by our instruments and brains are non-existent. This irrationality would put an abrupt end to all technological improvement, scientific exploration and theoretical debate. In science

there are no facts, only theories to be tested and retested with our available instrumentation, to be strengthened or replaced.

The brain is the arbiter of emotion and thought, but in the absence of mind it is also a self-regulating organ, controlling its control of emotion and thought. Initiated by genes and conditioned by the environment, the brain chooses its own path, spewing forth the chemicals of emotion one minute, then reining in the flood of passion with other chemicals, further conditioning itself in accordance with all of its previous conditioning. Knowing what it needs to survive, the brain sits atop the body sending out signals and orchestrating whole behavior patterns: to seek psychiatric help with attendant psychotropic medication, to start an exercise regime, to crave a good book and a hot bath on gloomy days. But it keeps communication open, listening to the rest of the body, responding to hormonal inputs and sensory messages all in the background while we contemplate our own ideas and whims in the foreground, the emergentism of the mind as a concert of all these brain functions. But the paradox is in the collective unawareness chemicals and reactions, combining to become an awareness. Herein, the whole as more than the sum of its parts is immeasurable because it cannot be quantifiably explained.

In dualism, we are uncomfortable thinking of the body as merely meat, capable of being manipulated with training and chemicals, without some other definition of self: maybe this means we are not ourselves, maybe we are just animals without free-will, maybe we are clone-able. But we are equally uncomfortable assigning our self awareness to some unknowable other, a gift from the other-worldly: maybe this means we are a puppet, maybe our depression is because we are weak-willed, maybe we

should be more religious. Plagued by indecision, we vacillate: we take anxiolytics but we frantically pray to God on icy roads. We can measure the effects of the anxiolytic medication, but we cannot measure the intervention of the other-worldly, the benefactor of mind, in an auto accident. We cannot isolate the variable consistently; we cannot keep all other factors equal. Ultimately, we are unable to determine if the other-worldly self can exert some extra measure of control over the physical world, to use the mind to intercede on behalf of the brain because we have no objective tool to measure the other-worldly.

We use the word “mind” like a new vocabulary word. We use it without an idea of what it means in connotation, what we are saying in context. “Mind” is idiomatic. With etymology referring to “memory” and “spirit”, “mind” is maintained by retrograde colloquialism, our sentiment keeps the word alive in our collective idiolects. Sometimes we say “mind” when we mean brain. But we have not found the mind in our physiology, only the brain. Through hundreds of years of anatomical study, the size, shape and location of the mind remains unknown. Sometimes we say “mind” when we mean our sense of self. But our sense of self is an unknowable quantity, observed only through subjective tools like self-report questionnaires and interviews tainted with expectation and deception on both conscious and unconscious levels. When we are “losing our mind” are we losing our brain, our sense of self, or is our brain merely overwhelmed with stimuli causing us to feel less like ourselves? The mind as a material entity has been lost all along, for it has not been located for measurement. The mind as a sense of self is lost in subjectivity. At best we can ascribe subjective correlations to the

interactions of chemical reactions and sense of self, but once again we may be guilty of hubris in assigning the unmeasured property of mind to account for our behavior.

A measurement is only as good as the tool of measurement. Our tool for measuring the mind is only our own brains. As we unravel the complexities of interaction between individuals, organ systems, cells, molecules, atoms, and all their infinitesimally small moving parts, we discover the slippage of our biological mechanism, the imperfections inherent to every person, every thought. These are the tools with which we seek to measure the impressively illusive concept of consciousness, perhaps the concept is flawed in itself, perhaps our methods of study are incapable of detecting the level of detail necessary for comprehension, or perhaps we are using the wrong tools. At the end of the material realm, in the failure to measure, we must retreat to philosophy and theology and simply say, "I don't know."

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